

HOW MANY DIMENSIONS OF PERSONALITY? THE „BIG 5”, THE „GIGANTIC 3” OR THE „COMPREHENSIVE 6”?

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Eighteen criticisms of the „Five Factor Model” of personality (FFM) are indicated : there is too much variation for comfort in the number and the nature of the personality dimensions that are currently recognized by researchers, whether in „lexical” studies or in questionnaire data. It is suggested that there are actually six main dimensions of normally-distributed human psychological difference; and that each of the six psychometric dimensions is connected with a particular underlying difference in both ability and emotion. A comprehensive scheme representing major dimensions of personality, ability and emotion is outlined. However, psychometric fusion sometimes occurs within two pairs of the Comprehensive 6 dimensions - when testing methods are less sensitive or when testees are of lower sophistication or general intelligence (*g*); such lack of differentiation results in only four or five dimensions being seen. Additionally, three of the six dimensions (extraversion, neuroticism and conscientiousness) are particularly easily found in conventional questionnaire studies. These three resemble the three most familiar personality concepts of Freud (*id*, *ego*, *super-ego*) and Eysenck (Extraversion, Neuroticism, Psychoticism); anyhow, a „Freudian” combination of short yet reliable ipsative versions of them yields correlations with sexual permissiveness and militarism/punitiveness. Like *g* itself, other dimensions of personality crystallize into differences in attainment and into attitudes regarding sex and aggression.

INTRODUCTION

The past ten years have seen a „converging consensus” among empirically oriented personality theorists. The „Five Factor Model” (FFM) proposes five main constituent dimensions of personality: *Openness (O)*, *Conscientiousness (C)*, *Extraversion (E)*, *Agreeableness (A)* and *Neuroticism (N)*. These „Big 5” („OCEAN”) factors are said to be the important, observable, uncorrelated ways in which people differ from each other in personality. The dimensions appear in ratings and questionnaires in several European languages. They have considerable statistical power - typically yielding a multiple correlation of around .60 with any sizeable factor from a traditional multi-scale test (McCrae & Costa 1994; McCrae, Costa, & Piedmont, 1993). They are relatively „real” - emerging rather more clearly when raters know ratees better (Borkenau & Liebler, 1993; Wiggins & Pincus, 1992). And something is known of their origins: twin studies have

shown long-term causal influences on most of them from additive genetic factors, from genetic epistasis and from within-family environmental influences (see Brand, 1989). (Deary and Matthews (1993) and Goldberg (1993) provide helpful reviews of the FFM.)

The FFM has been a welcome arrival in differential psychology. It seems to provide a long-sought compromise in the titanic struggles of the great psychometrician-psychologists, R.B. Cattell, H.J. Eysenck and the late J.P. Guilford. It certainly provides a firm-looking reply to behaviourists, „situationists“, „holists“ and „constructivists“ who have doubted the importance of biologically based personality differences; and it has given rise to a new internationalism of theorizing, research and conferencing. However, the present paper points out eighteen weaknesses of the FFM and suggests an improvement. *Four* broad psychological dimensions of ability and emotion are suggested to provide the minimum number of dimensions recovered in adequate researches; but *six* independent dimensions should be expected in reasonably sophisticated testing of intelligent testees; and just *three* of these dimensions appear especially readily in questionnaires and resemble the three key personality concepts deployed in the writings of both Freud and Eysenck.

EIGHTEEN PROBLEMS FOR THE FIVE-FACTOR MODEL (FFM)

1. In a matter as weighty as that of what are the major human personality variations, advocates of the FFM change their views with startling speed. McCrae and Costa (1983) offered „strong evidence for the validity of the proposed three-dimensional domain model of personality“ (involving *N*, *E*, and *O*) and went on to publish a test of their own „Big 3“ dimensions. Yet soon afterwards McCrae and Costa (1987) announced the „validation of the five-factor model“. Today, McCrae (1994) allows that six factors can easily be found - „the Big 5 plus general intelligence“. Both of two „integrative“ studies are now said by McCrae to „support Brand’s view (1984, 1995) that intelligence is an independent sixth factor“. [By contrast, it took Freud twenty years to complement *eros* with *thanatos*; and it took Eysenck twenty years to add Psychoticism to his two dimensions of normal personality, Neuroticism and Extraversion. More rapid „breakthroughs“ suggest not only open-mindedness but a possible lack of depth, breadth and resilience in the personality theory or „model“ in question.]

