Factor Structure of English-Language Personality Type-Nouns

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Although type-nouns (e.g., *idiot*, *hero*) are important in person description, lexical studies of personality have concentrated on adjectives. This study tested structural hypotheses using 372 highly familiar English-language type-nouns and descriptions by 607 participants of either themselves, a liked, or a disliked target person. One- and 2-factor structures were most robust, and replicated similar structures found in previous adjectival studies. Additionally, the structure with 8 orthogonal factors had good replicability and applicability within single-gender subsamples; as in previous studies of type-nouns, it included factors corresponding directly to Extraversion and Intellect/Openness, but also to Attractiveness and Masculinity (or Ruggedness). The Big Five was only weakly replicated. Personality taxonomies based on adjectives are unlikely to be comprehensive, because type-nouns have different content emphases.

Scholarly belief has it that over 2,300 years ago, Theophrastus (Theophrastus, 1909), a pupil of Aristotle, composed a catalog of 30 types of persons in a work entitled Χαρακτηρες (*The Characters*). For example, the types included κολακεία (*the flatterer*) and μεμψιμοιρία (*the grumbler*). Theophrastus represented personality attributes in the "type-noun" form, the sort of noun that would fit into an English sentence like "Robin is an *x*." Type-nouns name a group or class of persons by virtue of their holding some attribute(s) in common (e.g., daredevils, geniuses).

Adjectives Versus Type-Nouns

The legacy of Theophrastus suggests that type-nouns are a preferentially rich medium for personality description, and a good basis for a taxonomy. In more recent times, Fourier (1841–1843) and Kretschmer (1925) classed persons psychologically in type-noun categories. But recent taxonomies of personality attributes have emphasized adjectives rather than type-nouns. The Big Five structure, consisting of Extraversion, Agreeableness, Conscientiousness, Emotional Stability/Neuroticism, and Intellect/Openness factors, provides an example. Early studies key to the development of the Big Five taxonomy (Digman & Takemoto-Chock, 1981; Goldberg, 1980, 1990; Norman, 1963; Tupes & Christal, 1961/1992) relied exclusively on English-language adjectives as variables.

These key Big Five studies were all downstream from an influential study by Allport and Odbert (1936) involving the extraction of nearly 18,000 terms with a "capacity to distinguish the behavior of one human being from that of another" (p. 305), from an unabridged English-language dictionary. These investigators noted that in their listing, "[a]djectival and participial forms have been preferred throughout; nouns and adverbs appear only where no corresponding adjective or participle exists, or else in cases where their meaning is distinctive (e.g., both Quaker and Quakerish are included)" (p. 306). The studies of English-language descriptors following on Allport and Odbert culminated in studies of adjectival structure that yielded evidence for a recurrent Big Five structure. But how might scientific history be different if Allport and Odbert and others had put type-nouns on an equal footing with, rather than a secondary position to, adjectives?

It is reasonable to argue that adjectives are the most versatile and useful word class of personality descriptors, at least in English and in many European languages linguistically related to English. However, most of the world's languages are not European. Many languages have only a tiny adjectival word-class (i.e., very few adjectives, most commonly those translatable as *large*, *small*, *short*, *long*, *new*, *old*, *black*, *white*, *good*, *bad*, and the like), with some lacking the adjectival word-class altogether (Dixon, 1977). Exclusive reliance on studies of adjectives may limit the cross-cultural generalizability of models of personality-attribute structure, especially if representation of attributes in type-nouns differs from that in adjectives.

Representation of personality concepts in language is consequential. The most important, socially meaningful, phenotypic (observable) person-descriptive attributes tend to become encoded in language in relatively compact form (e.g., in single words), and the degree of representation of an attribute in language has some correspondence with the general importance of the attribute. On the basis of these premises, which are key to the lexical approach (Saucier & Goldberg, 2001), one can select variables representatively from a standard source (e.g., a dictionary), lessening the potential for variable-selection biases that are inevitably present in

the judgments of scientists. Lexical studies reveal an *emic* (i.e., indigenous) structure fitted to the personality-descriptor content within a language. What replicates cross-culturally across emic studies—a high replication standard—cannot easily be dismissed, as it points to truly ubiquitous psychological phenomena. Exploratory factor analysis is well fitted to an emic lexical study, because this procedure seeks a structure with maximal fit to the data at hand, rather than imposing (in an "etic" manner) structural expectations based on studies in other languages.

It is important to study type-noun descriptors (e.g., *jerk*, *fool*, *saint*) for several reasons. First, type-nouns carry part of the load of personality description, perhaps especially so in colloquial or informal speech contexts. Some kinds of content may be preferentially encoded as nouns, and studies of type-nouns may uncover additional dimensions beyond those represented in adjectives. Second, Wierzbicka (1986) argued that "human characteristics tend to be designated by nouns rather than adjectives if they are seen as permanent and/or conspicuous and/or important" (p. 357): Noun-descriptions are more powerful, and thus resented more when pejoratively applied to self. Third, type-nouns include a relatively high proportion of frequently used words directly related to psychopathology (e.g., *addict*, *alcoholic*, *psychopath*); a taxonomy of type-nouns might locate potential pathologies not well represented in current diagnostic systems to the degree they are represented in common speech. And fourth, type-nouns are social categorizations, denoting a "kind" of person. Although people, including psychologists, are quite prone to pejoratively label people using type-nouns (e.g., *weirdo*, *schizophrenic*), the distinct functions and effects of type-noun use, and the categorization of persons into types that it entails, are still poorly understood. We cannot understand type-noun use without investigating type-noun variables. Knowledge about how type-noun person description is structured will help guide researchers' selection of type-noun variables.

Studies of Dutch Personality Type-Nouns

Structural analyses of personality-descriptive type-nouns have been reported for the Dutch language (De Raad & Hoskens, 1990). Three judges reduced 80,838 Dutch nouns from two dictionaries to 8,450 that might be used for description of persons. Ratings by four judges of each noun's usefulness in describing, characterizing, or typifying a person led to a further reduction from 8,450 to 3,241 nouns. Next, 14 judges repeated the usefulness ratings; 785 nouns elicited mean usefulness scores above a key threshold among both Netherlands ($N = 10$) and Belgium ($N = 4$) judges. Then 30 sex-specific terms were eliminated, resulting in a final set of 755 type-nouns.

Using these 755 nouns as stimuli, descriptions of self and other were then obtained from 200 pairs of persons. Half came from the Netherlands, and half from Dutch-speaking Belgium. Each participant described themselves and separately the other person, someone with whom they regularly talked. Dutch-self, Dutch-partner, Belgian-self, and Belgian-partner data were factor analyzed separately. The six most recurrent factors were labeled as Malignity (e.g., *monster*, *false-friend*, *arch-villain*, *arch-hypocrite*), Extraversion (e.g., *merrymaker*, *buffoon*, *reveler*), Antagonism (e.g., *oppositionalist*, *obstructionist*, *instigator*, *know-all*), Perseverance (e.g., *workhorse*, *trier*, *stayer*), Anxiety (e.g., *chicken*, *scaredy-cat*), and Culture (e.g., *philosopher*, *deep-thinker*, *anarchist, ec-*

centric).[1] The Malignity factor appears to resemble Negative Valence (Saucier & Goldberg, 2001). The other five factors have some degree of correspondence with the Big Five. Two other factors, Colorlessness (e.g., *stoic*, *chameleon*) and Materialism (e.g., *capitalist*, *profiteer*), had a meaningful but lesser degree of recurrence across data sets.

In a study comparing structures based on adjective, verb, and type-noun descriptors, De Raad (1992) reanalyzed the earlier data after ipsatization (data were row-standardized so that each subject has the same response mean and variance). He reported a four-factor solution, which corresponded to a good degree with four of the Big Five: Extraversion, Agreeableness, Conscientiousness, and Intellect/Openness. However, Emotional Stability content was partly found on the Extraversion factor (e.g., terms like *chicken*, *grumbler*, and *complainer* correlated with Introversion), and partly on the Agreeableness factor (e.g., terms like *nuisance*, *offender*, and *quarreler* correlated with Disagreeableness), a split of fear and anger content. Moreover, many Extraversion terms were among the most salient terms on the so-named Intellect/Openness factor. These ipsatized-data factors were more clearly bipolar, with high-loading variables on both poles of the factor, but also counterposed different types of content at the two poles. For example, for the Extraversion factor, the three highest-loading terms were *chicken*, *grumbler*, and *complainer* at one pole and *comedian*, *buffoon*, and *comic* at the other; these are not semantic opposites. For Intellect/Openness, *chatterbox*, *twaddler*, and *prattler* on one pole were contrasted with *satirist*, *philosopher*, and *nonconformist* at the other, though not semantically opposite. In a domain of variables whose response-means are asymmetrically distributed, ipsatization might produce artifactual bipolarities (Dunlap & Cornwell, 1994; ten Berge, 1999).

