RUNNING HEAD: CLASSIFICATION OF DATA

A Classification System for the Data of Personality Psychology and Adjoining Fields

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"in press" Review of General Psychology.

Abstract

Classes of data are often distinguished according to how they arise in relation to the person (e.g., from self-report or from behavioral samples), or according to the type of test that produce them (e.g., ability or personality test). In a new classification system, data about personality are first divided according to whether they originate outside of the personality system (external source data) or inside it (personal report data). Personal report data are divided into life-, world-, self-, and process-report data. Data are further subdivided by the mental processes that produce each type (e.g., convergent thinking, divergent thinking, etc.), and then connected to the measurement procedures that elicit the specific type. The new classification regularizes terminology and encourages new ways to think about data.

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A Classification System for the Data of Personality Psychology and Adjoining Fields

Two approaches to classifying personality data are widely used today. The first, person-centered approach categorizes data based on whether they originate from the person's own self reports, from judges who observe the person, or from behavioral samples and observation (e.g. Block & Block, 1980; Cattell, 1965; Funder, 2001). The second approach is test-centered and divides data according to the types of tests that produce them, such as intelligence test data, personality test data, or data from tests of occupational functioning (e.g., Anastasi & Urbina, 1997). Both classification approaches conveniently distinguish among a burgeoning variety of data.

Convenient though they are, these two approaches may not be the most effective ways of classifying data. The categories in such systems were added and revised as types of data emerged, rather than adhering to any formal rules and analytic considerations. Moreover, it might be possible to construct a single classification system for data that joins the person- and test-centered approaches. Such a classification system would link each class of data about the individual to the measurement procedures that produced them.

Such a new classification system for data could also clarify terminology in the area. Although the present classification approaches advantageously employ only a few categories, they often do so at the expense of clearly defining what a category of data consists of. For example, the term, "self-report data" is widely used in two substantially different ways but without clear acknowledgement of the different definitions. Self-report data is sometimes defined as any report by the self, including answers to questions such as "Is nuclear power safe?", "Did you visit the hospital last year?", and responses to Rorschach inkblots (e.g., Bordens & Abbott, 2002, p. 135; Heiman, 2002, p. 284;

Shaugnessy, Zechmeister, & Zechmeister, 2003, p. 150). Alternatively, self-report is defined more specifically as a report by the self on the self – limited to answers to questions such as “Do you like parties” and “Are you a nervous person?” (e.g., Kaplan & Saccuzzo, 2001, p. 406).

Using different definitions of a term can sometimes invite overgeneralizations. For example, some psychologists have criticized self-report data as involving "deliberate faking, lack of insight, and unconscious defensive reactions" (Mischel, 1968. p. 236). Surely, however, self-reports such as “I am 20 years old,” or “I am female” are trustworthy in many contexts. Moreover, if certain self-reports are subject to, say, defensive reactions, then they can serve as indicators of those mental processes. So, when physiological data reflect that a person is anxious, and the same person denies it via self-report, the contradiction can be viewed as evidence for repression (e.g., Weinberger, 1990; Weinberger, Schwartz, & Davidson, 1979). The use of data in this way, however, requires some thinking through of the sources of data and what they signify.

This article presents a new data classification system that distinguishes among classes of data in a more formal fashion. After this introduction, the second, Background section provides a review of existing person- and test-based classification systems for data. Then, a new model of data classification is presented in the section, “A Systems Framework for Data Classification”. The classification system enumerates diverse types of data, divides them into useful categories and subcategories, indicates the measurement procedures necessary to collect them, and clarifies the differences among them. The implications of classifying data are then discussed.

Personality psychology coalesced in the 1920’s (Winter & Barenbaum, 1999). As such, it never had the chance to develop the sort of rational taxonomies that were developed in the 19th century and that underlie many other scientific disciplines.

Although we know reality is often more complex than even a sophisticated taxonomy can portray, personality psychology may become a healthier, stronger discipline for revisiting the developmental stage of the taxonomy, and regularizing the field's conceptions of data and other topics. This can provide it with a more solid foundation for the future.