2. Why had the previous forty years’ work of differential and social

psychologists failed to yield the correct number of dimensions? - Just what had Cattell (e.g., 1973), Eysenck (e.g., Eysenck & Eysenck, 1985), Guilford (e.g., Guilford, Zimmerman & Guilford, 1976) and C.E.Osgood (1962; Goldberg, 1993) done wrong? [The question „How many main dimensions are there?” has, after all, been central to differential psychology at least since the paths of Eysenck and Cattell diverged sharply around 1960.]

3. Most FFM studies examine differences occurring amongst relatively intelligent, young, healthy, law-abiding, higher-educated subjects. These testees are clearly chosen to suit the convenience of investigators as much as to examine the realities of human individual differences. [The virtual exclusion of the unskilled, the unemployed and the long-term low-waged is specially strange.]

4. Likewise, „lexical” and „taxonomic” studies (of how raters think adjectives in their own language overlap in meaning) usually involve university-educated, socio-culturally unrepresentative raters.

5. Beyond excluding very rare descriptors, lexical studies pay little heed to the frequency with which adjectives are actually used by modern native speakers, or to the objectivity with which adjectives can be applied to the same target by different raters. Such studies are thus not directly concerned with the person-describing schemes that are actually in regular use in the cultures from which raters are drawn.

6. Lexical studies usually omit adjectives on which ratees produce little variance. Adjectives related to intelligence are especially likely to be jettisoned because of: (i) the limited range of many of the „targets” (often acquaintances of the raters); (ii) the day-to-day unfamiliarity of many university students with people who differ much from themselves in intelligence; and (iii) the unwillingness of many social science students to „label” almost anyone at all as „dense”, „dim”, „dull”, „simple”, „slow” or „ignorant”. The major Dutch taxonomic programme for personality traits expressly omitted altogether „stable traits of capacity, ability, intelligence or skill” (Brokken, 1978; De Raad, Hendriks & Hofstee, 1992; McCrae, 1994). By contrast, when ability traits are included, a general *Intellectance* dimension subsumes variance from terms like „creative” and „imaginative” (Angleitner & Ostendorf, 1989; McCrae, 1994).

7. Perhaps because of the last four problems, general intelligence (*g*) has often had only a walk-on part - within the FFM’s *O* dimension. (*O* has often seemed to involved *Intellectance* (as well as *Extraversion* and youthful „anti-rule heterodoxy”) (Johnson & Ostendorf, 1993); and it correlates at about .35 with *g* even in samples having restricted *g* range (Brand, 1994).)

8. The FFM is a static, non-dynamic model of personality. As presented, it seems to have little to do with the major human motivational systems that surely centre on sex (or procreation), aggression (or competition) and curiosity (or creativity); it does not concern itself with how such drives are expressed (or repressed); and it has no theory of the structure of the mind. (See Magnusson & Törestad, 1993; McAdams, 1992; Ozer & Reise, 1994; Pervin, 1994.) [Even Eysenck - no advocate of psychoanalysis - has talked of sex and aggression as basic to attitudinal differences (Eysenck, 1954) and of his Psychoticism as a „superego” factor (Eysenck & Eysenck, 1976).]

9. The FFM does not connect its dimensions systematically even to any *static* underlying dimensions of emotions, sentiments, skills or abilities. There is systematic *evasion* of psychology here. [Notably, the FFM's A dimension envisages a bald opposition between love and hate, or between co-operation and competition. Many social and psychological theorists have rejected such simple dichotomy (see Brand, 1994, 1995): for example, just as Freud added *thanatos* to *eros* in his theorizing, so Adler (moving in the opposite direction) had to add altruistic, affectionate „social interest” to the force of antagonistic, competitive „personal interest” with which his break from Freud had begun.]