De Raad (1992) noted that the noun factors provided a "more coherent and well-delineated description" than the adjective factors, but also represented "the more extreme meanings of the adjective dimensions" (p. 27). These qualities give type-noun factors a characteristic vividness.

Studies of German Type-Nouns

Henss (1998) studied the structure of German type-nouns. A master list of 5,500 type-nouns was reduced to approximately 1,000 on the basis of familiarity ratings, and selection of terms was based on those that panels of undergraduate raters deemed "both highly personality relevant and descriptive of personality proper, physical attractiveness, or sex typical person types" (p. 59). Then the author selected 192 type-nouns he regarded as "particularly suited to cover the category of personality dispositions, physical attractiveness or sex typical person types" (p. 59), with deliberate attention to "cover the domain of the Big Five personality factors" (p. 59). These 192 were administered to 240 males and 240 females. Each was assigned to describe one stimulus person from a list of 24 prominent persons (12 male, 12 female) selected so as to "represent different fields of public life, be well known and cover a broad range on the dimensions of attractiveness and likeableness" (p. 59).

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[1] In this study, two separate Malignity factors were identified, but it was noted that they correlated at least .80, so I have combined them interpretively as a single factor here.

Factor analyses were conducted separately by gender of target. Seven male factors and six female factors were retained. Both sets had one factor characterized by terms (in translation) like *pompous ass* and *pain in the neck*, another factor with terms like *chicken* and *weakling*, another with terms like *thinker*, *quick thinker*, *mental giant*, and *brain worker*, another with terms like *joker*, *comedian*, *humorist*, and *life and soul of the party*, and another with terms like *careerist* and *ambitious person*. There were two male-specific factors, one with terms like *ladies' man* and *stud*, the other with terms like *recluse* and *obstructionist*. The one female-specific factor involved terms like *conservative*, *bore*, and *hanger-on*.

Correlations with Big Five and Attractiveness markers, and for male targets Self-Assertiveness markers, indicated markedly lower correlations for Conscientiousness and Emotional Stability (at best .31–.44 in magnitude) than for the other marker scales (each having at least one correlation from .51 to .65 in magnitude). Henss (1998) noted many similarities between the German and Dutch type-noun factors, remarkable given the many methodological differences between these two studies. He concluded that type-noun factors share only part of their variance with the Big Five, so it is unwise to restrict lexical studies of personality to adjectives alone.

Other Research on Type-Nouns

Although no structural studies have been carried out, there has been taxonomic work on type-nouns in languages other than Dutch and German. Goldberg (1982) constructed a preliminary rational taxonomy on the basis of a compilation of 1,947 English type-nouns. On the basis of this taxonomic exercise, Goldberg (1982) concluded that there are a higher number of slangy and colloquial terms in the noun domain, perhaps because they are used more in oral than written communication contexts, and that the majority of type-nouns carry negative implications. Like Angleitner, Ostendorf, and John (1990), he concluded that there are fewer personality type-nouns than adjectives, a view that has elsewhere been questioned (De Raad & Hoskens, 1990; Henss, 1995, 1996).

In a number of languages, including Croatian, Czech, Filipino, Hungarian, Italian, and Spanish, as well as German and English, type-nouns have been extracted from dictionaries alongside adjectives. However, following methodological precedent, the type-nouns in each of these lexical projects were put aside and structural studies were then conducted on the adjective class alone. Nonetheless, previous studies do indicate that type-nouns are numerous in languages that have been examined by personality psychologists.

Do personality type-nouns have distinct functions in person description? A recent study compared subject-response tendencies for adjectives, type-nouns, and attribute nouns (Pearce & Saucier, 2002). A set of 150 person-descriptive English word roots was identified that have adjectival, type-noun, and attribute-noun forms (e.g., *cynical*, *cynic*, *cynicism*). Participants in an experiment were randomly assigned to (a) describe either self or a liked friend or to rate the social-desirability value of the word, and (b) use either adjective, type-noun, or attribute-noun forms of the word roots. Analyses indicated that, for the undesirable attributes, the type-noun form had the lowest endorsement rate in self- and other-ratings, and the lowest social desirability of the three word forms. Thus, controlling for attribute content, the type-noun word form is more prone to pathologize or stigmatize an attribute. In a follow-up

study, attributes encoded in type-noun form were judged to be more difficult to change (and thus, more trait-like) than the same attributes encoded in the other two word forms. For an undesirable attribute, traitedness has negative implications for the possessor of the attribute. So, we might expect type-noun factors to more prominently represent stigmatized and/or pathologized aspects of personality.

Hypotheses for the Present Study

Because personality type-nouns are frequent in number, they provide an important test for current structural models of personality. The prime research questions for this study are: What is the structure of type-noun person description in English, and how does this structure compare with that found among adjectives?

A currently prevailing assumption is that variation in personality attributes occurs along five principal dimensions (i.e., the Big Five). Thus, a five-factor hypothesis would be as follows:

> When five factors are extracted and rotated, type-nouns will yield a Big Five structure.

Two lexical studies with inclusive variable selections found factors resembling the Big Five alongside two additional factors—Negative Valence and Attractiveness (Goldberg & Somer, 2000; Saucier, 1997). A variant hypothesis, then, would be as follows:

> When seven factors are extracted and rotated, type-nouns will yield a structure including the Big Five plus Negative Valence and Attractiveness.

Some non-Big-Five structural models have been formulated on the basis of lexical studies in multiple languages. There are indications that one-, two-, and three-factor models are more robust than the Big Five, both within and across languages (Saucier, 2002b). It will be useful to test whether these structures can also be found among type-nouns. Thus, a one-factor hypothesis would be as follows:

> When only one factor is extracted, type-nouns will yield a factor contrasting desirable and undesirable attributes.

A two-factor hypothesis would be as follows:

> When two factors are extracted and rotated, type-nouns will yield one factor related to Dynamism and another related to Morality/Harmlessness/Social Propriety.

Also, a three-factor hypothesis would be as follows:

> When three factors are extracted and rotated, type-noun factors will include one corresponding with Extraversion, one with Agreeableness, and another with Conscientiousness.

Studies of personality descriptors in Filipino (Church, Reyes, Katigbak, & Grimm, 1997) and Hebrew (Almagor, Tellegen, & Waller, 1995) yielded surprisingly similar seven-factor structures, a structure reasonably well-replicated in both Italian- and English-language structures (Saucier, 2003). Thus, a seven-factor hypothesis would be as follows:

> When seven factors are extracted and rotated, type-nouns will yield factors interpretable as Gregariousness, Self-Assurance, Even Tem-

per, Concern for Others, Conscientiousness, Intellect/Openness, and Social Unacceptability (or Negative Valence).

A variant on this hypothesis would involve these seven factors appearing with an eighth Attractiveness factor. Attractiveness was found in American data analyses to co-occur with the "Multi-Language Seven" structure represented in the seven-factor hypothesis (Saucier, 2003).

A final possibility: Personality type-noun structure may not correspond well with adjectival structures, but nonetheless replicate well across languages. If so, English-language type-noun factors should replicate the type-noun structure from Dutch (from De Raad & Hoskens, 1990) and German (Henss, 1998), even if adjective-derived structural models fail to replicate.

Method

Selection of Type-Nouns

Goldberg (1980, 1982) developed a list of 1,947 English-language personality type-nouns. His major source was the *American Heritage Dictionary of the English Language* (1973); additional terms came from a catalog of proper names that have become type-nouns (Partridge, 1950), or from suggestions by members of Goldberg's research team.

Galvin (1993) gathered frequency-of-use ratings on these 1,947 type-nouns. Subsets of 120 nouns were rated by 15–21 participants each, and the coefficient alpha values for their aggregated ratings ranged from .95 to .98. Galvin calculated unrotated-first-factor scores from the transposed data matrix in which raters were treated as variables in the factor analysis. For example, the highest factor-score values (frequency scores) were obtained for the terms *guy*, *girl*, and *female*, the lowest for *panjandrum*, *houri*, and *rudesby*.