Background

The Identification of Data Sources

The personality system represents the organization of a person's larger psychological processes, including the individual's motives, emotions, mental capacities, and plans of action, and their collective development over time. That is, personality is concerned with the broader trends of an individual's psychology. Consistent with the breadth of personality, personality data pertain to broad aspects of psychological processes. The data are those most relevant to the whole system, in contrast to, say, more specialized data emerging from studies in the areas of sensation (e.g., tachistoscopic data) or cognition (list recall data). Personality data, in other words, are relatively broad and general.

A small group of journal articles have introduced new types of personality data over the 20th century, and collectively define the data types we are familiar with today. For example, Frank (1939) defined projective tests such as the Rorschach inkblot test and the data they produced:

> …we may approach the personality and induce the individual to reveal his way of organizing experience by giving him a field (objects, materials, experiences) with relatively little structure and cultural patterning so that the personality can project upon that plastic field his way of seeing life, his meanings, significances, patterns, and especially his feelings… (Frank, 1939, pp. 402-403).

Much more recently, act frequency data were defined as indicating how often a person carries out behaviorally meaningful acts (Buss & Craik, 1985). For example, to measure “calculating acts,” judges first nominate representative and distinctive acts that reflect the trait (e.g., "I flattered a person in order to get ahead"). Then, people who take the act-frequency scale indicate whether or not they performed each specific act over, say, a month.

Life space data are more general than act-frequency data, and potentially include them (Brackett, Mayer, & Warner, in press; Mayer, Carlsmith, & Chabot, 1998). These data arise when a person reports elements of his or her life that are historical, externally observable, first-hand, and verifiable, among other characteristics. Examples include "Are you married?," “How many pairs of shoes do you own?” and “How long were you a member of the girl scouts?” Such life space questions gauge distinctive situational features and life events that, in the aggregate, go some distance toward describing a person’s life. Many other new sources of data have been proposed as well including think-aloud protocols (Ericsson & Simon, 1980), biographical data (“biodata”) (e.g., Mael, 1991), conditional reasoning data (James, 1998), and new data from brain imaging technologies (Morihisa, 2001).

Current Substantive Classification Models of Data For Personality Assessment

With the proliferation of data types there exists a need to classify them. The person-centered and test-centered approaches have been developed to meet this need.

Personality-Centered Classifications of Data

The person-centered approach to classifying data arranges data according to how they relate to the person (Cattell, 1965, pp. 61-62). The data are said to have their source in the “personality sphere” -- defined as “what people do over a sample twenty-four hour period.” Three “data bases" – that is, sources of data about the person – were originally

associated with the sphere in Cattell's system, although more recent developments include four sources (Block & Block, 1980; Funder, 1996, pp. 10-11; 2001, pp. 13-37). For example, Funder specifies *life-outcome*, *informant*, *self-judgment*, and *behavioral* data types, yielding the mnemonic 'BLIS' (with some reordering).

Life-outcome data contain both self-reported and institutional data about a person's life obtained from police records, medical files, or tax returns. Informant data include evaluations from observers who know about a target person well. Self-judgment data include self-judgments or self reports of personality by people themselves, such as endorsements of items like, "I am outgoing." Behavioral data involve examining a participant's behaviors in an observational setting. Behavioral data can include certain kinds of tests in which a person's responses are evaluated according to a criterion of, say, correctness, rather than taken at face value (as in self-judgment data). Funder's system varies from Cattell's original chiefly through the addition of the Informant Data category.

Test-Based Classifications of Data

Testing and assessment books use test-centered classifications of data types rather than person-centered approaches. Anastasi's authoritative textbooks in the area spanned the 50 years during which differential psychology textbooks evolved into contemporary volumes on testing and assessment (Anastasi & Foley, 1949; Anastasi & Urbina, 1997). As the test-centered name implies, data is organized according to the sorts of tests that provide them. For example, a central data type for all these texts include ability or performance tests. Such ability-test data prominently feature measures of intelligence and intellectual achievement.