10. Agreement on *five* as the correct number of dimensions (whether „perceived” or „real”) is far from complete (Brand, 1984; Pervin, 1994). Twenty large, modern programmes of work report *more* than five independent factors - most commonly *six*. (See e.g., Brand & Egan, 1989; Brand, Egan & Deary, 1993; Deary & Matthews, 1993; Linveh & Linveh, 1989; Shmelyov & Pokhilko, 1993; Matthews & Oddy, 1993). [Deary (1995) further claims that the same six-factor structure is even found in the first-ever correlation matrix of reliable personality assessments - collected under Spearman's supervision in London (Webb, 1915).] On the other hand, numerous investigators have favoured recognizing just *three or four* super-factors. These are usually *N*, *E*, *g* and some version of *C* (e.g., „anality”, „obsessionality”, *superego*, „solidity” or (social) conservatism vs. impulsion and alienation) - e.g., Bjorgvinsson & Thompson, 1994; Eysenck & Eysenck, 1985; Kline, 1992.

11. There are sometimes correlations as high as .40 amongst the scales of McCrae and Costa's NEO-PI and amongst other supposed indicators of the Big 5 (Caprara, Barbaranelli, Borgogni, & Perugini, 1993); and the „facets” (i.e., oblique sub-factors) of the Big 5 sometimes have their highest loadings on unexpected dimensions (Church & Burke, 1994).

12. There is no precise agreement among researchers on when to halt factor extraction. The most reasonable modern procedures seem to yield six or more dimensions (Matthews & Oddy, 1993). Yet five factors are sometimes extracted by researchers even when six seem clearly indicated (e.g., by Zuckerman, Kuhlman, Joireman, Teta & Kraft, 1993).

13. Despite investigators' optimistic naming of their factors, the factors *called* *O*, *C*, etc. (let alone other unnamed „representatives of the Big 5") differ substantially in nature from one study to another (e.g., Hofstee, De Raad & Goldberg, 1992; Stumpf, 1993); and *O* can disappear altogether (e.g., fusing with Intellectance (Johnson & Ostendorf, 1993)) or correlate with any evaluatively positive traits, especially Agreeableness (Borkenau & Liebler, 1993).

14. Some psychometric batteries involve substantially more reliable variance than can be accounted for by OCEAN variables alone (e.g., Goh & Leong, 1993; Waller, 1995).

15. The temporal stability of OCEAN-type differences is only around .50 over a ten-year period (Whitborne, Zuschlag, Elliot & Waterman, 1992) even though much longer (and thus more short-term-reliable) measures have been used than formerly in personality research.

16. The FFM takes no account of the fluctuating nature of personality „superfactors". For many years, Eysenck maintained that „sociability" and „impulsivity" correlated at >.40 and were both facets of a *broad* dimension of Extraversion on which criminals would have high scores; yet today it is generally agreed that *E* and *C* (vs. *impulsion*) are independent factors. Likewise the rather broad and evaluatively loaded FFM *A* factor may split (with help from the non-*g* variance that is found on *O*, if *g* is removed as a separate factor) into two separate factors of *dependence* (vs. *will*) and *tender-mindedness* (*affection*) vs. *realism*. (This phenomenon was first observed in Cattell's tests by Royce and Powell (1983).) Such systematic changeability of superfactors and conflict of evidence requires theoretical integration, not neglect.

17. Though Eysenck's personological stance centres on his „Gigantic 3", he has also classically recognised at least three or four more largely independent dimensions: *g*, social conservatism vs. liberalism, tough-mindedness vs. idealism, and „Lie"/Conventionality. So the „Big 5" do not embrace Eysenck's *opus*, let alone Cattell's.