Beginning with Galvin's (1993) list rank ordered by rated frequency of use, I aimed for the 600 terms with the highest frequency scores. However, the last 12 included a high proportion of questionable or ambiguous terms, so I selected 588. I then removed a few terms whose prime meaning is adjectival (e.g., *stupid*, *precious*) and other terms that were expletives (e.g., *shit*, *asshole*) or referred to sexual orientation (e.g., *homosexual*, *lesbian*), reducing the set to 557.

Among these 557 terms were many terms apparently more descriptive of social roles than of personal attributes, seeming to be role-nouns rather than type-nouns. A role-noun (e.g., *student*, *parent*) indicates an entity that can have any of a wide range of properties and thus can easily take a modifier (e.g., the hard-working student), whereas a type-noun (e.g., *bigot*, *flirt*) indicates a property or characteristic of some entity, and thus takes a modifier only rarely and with some awkwardness (e.g., the hard-working flirt). Four graduate-student judges rated whether each of the 557 terms from the earlier set should be considered a role-noun (scored −1), a type-noun (scored +1), or whether it could function either way (scored 0). The ratings had a coefficient alpha of .85. A total of 172 terms had negative mean ratings, indicating a preponderance of role-noun over type-noun classification, and these terms were eliminated. Eliminated terms included *guy*, *girl*, *female*, *bureaucrat*, and *cowboy*. From the remaining 385 terms, 13 terms were judged too awkward or profane for the person-description task and removed, leaving 372.[2]

The 372 terms included a full range of observable person-descriptive attributes that might contribute to impressions, not assuming any division separating personality traits (narrowly and arbitrarily defined) from other personality-relevant attributes (cf. Saucier, 1997, p. 1303).

Person-Description Inventory

The person-description inventory included first the 372 type-nouns, then 54 additional type-nouns used as markers for factors from the previous

Dutch and German studies. Last, the inventory presented 75 adjectives used as markers of adjective-derived personality factors.

Each of the Dutch and German type-noun factors was represented by three to five (usually four) type-nouns—terms reported in published tables (De Raad & Hoskens, 1990, Tables 4–7; Henss, 1998, Tables 1 and 2) to have the highest loadings on the respective factors—included either in the prime selection of 372 type-nouns or in the 54 appended type-nouns. There were sets of seven factors each from earlier studies of Dutch-self, Dutch-partner, Belgian-self, Belgian-partner, and German-male targets, and a set of six factors from German-female targets.

Each of the Big Five factors was represented by six or seven terms selected as a brief version of the Big Five Modular Markers (Saucier, 2002a; Saucier & Goldberg, 2002). The Modular Markers locate the first three Big Five factors—Extraversion, Agreeableness, and Conscientiousness—in such a way that they correspond to the broader Big Three factors, with Emotional Stability and Intellect/Openness scales constructed so as to be Big-Three independent. The "Big One"—Evaluation—was represented by 10 adjectives, and the Big Two factors (Dynamism/Dominance and Morality/Social-Propriety) were each represented by 10 adjectives. A priori scales were also included for Negative Valence (or Social Unacceptability) and Attractiveness.

The hypothesis regarding the Multi-Language Seven was conceived after the design of the inventory. Therefore, marker scales for these factors were devised from the 75 terms already selected, based on correlations of these same 75 terms with Multi-Language Seven markers in another data set (used by Saucier, 2003).[3]

Participants

Six hundred seven undergraduate students (187 men and 410 women identified their gender), with a mean age of 20, were recruited from the psychology subject pool at the University of Oregon. Of these participants, approximately one third were randomly assigned to describe themselves, one third were assigned to described someone they knew well and liked, and the other third were assigned to describe someone they knew well and disliked. For those asked to describe an acquaintance, half within each group (liked or disliked target) were assigned to describe a female target, and half were assigned to describe a male target. Thus, among the acquaintance ratings (mean age of 21), gender of target was manipulated so as to be independent of liked versus disliked status: There were approximately equal numbers of liked females, liked males, disliked males, and disliked females as targets of description. Acquaintance ratings were preceded by a rating of whether the target was liked greatly, moderately, little, or not at all.

Analyses

Description of persons in the real world is an amalgamation of judgments about self and about others, with others including some people we like and some we dislike. Even if we spend most time in the company of liked others, we may spend much time talking about the traits of disliked others, and we decide who not to spend time with on the basis of personality judgments. Therefore, the best approximation to real-life person description is obtained by aggregating ratings of self and others (both liked and disliked). The ratings of the 607 targets using the 372 type-nouns were factor analyzed with initial priority given to the principal-factors method, using orthogonal normalized varimax rotation. The solution involving one unrotated factor was examined, and then rotation of two, three, and successively more factors, saving factor scores for each solution, until

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[2] Lists of terms eliminated at this and a previous step are available from Gerard Saucier and at http://darkwing.uoregon.edu/~gsaucier/typenouns

[3] Terms included in all of the marker scales are available from Gerard Saucier and at http://darkwing.uoregon.edu/~gsaucier/typenouns

factors that were unsuitably small or uninterpretable began to appear. The solutions with factors up to that number were then compared with respect to (a) degree of replication within subsamples of the total sample, and (b) congruence of factors derived independently from analyses of male targets and analyses of female targets. The one-, two-, three-, five-, and seven-factor hypotheses were examined using the one-, two-, three-, five-, and seven-factor solutions from the 372 terms.

Results and Discussion

Principal-factors analysis of the 372 type-nouns yielded a remarkably large first factor accounting for 21% of the variance. The first 20 eigenvalues were 77.94, 25.92, 14.18, 10.08, 8.92, 7.07, 5.87, 4.53, 4.32, 3.63, 3.30, 3.15, 2.97, 2.84, 2.69, 2.60, 2.49, 2.48, 2.37, and 2.30. The scree plot provided no clear guidance for selecting the best number of factors, so other criteria were used for this purpose. Analyses proceeded successively from one-factor through 10-factor solutions. In the 11- and 12-factor solutions very small, low-saturation factors of difficult interpretation were added to the first 10. Thus, a "minimal interpretability" criterion suggested that no more than 10 factors be considered.

Principal-factors solutions were compared with principal-components (PC) and maximum-likelihood (ML) solutions for 1–10 factors. For solutions of one through eight factors, regression-derived factor scores and component scores indicated near-perfect correspondence between solutions derived by these three methods; each factor correlated .99 to 1.00 with a corresponding factor derived by each of the other two methods. For nine-factor and 10-factor solutions, PCs and principal factors had similarly high resemblance, but ML solutions yielded three or four factors correlating under .90 with the best-match PC or ML factor. Because PCs advantageously yield exact "factor" scores that are perfectly mutually orthogonal, PC results are reported henceforth (as "factors", using the broad sense of the term), with the understanding that principal factors (and, for up to eight factors, ML) would lead to the same results.

The hierarchy formed by solutions of one through eight factors is depicted in Figure 1. In the figure, each factor is labeled by several terms with the highest factor loadings; correlations between adjacent levels (numbers of factors) of .40 or greater in magnitude are indicated.[4]

A few important generalizations about the factor structure of these type-nouns are evident from Figure 1. The first factor is rather consistent from the one-factor solution to the eight-factor solution, with recurrent salient terms like *trash*, *rat*, *weasel*, *dummy*, and *twit*. The second factor (of two) splits into two factors in the three-factor solution; of these two factors, one (with salient terms like *ladies' man*, *stud*, and *gentleman*) remains fairly constant down the hierarchy, whereas the other (with salient terms like *sympathizer*, *thinker*, and *humanitarian*) splits in the six-factor solution into two factors, one emphasizing sweetness and the other intellectuality.

What Number of Factors Best Suits These Data?

A useful criterion for deciding on the number of factors is replicability. Replicability across factor-extraction methods has already been indicated: Rotated solutions with more than eight factors were not invariant across extraction methods. I also examined the replicability of the one- to 10-factor solutions in five

subsets of the total sample: female targets ($N = 343$), male targets ($N = 251$), self-reports ($N = 203$), liked others ($N = 202$), and disliked others ($N = 162$, those in this group with moderate or high liking-of-target ratings were excluded for this analysis). This replicability criterion concerns the robustness of the structure across differing methodologies (i.e., types of targets of description). Part–whole correlations (averaged across all the factors in the solution) between the best one-to-one matches of factors from the whole data set and the subsample are graphed in Figure 2; the grand mean for each number of factors is indicated by the bold line.