Nearly any definition of personality psychology would include mental abilities such as intelligence within it. For example, personality was recently described as the "consistent behavior patterns and intrapersonal processes originating within the individual" (Burger, 2000, p. 4; cf., Larsen & Buss, 2002, p. 4). And, psychologists

from many perspectives include intelligence in their conceptions of the personality system (e.g., Bellak, Hurvich, & Gediman, 1973; Cattell, Cattell, & Cattell, 1993; Mischel, 1968). The fact that the test-centered classifications typically label a second important type of test data as "personality data," therefore, seems rather incongruent.

The 'ability versus personality' distinction likely arose for historical reasons. Intelligence tests were developed during the first two decades of the 20th century, just before the field of personality psychology coalesced. Personality psychology arose in the 1920's at the same time as early projective and self-report scales were coming of age (Winter & Barenbaum, 1999). Shortly thereafter, a distinction between the earlier intelligence tests and the then-emerging "personality" tests must have seemed compelling. This distinction was, however, at best a matter of convenience at the time, and is inconsistent with contemporary usage.

At any rate, "personality scales" include measures of self-judgments (e.g., "Do you like parties?" "Do you prefer television to reading?"), attitude surveys, and projective techniques. Other data concerning "self-concepts and personal constructs" are also included in such volumes. These include, for example, reaction times to endorse a self description (Anastasi & Urbina, 1997; cf., Kaplan & Saccuzzo, 2001).

Evaluation of the Classification Systems

The person-centered and test-centered classification systems for data provide convenient and useful divisions of data into categories. Funder (1996, p. 10) refers to each data type as providing clues converging on what a person is like. There do exist, however, some difficulties with each system. Some of the broader issues of employing two separate systems, and using terms with multiple meanings were covered in the introduction. These broader problems find their origins in the details of these systems.

For example, although Funder's data divisions are both convenient and more comprehensive than Cattell's, they still possess many of the conceptual conundrums that

plagued Cattell's version. For example, self-judgments -- e.g., "I am outgoing" – form their own category, and include data from tests such as of the Big Five (e.g., the NEO-PI, Costa & McCrae, 1992). Self-judgments, however, may also be involved in life-outcome data in the form of demographic questions. For example, "What is your religion?" may require self-judgment for some people, as will many forms of behavioral data. The MMPI item, "Are you a special messenger of the Lord?", is considered a behavioral measure because it is not necessarily assumed to be true even if a person endorses it (Funder, 2001, pp. 16, 33). The distinction about whether test-responses are assumed to be true is certainly a valid one, but whether it suffices to justify a primary division of data seems arguable.

Turning to test-centered classifications, it may be sufficient here to remark that, as already indicated, certain test categories are defined in ways that are inconsistent with present usage (e.g., the term 'personality.'). In addition, there is room for improving the classification of tests according to the mental processes they elicit. For example, projective tests are often distinguished on the basis of uniquely eliciting complex, constructed mental responses. Yet, "objective" intelligence test items also require constructed responses in many instances. Consider the intelligence test question, "How are vinegar and sugar alike?". Answering the question surely involves memory of word meanings, testing several different meanings against one another, multiple comparisons, creative thought, and the construction of a verbal response such as, "They are both used to flavor food."

To improve the classification of data, a more formal understanding of how it arises is required. This will create distinct categories based on important procedural and/or mental process distinctions, connect a comprehensive group of data types to the measurement practices that bring them about, and rationalize terminology while doing so.

A Systems Framework for Data Classification

Orienting Personality Within the Life Sphere

The present classification system begins with the premise that all data about personality must come from the personality itself or from the systems surrounding personality – the brain, social situations, or groups. Cattell referred to the systems surrounding the individual as the "life sphere," though he never defined it beyond referring to a "…totality of human behaviour…" (Cattell, 1965, p. 60). A formal analysis of the life sphere is provided in the Systems Framework for personality (Mayer, 1995, 1998). The Systems Framework is a general organizational scaffolding for the discipline of personality psychology.