18. Authors' theoretical approaches can be erratic and hard to understand. On finding that *O* correlated with IQ, McCrae and Costa (1987) at first maintained the unitariness of *O* and the adequacy of the FFM. Today,

McCrae and Costa (see Deary & Matthews, 1993) claim to recover their *O* even when IQ is partialled out, but it is far from clear that this is possible in studies of the unselected, normal population (Brand, 1995). McCrae and Costa are only just beginning to acknowledge (McCrae, 1995) that, by implication, they must work with an explicit *six*-factor personology. They have yet to see much of what their factors look like when marker variables are regularly included in their studies to ensure that the *g* is adequately retrieved from correlation matrices. Reliable dimensional „personality“ differences are hard to identify in infants and young children, and personality is commonly said to be „destroyed“ when intelligence declines in Alzheimer's disease; yet the many of the latest generation of psychometrician-psychologists have been trying to insulate their concepts (and the field of personality as a whole) from the central reality of the human condition - general intelligence (*g*).

RESOLVING THE MAIN PROBLEM: A THEORY

There are probably important interaction effects between the major psychometric dimensions of general intelligence (*g*) and neuroticism (*n*). Neuroticism normally has a slight negative correlation with many forms of achievement (Francis, 1993); but higher levels of *n* often seem to yield *higher* artistic achievement in *high-g people* (Prentky, 1980). Again, Lienert (see Eysenck, 1994) has found that *g* itself can be markedly stronger (more unitary as a factor, accounting for more variance) among higher-*n* people. (This may occur because more specific abilities are just too unreliable to yield specific, non-*g* factors in more emotional, more variable, higher-*n* people.) Key psychometric correlations themselves thus differ across different ranges of *g* and *n*. Examination of such „zonal“ effects (McKenzie & Tindell, 1993) is probably the next big, general task of psychometric psychology.

Differences in *g* ranges may likewise help explain current variations in estimates of personality dimensions and structure. At around IQ 75, people differ from each other psychologically in rather few ways that are of socio-economic consequence: they show basic temperamental differences, but such variations will probably be of less practical importance to them than is their low level of *g* that they share. By contrast, at around IQ 125, some people are highly creative, hard-working and highly rewarded, while others are in prison, die early from drugs or AIDS, spend many hours daily

watching TV, or give themselves to unremunerative charitable work. More independent dimensions of variation in ability and knowledge can sometimes be found in testees having higher *g* levels (Detterman & Daniel, 1989; Deary, Gibson, Egan, Brand & Kellaghan, 1996); and wider variance on personality tests has sometimes been observed in personality amongst higher-*g* people (Brand, Egan & Deary, 1993). Although no factor other than *g* makes a reliable appearance in factor analyses of ability data in the normal population (Brand, 1993), at higher *g* levels people specialize more obviously in some particular stratagems, skills and knowledge systems *as opposed to others*.

In the modern history of psychology, there are two psychometric ability contrasts that have notoriously proved to be more „visible” at higher-*g* levels. These are (1) *field-independence vs. field dependence* (Flexer & Roberge, 1983) and (2) *creativity (vs. clerical ability)* (Hargreaves & Bolton, 1972). However, *g*-related differentiation probably occurs also for (3) *short-term memory vs. long-term memory* (Miller & Vernon, 1983) and for (4) *verbal vs. performance / spatio-mechanical abilities* (Detterman & Daniel, 1989). [Right- vs. left-handedness is another psychometric dimension that is more clearly defined outwith low-*g* ranges - for the very young and the mentally handicapped show relatively mixed and unreliable hand preferences (Soper & Satz, 1987).]