Figure 2 shows that the one- and two-factor structures in all subsamples are near-perfect replicas of the structure in the total sample. With more factors, replication in the subsamples becomes less consistent. The solutions of six through nine factors are arguably better than those with four or five factors: Not only are the six- to nine-factor structures more informative, but they reflect the overall factor structure about as well or better than is the case for four or five factors.

As a second replicability criterion, I examined congruence between factors based on ratings of male targets and factors based on ratings of female targets. This criterion is particularly important in the type-noun domain, where many highly descriptive terms contain gender markers (e.g., *ladies' man*, *party girl*) or might be more applicable to one gender than the other (e.g., *hunk* for males, *beauty* for females). Previous investigators dealt with this problem in either of two ways. One study eliminated all gender-specific terms (De Raad & Hoskens, 1990), although this eliminates potentially useful personological distinctions. The other study reported separate structures for male and female targets (Henss, 1998), although this leaves uncertainty about what the common across-gender structure might be. In this study, I sought a structure that would include the informative gender-specific terms but with factors that would appear whether the targets of description were men or women or both together.

Table 1 presents congruence coefficients for the one- to 10-factor solutions, once each male-target factor in a solution with a particular number of factors is paired with one female-target factor in a solution having the same number of factors, these pairings chosen so that the mean of the resulting congruence coefficients is maximized. As with the part–whole replication criterion, the one- and two-factor solutions markedly outperformed other solutions. Only one- and two-factor solutions had all congruence coefficients over .90, a widely used acceptability threshold for such coeffi-

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[4] All analyses reported here are based on original (not ipsatized) data. Factors based on ipsatized data for the most part resembled those based on original data. The only noticeable differences are as follows: (a) the first factor was more of a bipolar evaluation factor, contrasting terms like *friend, buddy,* and *sweetheart* with *jerk, rat,* and so forth; (b) a factor resembling the second factor from original ratings never appeared, likely because its content was subsumed within the favorable pole of the first factor; and (c) because of the disappearance of the second factor, many factors from Figure 1 first appeared at a higher point in the hierarchy than is evident in Figure 1. For example, *ladies' man* appeared as the second of two factors. In the ipsatized seven-factor solution, *doll–beauty–sweetie–darling* was replaced by *critic–cynic–pessimist–crab,* and *philosopher–nonconformist–bookworm–pioneer* was replaced by *freak–psychotic–maniac-lunatic*; thus, not only did the second factor not appear in ipsatized data, but its subcomponent factors also tended not to appear.

372 Type-Nouns: From One to Eight Factors
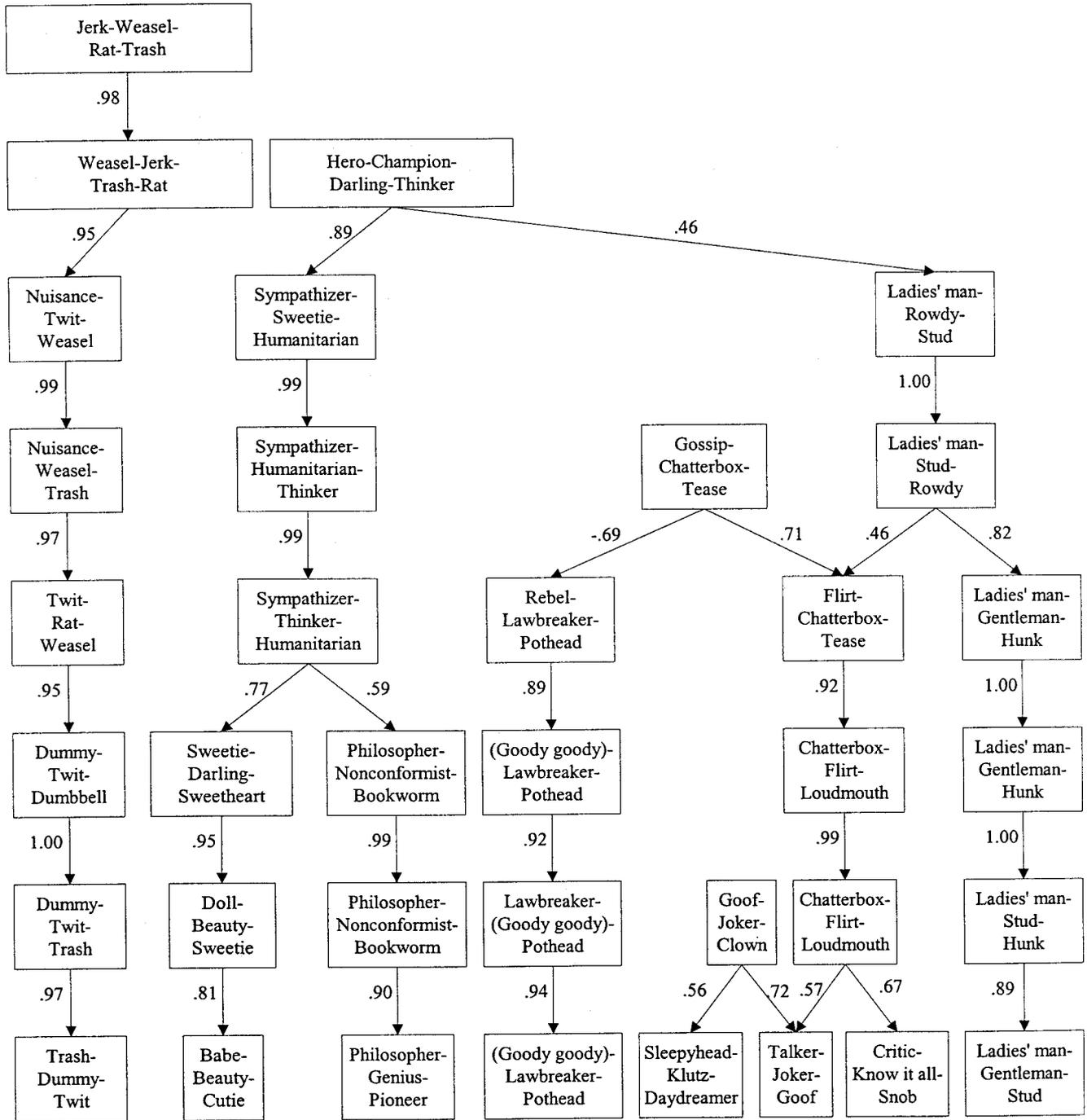
Figure 1. Emergence of factors from 372 type-nouns.

cients. Solutions with five, six, and eight factors were distinctive in that they had no congruence coefficient under .50, indicating better matching of male- and female-target factors than in the solutions with three, four, seven, nine, or 10 factors.

Considering jointly the part–whole replication and the male–female congruence criteria, there is reason to give special attention to the solutions having two and eight factors. The one- and two-factor solutions both had very high replication and congru-
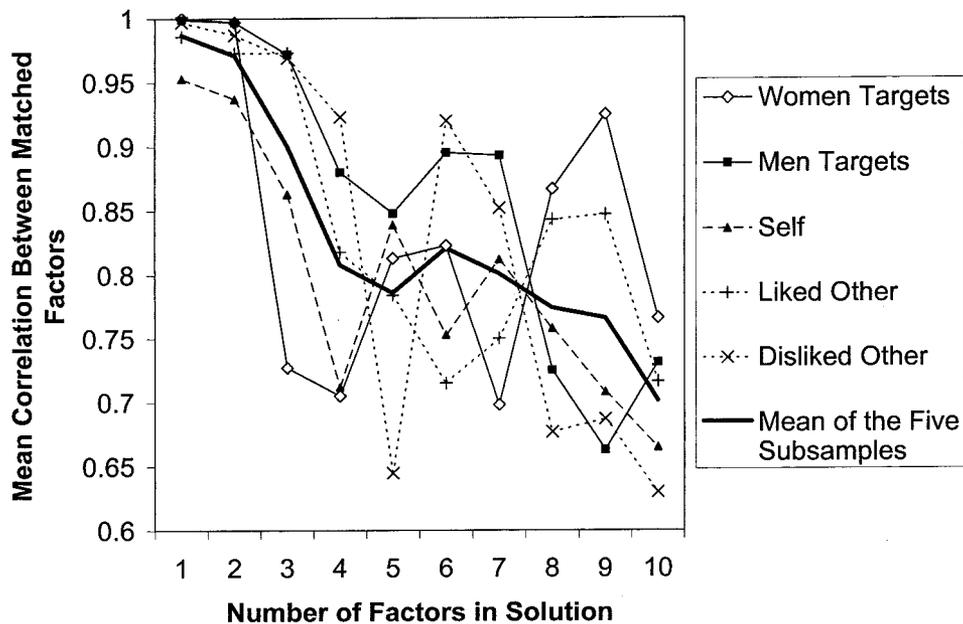
Figure 2. Replication of overall structure in parts of the sample.

ence, but two factors can be preferred because they are more informative than one factor. The five-, six-, and eight-factor solutions all had reasonable levels of both part–whole replication and male–female congruence, but the eight-factor solution was selected because, likewise, its additional factors make it more informative.