The Systems Framework employs generally accepted conceptual dimensions to place personality in its scientific context (Mayer, 1995). For example, psychologists (like other scientists) typically distinguish personality from other systems along several continua or dimensions. Chief among these is a molecular-molar dimension. In this context, "molecular" refers to underlying, mostly smaller systems from which personality is constructed. Systems that are molecular relative to personality include brain subsystems and neurons studied by psychobiologists. By contrast, molar systems refer to larger entities such as the family and society that include personality. So, the molecular-molar dimension interrelates the personality system with biological bases of behavior (relatively molecular), and family and societal systems (relatively molar). Note that this positioning of personality can be used to distinguish between biological data pertaining to the brain, at one end, and social and institutional data such as marriage licenses and other demographic data, at the other.

A second dimension that helps to position personality is an internal-external dimension. Much of personality takes place "within the skin" – inside the organism. The

organism, in turn, interacts with the external world. The internal-external dimension, therefore, separates internal mental (and biological) processes from external situational demands. The internal-external dimension, too, helps arrange data. Self reports of any kind originate from the "inside" of personality. Observers of personality, on the other hand, exist in the external situation.

A picture of personality arranged amidst the systems just discussed is shown in Figure 1. The molecular-molar dimension runs vertically because it often refers to the study of different "levels" or "layers" of systems. The incorporative environments – that is, the social and environmental groups including personality – are on top. These incorporative systems include both personality and the situations with which personality interacts. Personality (center) is located at the next level down (slightly more molecular), to the left of the external social situation. Below that (i.e., more molecular) are found biological underpinnings of the person, and social underpinnings of the situation such as its social settings and props.

Internal versus External Sources of Data: The First Division

Having now situated personality amidst its neighboring scientific systems, one can systematically inventory the data sources that arise in relation to it. It is helpful at the outset to make a broad distinction between data that originates from outside of personality and data that emanates from within it (see Figure 1). Personality is uniquely psychological and inside the skin (although often expressed). Surrounding it are its more molecular biological neighbors, the outside situation to which it connects, and the larger organizations of which it is a member. The classification system uses this "first division" between the inside of personality and its outside, surrounding systems to separate data that originates from the outside of personality from that which originates inside of it.

External Source Data:

Data from Systems Surrounding Personality

Figure 2 shows the data of outside origin. These data sources first are roughly divided into four broad groups corresponding to the four boxes surrounding personality. Institutional data stems from the incorporative group area, and includes such sources as hospital, government, and corporate records of the individual. Observer (or informant) data stem from the situation and include judges' ratings of a target person. Possession and setting data stem from situational elements and include evaluations of the neatness of an office, or inventories of books the individual possesses. Finally, biopsychological data stem from the biological area and include data from brain scans and other physiological recordings and medical monitoring. These broad, four-fold categories of data sources (e.g., institutional, observer, possession, and biopscyhological) should suffice for most purposes.

If desirable, however, it is also possible to further divide the above external sources according to the target they refer to, thus creating a secondary "source by target" breakdown of outside data. Data are divided in this subsidiary fashion within the four boxed data types in Figure 2. For example, data from an institutional source can be broken down according to whether it addresses the person's memberships (e.g., marriage certificates), interactions (e.g., school performance), internal personality (e.g., psychiatric records), or biological underpinnings (e.g., medical records). Similarly, observer data from the situation may describe the person's ethnicity, internal personality, social settings, and even, biological health. This source-by-target breakdown provides a comprehensive overview of the external-source data that pertain to the personality system and its environs. It creates non-overlapping categories of external data by crossing each data's source (e.g., institutional, situational, social setting, biological) with its target (e.g.,

the same list, with personality added in).

Personal Report Data: Data From Inside the Person

The classification of external data is important. The classification of internal data that arises from personality has its own psychological significance and variety. In this treatment, any report coming from the individual will be referred to as a personal report. The term "personal report" substitutes for the broad sense of the term self-report that is sometimes used in research methods books, i.e., as any report stemming from the self. The classification system further divides such personal reports according to the mental processes that produce them, and the knowledge areas from which they draw.