The above four bipolar mental ability contrasts can all be argued to be related to familiar personality distinctions. (1) Witkin and Cattell held the analytic, logical perceptuo-cognitive style of field-independence to be related to specificity of response, lateralization of function and independence-of-mind as opposed to agreeableness (Witkin, Goodenough & Oltman, 1979); and the competitive, relatively interpersonally insensitive, field-independent personality presents a low-*n* version of the core of „Type A” personality (Yarnold, Bryant & Litsas, 1989). (2) Abilities for close, vigilant attention and clerical work (as vs. peripheral processing, imagery and creative abilities) correlate with obsessionality, judgement (vs. perception), social conservatism, non-Psychoticism and age (Claridge, 1981; Katz & Pestell, 1989). (3) Relatively good integrative attention and short-term memory, but poorer long-term memory, seem to be broadly characteristic of extraverts (possibly related to cholinergic function) (Logue & Byth, 1993; Matthews, 1993). (4) Verbal (vs. performance) shift is more common in non-psychopaths, in females, in more socially adjusted and responsible children and in arts-oriented adults (Smith, 1964; Flor-Henry, 1974).

Thus there is reason to expect that the *non-g* personality differences which can be observed and measured will themselves vary with *g*-level; and that the number of retrieved factorial dimensions in ratings and questionnaires will vary too. At lower *g*-levels, rather broad and general factors like Osgood's ACTIVITY (or *Liveliness* vs. *Inhibition*) and POTENCY (or *Forcefulness* vs. *Agreeableness*) could be expected. By contrast, at higher-*g* levels such global distinctions should differentiate: ACTIVITY into extraversion (*e*) vs. introversion and, almost independently, into impulsivity vs. conscientiousness (*c*) / inhibition; and POTENCY into will (*w*) / assertiveness vs. deference and, independently, into hostility vs. receptiveness / affection (*a*). Which of these dimensions are seen will also depend somewhat on the complexity and subtlety of the information available to the psychological researcher (Borkenau & Liebler, 1993; De Raad & Hofstee, 1993).

Such differentiation of personological phenomena at higher levels of intelligence and information-processing may also be hypothesized in the realm of emotional experience. Just like personality items, estimates of emotion quite often exhibit a crude, two-dimensional circumplex (Conte & Plutchik, 1981). This circumplex contrasts ACTIVE, *action-ready* states of Joy and Anticipation with those of Sadness and Surprise; and POTENT, *antagonistic* states of Anger and Disgust with those of Acceptance and Fear. However, this two-dimensional model is itself a simplification of *four* independent dimensions of contrast in mood and emotion. The four basic emotional contrasts that are commonly recognised today are: (1) Anger vs. Fear; (2) Surprise / attentiveness / alertness vs. Anticipation / boredom; (3) Joy vs. Sadness; and (4) Disgust / hostility / rejection vs. Acceptance (Oatley & Jenkins, 1992). Modern „cognitive” theorists commonly hold that these mood variations differentiate further into the social emotions of guilt, shame, jealousy, love, contempt, etc., in so far as they are experienced as responses to *particular*, specifiable events in appropriate cognitive contexts (involving reasoned expectations). These four basic dimensions of emotion look likely candidates for having connections, respectively, with the personality dimensions of *w*, *c*, *e* and *a*. For example, self-rated attentiveness can be found correlated at .80 with conscientiousness, joviality at .84 with extraversion, and hostility at -.63 with Agreeableness (Watson & Clark, 1992).

In addition to the four dimensions of emotion that differentiate from the two-dimensional mood „circumplex”, empirical work usually allows identification of two further factors of mood. One is a dimension of

Table 1. *Variants of the Comprehensive 6 Dimensions of Personality*

Global Contrasts ↓	6 Ability dimensions	6 Personality dimensions	6 Mood dimensions	Global Contrasts ↓
	<i>g</i> (fluid)	<i>g</i> (crystallized) Intellectance Culture	Clear-headedness	
+ <i>IReason</i> ↑ EVALUATION (classical) ↑ - <i>IPassion</i> ↓	Responsiveness to reinforcement; event memory.	<i>n</i>	Uncertainty, Degree of emotional variability.	NEGATIVE <i>Intensity of mood</i>
+ <i>ILiveliness</i> ↑ ACTIVITY ↑ - <i>Inhibition</i> ↓	Short-term memory (vs Long-term memory)	<i>s</i>	Joy (vs Sadness)	POSITIVE ↑ <i>Activity</i>
- <i>Inhibition</i> ↓	Clerical (vs Creative)	<i>c</i>	Alertness (vs Impulsion due to low cerebral, 'upper' arousal)	ATTENTIVE
+ <i>IForcefulness</i> ↑ POTENCY ↑ - <i>Iagreeableness</i> ↓	Field-independence (vs Field-dependence)	<i>w</i>	Anger (vs Fear)	
- <i>Iagreeableness</i> ↓	Symbolic abilities, intuition <i>s</i> (vs spatio-mechanical)		Acceptance (vs Disgust)	↓ Pleasantness
↑ CAPITALS = Osgood's terms.		CAPITALS = Watson & Clark's (1992) terms ↑ <i>Italics</i> = Daly et al.'s (1983) terms ↑		