On the basis of the criteria applied above, the two-factor solution, like the one-factor solution, can be regarded as invariant. But "invariant" is too strong a word for the eight-factor solution, which includes congruence coefficients as low as .53. A .53 congruence indicates both meaningful similarity and meaningful differences between two factors. The eight factors did have a discernible, fairly consistent core across subsamples, and all of the eight male-target factors have a reasonable one-to-one match among the eight female-target factors. Next, I attempt to define the core of each of the eight factors in a way that is consistent across male and female targets.

Table 1

Congruence Coefficients (in Rank Order) Matching Female-Target Factors With Male-Target Factors

No. of factors										Mean coefficient
1	.96									.96
2	.97	.93								.95
3	.89	.68	.49							.69
4	.93	.87	.84	.22						.71
5	.91	.85	.82	.74	.62					.79
6	.93	.84	.80	.75	.69	.53				.76
7	.91	.86	.74	.68	.63	.49	.42			.68
8	.93	.93	.82	.76	.70	.67	.58	.53		.74
9	.94	.88	.80	.72	.63	.61	.38	.38	.27	.62
10	.95	.82	.82	.79	.75	.66	.63	.62	.42	.16	.66

Initial Characterization of the Eight Factors

These eight factors can be given descriptive labels on the basis of careful attention to the common denotations of the most high-loading terms.[5]

Factor 1 featured a large number of derogatory descriptors indicating worthlessness (*trash, twit, scum, worm*), incapability (*dummy, dumbbell, idiot, moron*) and/or malice (*rat, weasel, creep, scoundrel*); 11 favorable terms (e.g., *friend, buddy, success, winner, sweetheart*) had salient negative loadings. This factor could be called Contemptibleness or Social Unacceptability. The terms with the highest positive loadings are used for those we feel contempt for or find unacceptable, at least momentarily. Type-nouns powerfully express these evaluative sentiments. Whereas Factor 1 strongly emphasizes evaluation, the remaining factors are more descriptive.

Factor 2 resembles the Big Five Intellect/Openness factor. Highest-loading terms were *philosopher, genius, pioneer, thinker, innovator, artist, humanitarian, intellectual,* and *brain*. These suggest genius, reflectiveness, originality, and nonconformity, and the label Autonomous Intellect.

Factor 3's highest-loading terms—*critic, know-it-all, snob, cynic, eavesdropper, snoop, skeptic, show-off, obsessive,* and *smart-aleck*—reflect a critical, overbearing, and egotistical attitude toward others, with indirectly expressed antagonism. Such a factor involves Egocentrism.

For Factor 4, in the mixed-gender sample, the highest-loading terms were *ladies' man, stud, gentleman, hunk, romeo, sportsman,*

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[5] A table that presents the 372 terms sorted by their loadings on the eight factors, with loadings on the two-factor solution added on the right, is available from Gerard Saucier and at http://darkwing.uoregon.edu/~gsaucier/typenouns

dude, *lady-killer*, *jock*, *playboy*, and *womanizer*; three terms with salient negative loadings were *feminist*, *vegetarian*, and *longhair*. The factor clearly emphasizes sexuality, aggressiveness, and perceived masculinity. Because the content includes terms that are traditionally used primarily to describe males, one might wonder whether it is a "males-only" factor. Indeed, the factor scores correlated .63 with (male) gender, and it could be labeled as Masculinity. It is important, therefore, to define content that is associated with this factor regardless of whether males or females are being described.

Table 2 provides for this and other factors a list of terms with the highest degree of association with the factor in samples in which either only males or only females are being described. To arrive at this list, the female-target factor structure was imposed on the total sample, then the male-target factor structure was so imposed, and the factor scores for these two structures were averaged. Specifically, using the 372 type-nouns as predictors, a regression equation was developed for the factor within each (male-target or female-target) subsample. Using this equation, standardized predicted scores were generated for the total sample; in the derivation subsample predicted scores, of course, equaled obtained scores. The standardized predicted scores on the basis of a female-target factor were then averaged with those corresponding scores on the basis of the most closely corresponding male-target factor. Finally, these averages were correlated with all 426 type-nouns (the 372 from Galvin, 1993, plus the 54 appended).

For seven of eight factors, there is little difference between the terms listed in Table 2 and those with highest loadings on the factor in the mixed-gender eight-factor solution. But for Factor 4 there are some noticeable differences: The most cross-gender replicable version of this factor has less emphasis on male-specific terms and more emphasis on terms denoting Ruggedness. The male-specific "womanizing" content is emphasized on this factor only when male targets are substantially represented. I label the mixed-gender-sample version as Masculinity and the replicable-across-genders version as Ruggedness.

For Factor 5, highest-loading terms were *lawbreaker*, *pothead*, *drunk*, and *rebel* at the positive pole, and *goody-goody*, *conserva-*

Table 2
Type-Nouns Most Highly Associated With the Mean of Paired Standardized Female-Target Factor Scores and Male-Target Factor Scores

	Factor 1		Factor 3		Factor 5		Factor 7
.76	Trash	.50	Snob	.60	Lawbreaker	.57	Joker
.76	Dumbbell	.48	Gossip	.51	Pothead	.57	Clown
.75	Dummy	.47	Eavesdropper	.51	Drunk	.56	Goof
.74	Twit	.46	Critic	.51	Alcoholic	.51	Comedian
.74	Moron	.45	Materialist[a]	−.47	Goody-goody	.51	Comic
.74	Idiot	.44	Tease	.46	Rebel	.50	Rowdy
.73	Twerp	.44	Hotshot	.42	Troublemaker	.47	Extrovert
.73	Worm	.43	Boaster[a]	.40	Slacker	.46	Talker
.73	Scum	.43	Snoop	−.39	Traditionalist	.45	Life-of-the-party[a]
.73	Rat	.42	Know-it-all	−.39	Conservative	.44	Practical-joker
.72	Bonehead	.41	Show-off	−.39	Perfectionist	.44	Character
.72	Deadbeat	.40	Blabbermouth	−.38	Innocent	.44	Chatterbox
.71	Weasel	.40	Flirt	.38	Night-owl	.43	Loony
.71	Blockhead	.39	Brown-nose	−.36	Early-bird	.43	Screwball
.71	Creep	.39	Teaser	−.35	Christian	.43	Loudmouth
.70	Dunce	.38	Busybody	−.32	Disciplinarian	.43	Chatterer[a]
	Factor 2		Factor 4		Factor 6		Factor 8
.62	Philosopher	.47	Tough	.69	Babe	.50	Klutz
.53	Nonconformist	.46	Jock	.67	Darling	.46	Worrywart
.50	Pioneer	.45	Sportsman	.67	Sweetie	.46	Sleepyhead
.48	Poet	.44	Machine	.66	Honey	.44	Daydreamer
.48	Artist	.40	Aggressor[a]	.65	Beauty	.37	Speculator
.47	Genius	.40	Ladies' man	.64	Cutie	.35	So-and-so
.46	Individualist	.39	Daredevil	.63	Doll	.35	Novice
.46	Radical	.38	Diehard	.60	Love	.34	Paranoid
.44	Liberal	.37	Gentleman	.60	Romantic	.32	Beginner
.44	Brain	.36	Wise-guy	.58	Charmer	.32	Pushover
.43	Loner	.36	Lady-killer	.57	Comforter	.31	Packrat
.43	Intellectual	.36	Born-fighter[a]	.57	Knockout	.28	Mortal
.41	Innovator	.34	Dude	.57	Fox	.26	Pacifist[a]
.41	Left-winger	.34	Authority	.56	Star	.26	Homebody
.40	Outsider	.34	Fighter	.55	Hero	.22	Lightweight
.39	Eccentric	.30	Heavyweight	.55	Sympathizer		

Note. N = 607.
[a] Term was included among 54 supplementary type-nouns, but not in the main set of 372.

tive, *traditionalist*, *innocent*, and *Christian* at the negative pole. This factor contrasts Delinquency (the best single label) with Moralism. It seems possible that one could identify both favorable and unfavorable aspects of each pole.