The Knowledge Area of the Report

The knowledge area of a personal report concerns what it pertains to and reveals: the self, its relationships with others, its estimations of the world, and its internal mental processes. Self-report is defined, in this context, more-or-less in agreement with today's testing books as a report by the self about the self concept. Endorsement of an item such as "I enjoy reading mechanics magazines (agree-disagree)" illustrates one form of self-report. In the present system, self-report is distinguished from three new categories of data: *Life report*, *world report*, and *process report* data.

Life report data describes aspects of one's outside involvements with the world such as "How many pairs of shoes do you own?" and "How many times have you spoken to your mother this month?" World-report data concerns attitudes, beliefs, and knowledge about the broader, external world. Endorsement of the item, "Auto mechanics are overpaid (agree-disagree)," illustrates one form of world report, and knowledge items of the sort "Are two plus two four? (agree-disagree)," illustrates another. Process-report data refers to reports that reflect the monitoring of internal states such as mood, attempts at thought suppression, or current concerns. The four types of personal report data: self-,

life-, world-, and process-report, are complementary members of a set that help clarify and restrict the meanings of one another. These areas of personal report are shown in column 1 of Table 1.

Mental Processes Involved in Reporting

The classification system recognizes a second quality of such data beyond the knowledge area that is important to interpreting their quality and meaning. This involves the mental processes by which the report arises. These mental processes can be arranged from the most simple and constrained to the most potentially complex and constructed, and include processes of four qualitatively different types. These are shown in column 2 of Table 1. In the first, endorsement responses, the individual simply reads a statement and endorses whether or not it is true, or applies to the self. Self-report endorsements would include agreement as to whether one is *extroverted* or *conscientious*; among world-reports it would include agreements with various attitudes and beliefs on *attitude* and *belief surveys.*

The second, convergence-to-criterion response type, requires finding a correct answer to a given problem, or providing one of several desired responses to the question posed by the test-maker. In convergent responding, the individual seeks to construct an answer, knowing that it will be evaluated according to a criterion of correctness. The classic example of convergent responding is found in tests of intelligence (a world-report response).

A third, divergent response category, includes many creative-ability tests in which the participant is asked for an open-ended or divergent response in which the emphasis is on finding many new or novel solutions to a problem. Such responses often are graded according to the number of responses given and their originality (Mumford, 2001).

The final, thematic response type, requires the individual to again actively produce a response but, in this case, there is more latitude as to legitimate productions (as opposed to converging to one or two possibilities, or diverging to a class of creative responses). Here, the individual must construct some considerable portion of the data response according to self-selected criteria. In the world-report sphere, *projective* responses are constructed responses in which, as with the Thematic Apperception Test, an individual is shown a picture and must make up a story to it. As a consequence, this sort of response is potentially very broad and unconstrained.

Connection to Currently-Used Data Types and Tests

The last step of the classification system is to connect each data type to more specific types of data referred to today and the measurement procedures that produce them. Crossing the four knowledge areas with the four response processes potentially yields sixteen categories although not all of them are commonly used. Ten categories for which it was possible to list one or more commonly-referred to types of data are shown in column 3 of Table 1; the measures that produce such data are shown in column 4. Many examples of individual types of data and tests have been discussed during this exposition and are listed there. Regarding tests, for example, it is plain that the organization accommodates both more common tests such as tests of academic achievement, intelligence tests, self-report scales of motivation and emotion, and projective tests, as well as more unusual measures such as act-frequency data, life space scales, and open-ended personality measures such as the "Who Are You" (W-A-Y) technique and others (Bugental & Zelen, 1950; Ivcevic, Mayer, & Brackett, in press; McGuire & Padawar-Singer, 1976).

Discussion

Meeting Criteria of a Good Classification System

Over the years, a series of classic articles have introduced fundamental data types such as projective data and act-frequency data. Classification systems developed to organize these data types were either person-centered or test-centered. Although the classifications served the field well, under close inspection, they often employ inadequate overlapping categories, or categories that are too broad.