Intensity vs. Composure (Howarth, 1980; Daly, Lancee & Polivy, 1993). This looks intrinsic to *n*: for high-*n* is notoriously related to intense and more rapidly changing experience of many different moods (Williams, 1993). The other is a Clear-headedness vs. Confusion factor (Howarth, 1980): this looks promising as a way of recognizing such (slight) temporal variability as is found in fluid *g* (*g_p*) (Rauscher, Shaw & Ky, 1993).

Changes along these six dimensions of mood may yield cognitive shifts and temporarily changed approaches to problem-solving. Longer-term personality differences will presumably arise from underlying tendencies to differ from others, on average, in such affecto-cognitive states. A unifying structural scheme (see Table 1) would link six personality dimensions (*g*, *n*, *e*, *c*, *w*, and *a*) to the six dimensions of ability and mood indicated above, while noting at the same time the broader dimensions into which some of these six dimensions may collapse - yielding only four dimensions when less specific information is available.

Such a structured scheme acknowledges that the number of visible personality dimensions will vary - depending on the intelligence of testees and on the sophistication of the approach adopted by testers. In contrast, the „Big 5” personality dimensions provide an estimate of central tendency for what is actually a *bimodal* distribution of theoretical possibilities. The Comprehensive 6 can support a linkage of personality dimensions to all the main, empirically distinct, psychological dimensions of contrast for both moods and abilities. It handles many of the anomalies of the „Big 5” - notably that the classic programmes of work with population samples by Eysenck, Cattell and Osgood never homed in on them. It spells out the „inextricable intertwining” of affect and cognition, and the „implacable logic” of the emotions that are such popular but minimally articulated ideas in cognitive psychology today (*e.g.*, Lazarus, 1993; Oatley & Jenkins, 1992). And the relations between the six dimensions as *g* differentiates into four dimensions (*e*, *c*, *w* and *a*) on which *n* creates short-term variability can be conveniently illustrated as a „double cone” (Brand, Egan & Deary, 1993).

RESOLVING A MINOR PROBLEM: A SHORT MEASURE OF THE READILY MEASURABLE

If there are truly *six* main super-factors of psychological variation, within and between people, which of *these* are the more important and

readily measurable? In accounting for people's real-life, socio-economic outcomes, intelligence is undoubtedly the most important dimension (see Brand, 1987, 1993; Herrnstein & Murray, 1994); and it is readily and reliably measurable in thirty minutes of group-testing. However, people are often unaware of the population range of intelligence levels, and are therefore poor at rating their own. Moreover, because there is rather little daily variation in g , people do not look to g to explain much of their own behaviour and experience. Finally, occupational selection *by* g means that, *within* many job contexts, the important personal differences between people will consist in factors other than g .