For Factor 6, highest-loading terms were *babe*, *beauty*, *cutie*, *fox*, *doll*, *knockout*, *charmer*, *party-girl*, *sexpot*, *heartbreaker*, *playmate*, *honey*, and *darling*. This factor includes many terms related to Attractiveness that are more often applied to women while still being applicable to men (e.g., *doll*, *knockout*, *charmer*). To a lesser degree, the factor includes terms of endearment that one might use for an intimate partner (e.g., *babe*, *darling*, *sweetie*, *honey*, *love*) that connote pleasing qualities. This factor can be called Attractiveness/Pleasingness.

For Factor 7, highest-loading terms were *talker*, *joker*, *goof*, *clown*, *rowdy*, *chatterbox*, *comic*, *comedian*, *loudmouth*, *extravert*, *practical-joker*, and *character*. These are somewhat extreme expressions of sociability and extraversion. "Waggishness" perhaps best captures this combination of attributes. But "Liveliness" is a more widely used term, and thus a better label.

For Factor 8, highest-loading terms were *sleepyhead*, *klutz*, *daydreamer*, *lazybones*, *dreamer*, *worrywart*, *speculator*, *paranoid*, *pushover*, and *novice*. These terms together suggest a dawdling, bewildered, dissociated, ruminative, and perhaps naïve quality. In addition to reverie and disorientation, it might reflect individual differences in absorption, a tendency to become caught up in self-involved experiences. One might tentatively label it Disorientation/Absorption.

Initial Characterization of the Two Broad Factors

In the two-factor solution, the first and larger factor closely resembles Factor 1 (Contemptibleness, Social Unacceptability) as described above. Highest-loading terms were *weasel*, *jerk*, *rat*, *trash*, *scum*, *worm*, *idiot*, *dummy*, *twit*, *creep*, and *nuisance*, all on the positive pole; *friend* and *success* were high-loading (.50 and over) salient terms on the other pole. However, terms from Factor 3 (*snob*, *show-off*, *snoop*, *eavesdropper*), Factor 5 (*drunk*, *lawbreaker*), and even Factor 7 (*loudmouth*) also had salient high loadings (.50 and over) on the factor. So this is a slightly broader version of Factor 1. If not called Contemptibleness or Social Unacceptability, it could be called "those one should like to avoid."

For the second factor in the two-factor solution, highest-loading terms were *hero*, *darling*, *champion*, *thinker*, *sympathizer*, *star*, *innovator*, *leader*, *sweetie*, *peacemaker*, and *enthusiast*, all on the positive pole. There were no terms with salient loadings on the negative pole, although the terms *loser*, *creep*, and *jerk* had substantial (−.30 or greater) secondary loadings on this pole. This factor can be seen as a compound of more specific factors from the eight-factor solution that relate to Intellect/Openness, Attractiveness/Pleasingness, and the desirable aspects of Ruggedness. The associated terms suggest outstanding qualities that inspire admiration. Whereas the first factor in the two-factor solution concerns whether one is socially acceptable, the second concerns whether one is a "standout." It could be called Admirableness, or "those one should like to approach."

There were numerous terms with positive loadings on both of these two factors. Examples included *skeptic*, *rebel*, *nut*, *klutz*, *teenybopper*, *busybody*, *scatterbrain*, *lush*, *pushover*, *butterfin-*

gers, *lightweight*, *sexpot*, and *plaything*. Each term suggests a mix of admirable and contemptible (i.e., socially unacceptable) features. There were virtually no terms with negative loadings on both factors, perhaps because familiar type-nouns mark features that are present, not features that are absent. The type-noun domain characteristically lacks negation terms, although some awkward ones could be concocted (e.g., *non-nut*, *non-rebel*, *non-pushover*, *non-sexpot*).

Replication of Type-Noun Factors Across Three Germanic Languages

The above analyses addressed within-language (i.e., across subsample) replication, but did not address across-language replication. Do English-language type-noun factors replicate those found in Dutch and German? To answer this question, I focus here on the eight-factor solution, because this solution was the most useful in the current English-language data, and both the Dutch and German studies focused on solutions with roughly the same number of factors.

Table 3 presents the correlations between the eight American-English type-noun factors and markers for type-noun factors found in studies conducted in the Netherlands, Belgium, and Germany (De Raad & Hoskens, 1990; Henss, 1998). Of the eight American factors, all but Factor 5 (Delinquency) had a substantial (≥ .45) correlation with a factor from one of these studies.

Factor 1 (Social Unacceptability) had high correlations (over .50) with two German-male and two German-female factors, and with three Dutch-self factors, two Dutch-partner factors, four Belgian-self factors, and four Belgian-partner factors. The consistently related Dutch and Belgian factors are labeled Malignity, Anxiety, and Antagonism. One related German factor emphasized descriptors like *pompous ass* and *pain in the neck*, and the other emphasized descriptors like *chicken* and *weakling*. The large number of correlates suggests that Factor 1 is a broader factor than any reported in the European studies; within each set of European factors, several can be seen as specific "facets" of an overarching factor of incapability, worthlessness, and malice.

The other factors with many counterparts in the European studies were Factors 2, 3, and 7. Factor 2 (Autonomous Intellect) was highly related to those Dutch and Belgian factors labeled as "Culture" by De Raad and Hoskens (1990), and to German factors emphasizing terms like *thinker*, *mental giant*, and *brain worker*. Factor 3 (Egocentrism) was consistently correlated (from .33 to .55) with the Antagonism factor in the Dutch and Belgian structures, and was also substantially related to German factor M2 (with terms translated as *pompous ass* and *pain in the neck*). Factor 7 (Liveliness) was highly related to most of the Dutch and Belgian type-noun Extraversion factors, which similarly emphasize a propensity to merrymaking, as well as to those German factors referencing being a wag and the "life and soul of the party."

Three of the present eight factors are related to German factors that are gender-limited. Factor 6 (Attractiveness/Pleasingness) was highly correlated with German-female targets factor F6; Factor 6 had weaker relations with Dutch and Belgian factors, probably because of the exclusion of attractiveness terms in that study. Factor 8 (Disorientation/Absorption) was substantially related to another German-female targets factor (F5). Finally, Factor 4 (Mas-