To remedy this situation, a new classification system was introduced. It includes a major division of personality data into that which originates outside the personality system and describes it, and that which emanates from inside personality itself. The outside data includes four broad categories of data (institutional, observer, setting, and biopsychological), each in turn consisting of subtypes. The personal-report data, too, is broken down into a number of subcategories. As indicated in Table 1, these provided a comprehensive collection of data types of both historical and contemporary interest. They span from standard questionnaire data such as that found in the Big Five, to act-frequency and life-space data categories (Buss & Craik, 1985; Goldberg & Rosolack, 1994; Mayer et al., 1998).

It was the aim of this new system to comprehensively include relevant data types, to create distinct categories in part according to the different mental processes that measurement responses require, to rationalize terminology, and to connect data types to the tests and measurement practices that bring them about.

Integrating Person- and Test-Centered Concepts in the Area

One important attribute of the system here is that it merges person- and test-centered data (e.g., in Table 1). This creates one conceptually more powerful and unified system where before there were two weaker classifications. It creates a better system because each type of person-centered data is clarified by associating the specific kinds of

measurement procedures that are employed to obtain the data. This also makes sure that test-centered data is accurately labeled according to the actual sorts of personality processes that it assesses.

The Classification System Promotes Better Theorizing About Data by Creating Distinct Categories of Data

One of the major points of this classification system is that the different categories of data are different because they are produced differently – and that has implications for what the data mean. For example, whether the data's source is external or internal to personality makes a theoretical difference – as does whether the person is simply endorsing an item, constructing a convergent response to meet a criterion, or constructing divergent and thematic responses. A person's endorsements of an extroversion item reflects that person's *self-concept¸* and draws on relatively stable memories of the self. Such self-concept data can be expected to be meaningfully different from, say, a person's freely-generated self-descriptions in which a person must create a narrative description of him or herself. This latter type of data requires a more extensive constructive process (Ivcevic et al., in press; McCrae & Costa, 1988). Similarly, self-reports correlate only weakly with observer reports in a variety of areas (e.g., Funder, 1995; Paulhus, Lysy, & Yik, 1998).

We can conceive of differences in data that describe the same phenomena in two different ways. The first, multi-trait, multi-method approach assumes that different data types measuring the same personality characteristic should converge (Campbell & Fiske, 1959). For example, self-report, videotapes of behavior, and institutional records of extroversion, should converge (relative to measures of different attributes such as

neuroticism). The multi-trait multi-method approach would lead us to conclude that each data source is a weak indicator of the person's actual extroversion and that the indicators should therefore be combined, perhaps averaging them to get an overall index of extroversion. That may indeed be appropriate for some purposes.

It may be far more powerful, however, to accept that such different categories of data reflect truly different aspects of the person. From this perspective, each form of data is a potentially powerful reflection of a somewhat different part of the personality system. For example, endorsing self-report statements such as, "I like parties," is a relatively simple exercise in recognizing common statements and matching them to one's self concept. On the other hand, world-report data that generates thematic responses to TAT cards, and yields stories with themes of sociability says something else about implicit motivational themes. Somewhat different again would be life-report data that tap memories of external extroverted behavior using act-frequency items. Finally, process-report data concerning sociable feelings would strongly reflect ongoing emotional processes. Each of these data sources can be viewed as assessing different aspects of personality and its processes; each one can be expected to yield somewhat different results.

Each data source, from this perspective, is a strong indicator of a better-specified variable. This is a more powerful way to view data in personality, achieved through advances in understanding cognitive and emotional processes, and the behavior of the data itself. The challenge is that researchers must better keep in mind the data and what they specifically mean, and choose the right source(s) of data for a given research study.