In research with students, adult volunteers and job candidates in Edinburgh and Birmingham, equal numbers of adjectives for each of the above „Comprehensive 6" dimensions were used to form a 144-adjective ipsative test. A first factor of *affection/neuroticism* (strongly loaded by „loving", „tender-hearted", „compassionate" and „passionate" vs. „thick-skinned", „composed", „level-headed" and „unsentimental") provided quite the largest component of self-ratings (both before and after scree-tested reduction and Varimax rotation of factors) (Brand & Egan, 1989). This factor seemed interpretable as one of emotionality / neuroticism / sensibility vs. sluggishness / *ego* strength / sense - though it captured rather more of the positive and affectionate aspects of emotionality than is usual for neuroticism factors. The next two Varimax factors seemed to reflect surgency / extraversion / *id* strength vs. stoicism / introversion; and scrupulosity / conscientiousness / *superego* strength vs. spontaneity / impulsiveness. Recently, in 54 Edinburgh adults, Vincent Egan and I have observed that even mere eight-item packages assessing these three dimensions (using contrasted adjectives - see Brand & Egan, 1989, Table 2) have split-half reliabilities of around .70, and strong correlations with Eysenck's *E* (*id*, ~*superego*) and ~*N* (*ego*). These findings exemplify three now well recognised phenomena: (i) the general tendency for the *three* Big 5 dimensions of *N*, *E* and *C* to emerge especially clearly (as do the three corresponding mood dimensions of „Negative", „Positive" and „Attentive / Constrained") (Tellegen, 1992; Watson & Clark, 1992; Wiggins & Pincus, 1993); (ii) for broad *E* dimensions of the original Eysenckian type to break up into independent components of *e* and *c* (as in Table 1); and (iii) for emotionality / neuroticism to be higher in women especially when the highest loading items for *n* are used (Francis, 1993).

The above three *ego vs n*, *id / e* and *superego / c* factors were combined to yield a crude operationalization of expressed *eros* (cf. Freud) as [*id*² -

(*ego x superego*)] (after eliminating zeros by adding 1 to all three scores). Analysis of data from twenty-four 2-adjective items given to 66 London University psychology students shows *eros* (or, more prosaically, *spiritedness*) to correlate significantly ($p < .001$, 2-tailed) with approval (in a very brief survey) of abortion, polygamy, pornography and prostitution. Similar operationalization of expressed *thanatos* (or *strong-mindedness*) as [*id x ego x superego*] also showed a significant correlation ($p < .01$, 2-tailed) with a package of more „aggressive” attitudes involving approval of hanging and Thatcherism and opposition to agnosticism and pacifism; and, in 69 Scottish adults, *thanatos* was related ($p < .02$) to favouring Nationalism as opposed to holding no party-political views. These explorations thus suggest ways of beginning to link dimensions of modern differential psychology at once to some of the basic and original concepts of Freudian theory and to the major attitudinal variables of permissiveness / hedonism and militarism / punitiveness.

CONCLUSION

It seems reasonable to say that the three most recognizable dimensions of personality in self-report data are presently *e*, *n* and *c*. These three dimensions are similar to Eysenck's „Gigantic 3”; they have strong relations to general dimensions of mood and emotion as is increasingly demanded in post-cognitive psychology (Sutherland, 1994); and they could apparently bear some psychoanalytic interpretations. However, as the new surge of empirical work on personality has shown in the past decade, it is as well to acknowledge three additional dimensions. Two of these - the POTENCY dimensions of *w* and *a* - are less reliably retrieved, perhaps because they reflect rather deep aspects of personality (e.g., connected with motivations for - rather than restraints on - aggression and sex); and many of today's psychometrician-psychologists would shudder at the political incorrectness of admitting the intellectual dimension of *g* as fully part of personality variation. Yet psychologists need not be surprised that six dimensions are needed to describe personality even half-adequately: for European languages remind us that we can each be said to possess, to varying degrees and with varying qualifications, six key folk-psychological components of personhood - a mind (cf. *g*), a heart (*n*), a soul (*a*), a spirit (*e*), a will (*w*) and a conscience (*c*). After a century of psychology that has been largely dominated by empiricist and idealist opponents of realism (see

Brand, Egan & Deary, 1994), it is perhaps time to admit something like the Comprehensive 6 as the state of the art for differential psychology, psychoanalysis, folk psychology and their many hoped-for interfaces in applied psychology - for all that the Freudian / Eysenckian 3 will long remain the best known and most widely used in settings where *g* variance is negligible.

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AUTHOR NOTE

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