Table 3

Correlations Between Type-Noun Factors From English and From Other Languages

	Factor scores from American-English factors										
	Eight factors								Two factors	
Other factor	1	2	3	4	5	6	7	8	1	2
German-male										
M1	**.52**	.00	.16	−.19	−.17	.06	−.10	.39	.22	**.46**
M2	**.60**	−.14	**.48**	.15	.13	−.04	.35	−.01	**.76**	−.05
M3	−.24	**.68**	.08	.21	−.07	.05	.05	.06	−.17	**−.67**
M4	−.01	.23	−.09	.36	.15	.09	**.68**	.13	−.10	**.51**
M5	.24	.06	.06	**.76**	.11	.23	.06	−.12	.33	.30
M6	.28	**.51**	.37	−.07	.06	−.10	−.12	.32	.38	.35
M7	.19	**.49**	.28	.19	−.16	.15	.13	−.02	.28	**.54**
German-female										
F1	**.75**	−.12	.39	−.14	−.02	−.09	.21	−.01	**.82**	−.17
F2	−.19	**.69**	.16	.22	−.14	.05	.10	.05	−.11	**.70**
F3	−.37	.28	−.17	.31	.11	.21	**.55**	.16	−.27	**.59**
F4	**.58**	−.01	.28	−.03	−.18	.00	−.13	.37	**.61**	.00
F5	.23	.29	.30	−.20	.03	.07	−.06	**.52**	.32	.28
F6	.06	.20	.22	.05	−.14	**.71**	.12	−.02	.15	**.50**
Dutch-self										
Malignity	**.82**	−.20	.26	.05	.09	.00	.00	−.19	**.85**	−.27
Anxiety	**.63**	−.09	.25	−.21	−.13	−.05	−.17	.29	**.63**	−.17
Extraversion	.23	.15	.31	−.07	−.08	.33	**.56**	.09	.37	.40
Culture	−.35	**.71**	.08	.14	−.06	.07	.05	.12	−.27	**.70**
Antagonism	**.69**	.08	.33	.06	.18	−.01	.18	.03	**.79**	.05
Perseverance	−.31	**.48**	.04	.17	−.35	.15	.11	−.09	−.29	**.57**
Materialism	−.01	**.53**	.26	.24	−.21	.14	.16	−.14	.09	**.58**
Dutch-partner										
Malignity	**.87**	−.15	.18	.05	.10	−.10	.06	−.09	**.88**	−.24
Extraversion	−.11	.30	−.13	.30	.05	.06	**.59**	.19	−.02	**.54**
Anxiety	**.47**	.02	.30	−.26	−.20	.04	−.13	.41	**.50**	.00
Antagonism	.39	.27	**.45**	.10	−.04	−.01	.13	.06	**.52**	.26
Culture	−.03	**.74**	.01	.00	.09	.03	−.01	.08	.00	**.60**
Perseverance	−.21	**.52**	.10	.20	−.27	.14	.13	−.16	−.17	**.58**
Colorlessness	.25	.36	.18	.08	−.17	.17	.09	.33	.32	**.47**
Belgian-self										
Malignity	**.81**	−.09	.24	−.01	−.01	.00	−.02	−.06	**.82**	−.16
Antagonism	**.58**	−.10	.41	.14	.21	.06	.40	−.10	**.73**	.01
Extraversion	.25	.20	−.09	.29	.04	.05	**.61**	.25	.33	**.45**
Anxiety	**.55**	−.10	.36	−.30	−.13	.04	−.12	.31	**.58**	−.14
Culture	.09	**.70**	.00	−.05	.28	−.03	.10	.09	.14	**.53**
Perseverance	.31	.30	.15	.20	−.23	.00	−.05	.12	.33	.31
Materialism	**.55**	−.05	.40	.14	−.08	.18	.08	.05	**.65**	.07
Belgian-partner										
Malignity-1	**.89**	−.17	.17	−.04	.03	−.05	.04	.02	**.88**	−.23
Antagonism	**.52**	.03	**.55**	.19	.04	.03	.24	−.08	**.69**	.10
Culture	.42	**.45**	.23	−.04	.24	−.03	.09	.17	**.52**	.33
Malignity-2	**.85**	−.19	.14	.18	.10	−.08	.05	−.10	**.86**	−.23
Extraversion	.25	.18	.04	.38	.05	.03	**.53**	.26	.36	.43
Anxiety	**.69**	−.12	.43	−.09	−.03	−.13	−.16	.13	**.74**	−.23
Perseverance	.19	.42	.14	.20	−.28	.07	−.01	.16	.22	**.46**
American-English eight factors										
1									**.94**	−.09
2									.02	**.79**
3									.28	.02
4									.09	.27
5									.12	−.12
6									.03	.40
7									.11	.28
8									.07	.21

Note. $N = 607$. German factors are from Henss (1998); Dutch and Belgian factors are from De Raad and Hoskens (1990). Correlations of .45 or greater magnitude are shown in boldface.

culinity) was highly related to German-male targets factor M5 (with German equivalents for *ladies' man*, and so forth).

To a degree, then, English-language type-noun factors do replicate those in Dutch and German. Two factors are quite consistent across studies in all three languages: one factor referencing deep and divergent thinking related to Big Five Intellect/Openness, and another factor representing what could be labeled as Liveliness, and which is related to Big Five Extraversion. Another pair of factors seem consistent only when the variable selection allows: The German and English studies included an ample representation of terms related to gender, attractiveness, and sexuality, and in both of these studies there was one factor that included an emphasis on beauty and sexual attractiveness, and another factor emphasizing the pursuit of what is found attractive—with descriptors like *ladies' man*, *stud*, *playboy*, and *womanizer*; perhaps Dutch and Belgian data would have yielded similar factors had a more inclusive variable selection been used. Another consistency across languages is factors that include malignancy and cowardice content: However, the Dutch and German studies identified separate factors for malignancy and cowardice, whereas these two kinds of content are combined in the present study's Factor 1.

Thus, these three Germanic-language studies indicate robust type-noun factors related to Intellect/Openness, Liveliness, Antagonism, Attractiveness, and Masculinity, as well as Malignancy and Cowardice either combined in one factor or separated. Factors directly corresponding to Big Five Conscientiousness and Emotional Stability appear to be missing (as in Henss, 1998).

Replication of the Big Five and of Alternative Structures

As Table 4 indicates, in the five-factor type-noun solution, factors are found corresponding to Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Intellect/Openness, with correlations of .60, −.66, .34, .31, and .50, respectively. The

mean of these five coefficients is .48. If one compares the Big Five plus Negative Valence and Attractiveness with the seven-factor type-noun solution, factors are found corresponding to Extraversion, Agreeableness, Conscientiousness, Emotional Stability, Intellect/Openness, Negative Valence, and Attractiveness, with correlations of .56, .21, .34, .29, .53, .80, and .71, respectively, for a mean of .49.

Table 5 presents evidence for evaluating the one-, two-, and three-factor hypotheses. The Evaluation (*SD*) marker scale correlated an impressive −.86 with the first factor from type-nouns. The Big Two marker scales correlated −.81 and .54 (mean .67) with matched factors in the two-factor type-noun structure. And the Big Three marker scales correlated .47, −.66, and .32 (mean .48) with matched factors in the three-factor type-noun structure. The replication level for the Big One and Big Two are clearly higher than for the Big Three, Big Five, or the Big-Five-plus-two.

Table 6 presents evidence for evaluating the seven-factor hypothesis. When factors from the seven-factor type-noun solution are matched one-to-one with Gregariousness, Self-Assurance, Even Temper, Concern for Others, Conscientiousness, Intellect/Openness, and Negative Valence, one has correlations of .52, .61, .13, .45, .39, .59, and .80, respectively. The mean replication coefficient of .50 is about the same as the replication level for the Big Five. However, one of these type-noun factors (Factor 2 of 7) is highly related to Attractiveness. If one adds an Attractiveness factor and compares the eight-factor type-noun solution with the Multi-Language Seven plus Attractiveness, the replication correlations become .68, .49, −.51, .28, −.35, .64, .83 for the first seven factors, and .70 for Attractiveness. The mean of these coefficients is .56, somewhat higher than those obtained in testing the five-factor hypothesis, or that with seven factors sans Attractiveness.

Overall, one- and two-factor hypotheses were best supported by these analyses.

Table 4
Correlations Relevant to the Five-Factor Hypothesis

Type-noun factor	Big Five					Additional factors	
	E	A	C	ES	I/O	NV	Attr.
Five-factor type-noun structure							
Factor 1 (twit, rat, . . .)	−.21	**−.66**	−.40	−.39	−.28		
Factor 2 (sympathizer, thinker, . . .)	−.09	.41	<u>.34</u>	−.36	.34		
Factor 3 (ladies' man, gentleman, . . .)	.21	−.16	.15	<u>.31</u>	−.08		
Factor 4 (rebel, lawbreaker, . . .)	.08	−.04	−.32	.03	**<u>.50</u>**		
Factor 5 (flirt, chatterbox, . . .)	**<u>.60</u>**	−.16	−.15	−.22	−.03		
Seven-factor type-noun structure							
Factor 1 (dummy, twit, . . .)	−.23	**−.62**	**−.50**	−.31	−.29	**<u>.80</u>**	−.32
Factor 2 (doll, beauty, . . .)	.05	.41	.08	−.28	.09	−.20	**<u>.71</u>**
Factor 3 (philosopher, nonconformist, . . .)	−.11	.04	.21	−.29	**<u>.53</u>**	−.07	.09
Factor 4 (ladies' man, stud, . . .)	.23	−.12	.19	<u>.29</u>	−.07	.08	.17
Factor 5 (chatterbox, flirt, . . .)	**<u>.56</u>**	−.36	−.07	−.28	−.03	.20	.22
Factor 6 (lawbreaker, [goody-goody], . . .)	.20	−.09	−<u>.34</u>	.15	.34	.18	.09
Factor 7 (goof, joker, . . .)	.15	<u>.21</u>	−.15	.05	.12	−.11	−.13

Note. *N* = 607. E = Extraversion, A = Agreeableness, C = Conscientiousness, ES = Emotional Stability, I/O = Intellect/Openness, NV = Negative-Valence, Attr. = Attractiveness. Lexical type-noun factors are denoted by the two highest-loading terms. Correlations of .45 or greater in magnitude are shown in boldface. Coefficients representing best-match pairs of factors are underlined.