Recommendations for the Rationalization of Terminology

This article has pointed out a number of ambiguities in the use of such phrases as

"self-report data" and "personality test data". The classification system retains the meaning of many terms in the field, but adds new terms where needed, and clarifies and better specifies the usage of other terms that have multiple meanings. For convenience, the following summarizes the major recommended major changes:

- The new phrase "personal report data" should be used to replace the broad definition of self-report data (i.e., as anything reported by the self).
- The new term, "life-report data" is a type of personal report data that pertains to the individual's outside life (e.g., clothes owned, interactions during a day).
- The new term, "world-report data" is a type of personal report data that concerns attitudes and knowledge about the world (e.g., what salary should doctors earn?; what is three times seven?)
- The new term "process-report data" is a type of personal report data that concerns internal psychological processes monitored by the individual (e.g., current mood; current concerns).
- The term, "self-report data" is retained and specifically defined as a type of personal report data that concerns the self-concept.
- The opposition of the categories "ability testing" and "personality testing" is inconsistent with present usage and should be revised. A minimalist revision – but still a great step forward -- would substitute "knowledge testing" for ability and achievement testing, and "socio-affective testing" for personality testing (Mayer, in press). Knowledge testing would include intelligence and achievement tests, as well as tests of creativity and other mental abilities. Socio-affective testing would include endorsements of emotion-relevant test items, thematic world-reports (e.g., projective testing), and related data groups. A more radical revision would be to divide testing and assessment

books into the categories of tests as outlined in Table 1. That is, it may be time for a wholesale revision of how such texts are organized that is based on a more formal appreciation of our central data sources and types.

Concluding Comment on How Data (and its Organization) Shape Our Research Practices

Personality interacts with a number of surrounding systems including the brain, outside observers, and institutions. Psychologists obtain much of their data about the person from those systems as well. Baumeister and Tice (1996, p. 364) have recently written, "We...exhort our fellow personality psychologists to make a vigorous effort to recapture their interdisciplinary prominence and reclaim their role as the broadest, most widely influential thinkers in psychology." To do so begins with relating personality to its surrounding systems.

Although it may seem tenuous to draw a connection between something so lofty as 'reclaiming our roles as interdisciplinary thinkers,' and something so lowly as the classification of data, the two are not so far apart. The sorts of data we choose to employ and interrelate cannot be considered apart from the goals of our science. The categorization here illustrates how data interconnects personality and its neighboring systems. As such, it enables us to better recognize the disciplinary goals and interdisciplinary cooperation necessary to further develop an understanding of human personality.

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Author Notes

My thanks are extended to Marc Brackett, Zorana Ivcevic, Eric Dearing, Michael Mangan, and Kyle Wanshaffe, who commented on earlier drafts of this article.

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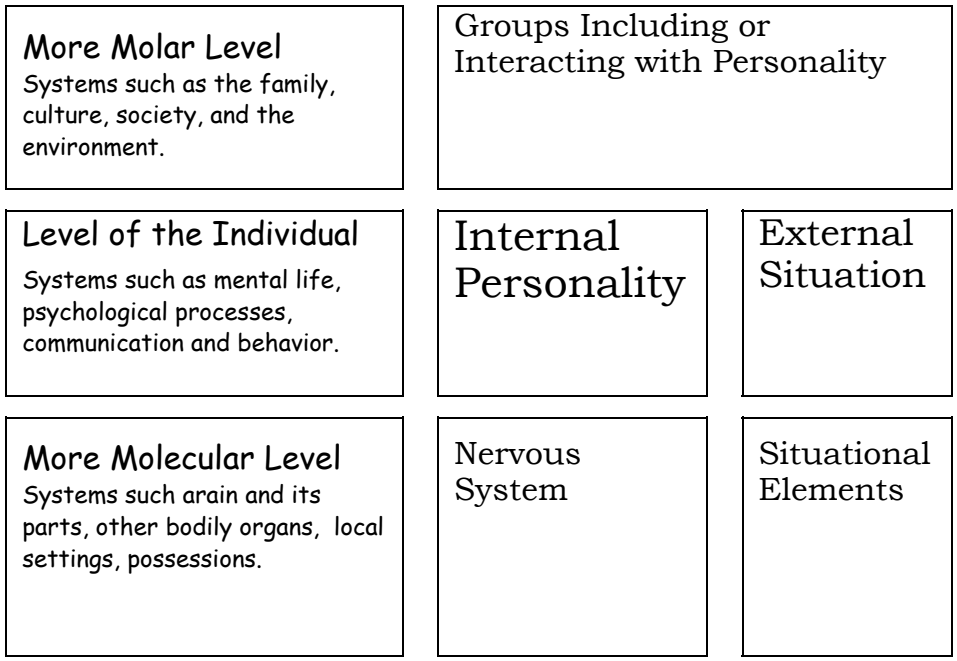
Table 1: A Breakdown of Personal Report Data and the Tests that Elicit It