Table 5
Correlations Relevant to the One-, Two-, and Three-Factor Hypotheses

| Type-noun factor | Big One | Big Two | | Big Three | | |
		M/S	D	E	A	C
One-factor type-noun structure						
Factor 1 (jerk, weasel, . . .)	**−.86**					
Two-factor type-noun structure						
Factor 1 (weasel, jerk, . . .)		**−.81**	−.34			
Factor 2 (hero, champion, . . .)		.33	**.54**			
Three-factor type-noun structure						
Factor 1 (nuisance, twit, . . .)				−.19	**−.66**	**−.46**
Factor 2 (sympathizer, sweetie, . . .)				−.07	.42	<u>.32</u>
Factor 3 (ladies'man, rowdy, . . .)				**.47**	−.20	−.04

Note. *N* = 607. Big One = Socially Desirable Qualities; M/S = Morality and Social Propriety; D = Dynamism, Dominance, Deference; E = Extraversion; A = Agreeableness; C = Conscientiousness. Lexical type-noun factors are denoted by the two highest-loading terms. Correlations of .45 or greater in magnitude are shown in boldface. Coefficients representing best-match pairs of factors are underlined.

Consequences for Taxonomies of Personality

There appears to be a difference between the kinds of content emphasized in type-noun descriptors as contrasted with adjectival descriptors. In the type-noun domain, a single factor is dominant. On the basis of examination of content alone, I labeled this factor as Contemptibleness or Social Unacceptability. Because such a factor is distinctly larger among type-nouns than among adjectives, we might conclude that type-nouns focus more on referencing violations of morality and other standards for acceptable behavior, and more prominently represent stigmatized and/or pathologized aspects of personality. Exclusive reliance on studies of adjectives would lead one to underestimate the importance of the morally

judgmental aspect of person description, which constitutes a dominant force in impression formation (Wojciszke, Bazinska, & Jaworski, 1998).

The emphasis among type-nouns on marking behavior that is socially unacceptable may reflect a human preoccupation with identifying and labeling those who should be excluded from the group. Terms like *dummy*, *jerk*, *crook*, and *phony* serve to categorize a person as not worthy of being dealt with in normal give-and-take social relationships. Consonant with this view, several of the salient negative-loading terms on Factor 1 (*friend*, *buddy*, *somebody*, *love*, *sweetie*) have connotations of group inclusion. A group-exclusion function would help explain why so many Factor

Table 6
Correlations Relevant to the Seven-Factor Hypothesis

| Type-noun factor | Multi-Language Seven | | | | | | | Attr. |
	Greg.	SA	ET	CFO	Con.	O/V	NV	
Seven-factor type-noun structure								
Factor 1 (dummy, twit, . . .)	−.27	−.27	**−.53**	**−.63**	−.27	−.40	**.80**	
Factor 2 (doll, beauty, . . .)	.17	−.17	.14	**.45**	.11	.25	−.20	
Factor 3 (philosopher, . . .)	.00	−.07	−.11	.19	.31	**.59**	−.07	
Factor 4 (ladies'man, stud, . . .)	.20	**.61**	.20	−.07	.11	.05	.08	
Factor 5 (chatterbox, flirt, . . .)	**.52**	.11	−<u>.43</u>	−.34	.04	−.07	.20	
Factor 6 (lawbreaker, . . .)	.16	.15	.02	−.14	−<u>.39</u>	.05	.18	
Factor 7 (goof, joker, . . .)	<u>.32</u>	.04	.13	.22	−.11	.11	−.11	
Eight-factor type-noun structure								
Factor 1 (trash, dummy, . . .)	−.18	−.16	**−.50**	**−.67**	−.26	−.41	**.83**	−.34
Factor 2 (philosopher, genius, . . .)	.10	.02	.07	.37	.38	<u>**.64**</u>	−.15	.30
Factor 3 (critic, know-it-all, . . .)	.04	−.08	**−.51**	−.35	.14	−.01	.17	−.07
Factor 4 (ladies' man, . . .)	.06	**.49**	.19	−.03	.04	.00	.02	.09
Factor 5 ([goody-goody], . . .)	.08	.12	−.05	−.16	−<u>.35</u>	.12	.16	−.05
Factor 6 (babe, beauty, . . .)	.24	−.06	−.10	.07	−.02	.02	.03	**.70**
Factor 7 (talker, joker, . . .)	**.68**	.22	−.03	.01	−.04	.06	.01	.09
Factor 8 (sleepyhead, klutz, . . .)	−.19	−.42	−.03	<u>.28</u>	−.10	.09	−.11	−.01

Note. *N* = 607. Greg. = Gregariousness; SA = Self-Assurance; ET = Even Temper (vs. Temperamentalness); CFO = Concern for Others (vs. Egotism); Con = Conscientiousness; O/V = Originality, Virtuosity; NV = Negative Valence; Attr. = Attractiveness. Lexical type-noun factors are denoted by the two highest loading terms. Correlations of .45 or greater in magnitude are shown in boldface. Coefficients representing best-match pairs of factors are underlined.

1 (Social Unacceptability) terms involve the description of a person as a kind of animal (*rat*, *weasel*, *worm*, *dog*, *jackass*, *pest*, *snake*, *monster*, *cow*, *slug*, *pig*, *turkey*, *crab*, *shrimp*, *chicken*) or other nonhuman object or entity (*trash*, *scum*, *dumbbell*, *devil*, *vegetable*, *fruit*, *snot*). Describing an individual in nonhuman terms implies that the individual is "not one of us," that is, he or she should not be a bona fide member of one's own human group.

Considering this large Factor 1 as well as Factors 3, 4, and 5, it seems that personality type-nouns emphasize sociopathy more heavily than neuroticism, and that type-noun factors emphasize sociopathy more heavily than adjective factors do. This is consistent with the type-noun emphasis on violations of morality and other standards for acceptable behavior. Sociopathy may be more directly relevant than neuroticism for those group-exclusion issues that type-nouns highlight.

These results suggest that one- and two-factor type-noun structures may be superior to structures with more factors. They were far more replicable across subsamples and across gender than structures with more factors. They also showed more obvious correspondence with adjective-derived one- and two-factor structures. Although structures like the Big Five are more informative and thus should provide better prediction, one- and two-factor structures appear to be more replicable across cultures (Saucier & Goldberg, 2001) and across samples within one language (Ostendorf, 1990; Saucier, 2002b), are more reproducible in individual-level factor structures (Saucier & Simonds, 2003), and are likely to be more related to universal features of the human cognitive-affective system, like Osgood's affective-meaning factors (Osgood, May, & Miron, 1975; cf. Saucier, 2002b).

If one does extract more than two factors among type-nouns, factors with substantial non-Big-Five content tend to appear. This study is one of many (e.g., Saucier & Goldberg, 1998; Schmitt & Buss, 2000) indicating that the Big Five is not a comprehensive model with respect to describing meaningful attributes of persons. In lexical studies, Big Five structures are obtained on application of certain widely applied standards for variable exclusion; the Big Five is not very robust to alteration in these criteria (Saucier, 1997). The Big Five tends to omit content related to Attractiveness and to Masculinity and Ruggedness, although these are strongly enough represented in type-nouns as to form factors. Henss's (1998) remark that "type-noun factors share only a part of their variance with the adjective factors in general and the Big Five in particular" (p. 69) applies well to the present results. Type-nouns reference aspects of sexual behavior and delinquency (including substance abuse) that are apparently less well-represented in the adjective domain. There may be some traits uniquely represented among attribute nouns (e.g., *integrity*, *fortitude*), so future studies should address this domain as well as that of type-nouns.

Conclusions

Future studies should more closely examine the nature and functions of the very large, evaluative factor (Social Unacceptability or Contemptibleness) that stands out in the type-noun domain. Moreover, future studies should give more attention to the one- and two-factor levels in person description, which are advantageously robust and appear to have high generality to within-person data, and thus may help integrate "observable attribute" and "dynamic process" approaches to studying personality. At a more specific level, lexical studies of type-nouns point to the social importance of Attractiveness and Masculinity (or Ruggedness) in person description, and it would be advantageous if structural models of personality took more account of these variables.

It appears that most studies of the natural language of personality have been based on unwarranted assumptions. Specifically, we cannot assume that all languages have large adjective classes as do English and other European languages. Nor can we assume any longer that attributes are represented in exactly the same manner in type-nouns as in adjectives. So there is much to learn from ventures beyond the well-trodden path of the trait adjective.

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