Response Production in Internal Personality			**Examples of Eliciting Questionnaires and/or Tests**
KNOWLEDGE AREA	*RESPONSE PROCESSES*	*COMMON OR RECOMMENDED NAMES FOR DATA TYPES*	
World-Report	Endorsement	attitude-report belief-report	Attitude surveys, belief surveys
	Convergent	criterion-report (performance data)	IQ, aptitude and achievement tests
	Divergent	divergent-report	Divergent-thinking tests of creativity
	Thematic	projective-report thematic-report	Inkblot-based projective tests, thematic apperception stimuli, personality tests of conditional reasoning
Life-Report	Endorsement and/or Convergent	life-report (life-space data)	Life-space scale, biodata, act-frequency measure
Self-Report	Endorsement	self-report self-judgment	Scales measuring the Big Five, the Big Three, and similar personality dimensions
	Convergent	criterion-report	Measures of personal intelligence
	Thematic	projective-report open-report	Sentence completion tests beginning with "I" or "My…", personal striving questionnaires, open-ended self-descriptions
Process-Report	Endorsement	state-report	Mood adjective checklists
	Thematic	process-report	Free association, think-aloud protocols

Figure Captions

Figure 1: An overview of personality and its surrounding systems.

Figure 2: An overview of the external sources of data about personality, and an outline of some personal-report data, embedded in the systems diagram of personality and its surrounding systems.


More Molar Level
Systems such as the family, culture, society, and the environment.
Groups Including or Interacting with Personality
Level of the Individual
Systems such as mental life, psychological processes, communication and behavior.
Internal Personality
External Situation
More Molecular Level
Systems such arain and its parts, other bodily organs, local settings, possessions.
Nervous System
Situational Elements

Overview of Data About the Person

More Molar Level

Groups Including or Interacting with Personality

Institutional Data including records of *Group Memberships* (Government census data, records of marriage, family structure, ethnic membership) *Interactions* (Marriage and divorce certificates, school and university grade transcripts, records of occupational performance) *Internal Personality* (mental health/psychiatric records, longitudinal psychological research records), *Situational Elements* (Bank accounts; real-estate transactions; consumer habits), *Biological Status* (Medical clinics and hospital records concerning an individual's health and illness).

Personality Level

Internal Personality Data

Personal-Report Data	
Knowledge Area	World-report, life-report process-report, and self-report data types
Response Processes	Endorsement, convergent divergent, thematic

External Situation

Observer Data including *Group Memberships* (informant information concerning family size, and other biographical data) *Interactions* (behavioral checklists/counts, records of behavioral acts, and general observer rating data), *Internal Personality* (teacher/counselor ratings of self-esteem), *Situational Elements* (reports of possessions and activities); *Biological Data: O*bservations and rating data regarding health and illness

More Molecular Level

Nervous System

Biopsychological Data concerning *Group Memberships* (e.g., genetic tests) *Interactions* (e.g., medical tests indicating exposure to various health hazards, *Internal Personality* (PET scans of a person's brain), *Situational Elements* (data from tests indicating the use of illegal drugs), *Nervous System* (tests indicating function of neuropsychological systems).

Situational Elements

Setting Data indicating *Group Membership* (awards and trophies from organizations), *Interactions* (possessions such as baseball glove indicating activities), *Internal Personality* (awards for good character), and *Biological Data* (medications owned, health accessories).