# What Makes a Personality Psychologist?

## A Survey of Journal Editors and Editorial Board Members

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Of all the fields of psychology, personality is, perhaps, the most methodologically diverse. Indeed, methodological pluralism is a cornerstone of the field. Thumbing through a typical issue of a personality journal will reveal a rich array of methods, including longitudinal and experimental designs; studies of typical and atypical populations; and a wide range of assessment procedures, including self-report scales, informant reports, projective tests, observational assessment, and DNA analyses. This methodological diversity reflects, and is in fact compelled by, the breadth and complexity of the substantive questions personality researchers seek to address. It is not surprising that a field that aims to understand everything from genetic to cultural influences on the person involves a wide range of methods.

But what exactly are the most common methods in contemporary personality research? That is, what is the best way to characterize the personality approach to psychology? Despite lively discussions at conferences and in the halls of psychology departments about which methods are rising or falling in popularity, there have been virtually no systematic studies of this issue.[1] This raises the question: Does the reality match the stereotype? Do personality researchers actually use a diverse range of methods? What exactly are the research designs, assessment methods, and statistics in the methodological toolkit of the 21st century personality researcher?

To address these questions, we conducted a survey of prominent personality researchers; specifically, members of the editorial boards of the leading journals in the field. We asked our respondents to answer a comprehensive set of questions about the way they design their studies, assess their key constructs, and analyze their data. The aim of the survey was to gauge the frequency with which personality researchers use each method and, by doing so, provide an empirical snapshot of the current state of personality research.

## Method

### Respondents and Procedure

Our sample consists of Editors, Associate Editors, and others members of the editorial boards of three of the leading journals in personality psychology, including the *European Journal of Personality*, the *Journal of Personality*, and the *Journal of Personality and Social Psychology: PPID*.[2] We selected members of personality editorial boards for several reasons. First, these individuals are very likely to conduct research on personality and to perceive themselves as personality psychologists. Second, these individuals are typically among the most productive researchers working the field, so they are collectively responsible for a large body of personality research. Third, members of editorial boards cover a broad range of career stages, so the sample will include individuals who are at the early, middle, and late stages of their scientific careers. Fourth, members of editorial boards decide what is and is not accepted for publication in personality journals, and thus are the "gatekeepers" of personality psychology. These individuals are highly knowledgeable about what constitutes personality research; in fact, one could argue that they set the standards for the field.

Participants were contacted by electronic mail and were told, "The goal of the survey is to learn more about the kinds of research conducted by prominent personality psychologists." If they were interested in participating, they were directed to a World Wide Web address where they could access the survey and complete it on-line. Of the 142 individuals contacted, 72 completed the survey, for a response rate of 51%.

Respondents were assured complete anonymity; they were informed that their survey responses are completely confidential and cannot be tied to their name or email address.

### Survey Questionnaire

The complete survey is posted on the web at: http://psychology.ucdavis.edu/labs/robins/**XXXX**.

The survey was constructed through an iterative process. As a starting point, we asked a focus group of 7 leading personality researchers to generate a set of methodological features that could be used to describe the prototypical personality approach. We then supplemented this list by reviewing recent journals, edited volumes, and textbooks to identify methods used in personality research. This led to an initial pool of survey items. We sent this set of items to a small group of personality researchers and solicited feedback on ambiguities, omissions, and redundancies in the survey. Based on their feedback, we eliminated and rephrased many items, and added new items to fill gaps in the item pool.

This procedure led to a final survey that included multiple sections and over 200 items. In this chapter, we will report findings related to the first three sections, which map onto the major sections of the present volume (research designs, assessment methods, statistical procedures), and thus provide a useful reference point.

In the first section of the survey, respondents were asked to rate the frequency with which they used each of 12 research designs and approaches in their research (e.g., experimental, correlational, longitudinal, etc.); in the second section, respondents rated the frequency with which they used each of 17 assessment methods/measures (e.g., self-report, informant report, behavioral observation, etc.); and in the third section respondents rated the frequency with which they used each of 21 statistical procedures and data analytic strategies (e.g., ANOVA, correlation, factor analysis, etc.). All ratings were made on a 7-point scale, ranging from 1 ("never") to 7 ("always"), with 4 ("sometimes") as the midpoint of the scale.

After completing these ratings, respondents were asked to rate the extent to which they "study issues and topics related to the field of personality psychology," using a 7-point scale

ranging from 1 ("not at all") to 7 ("very much"), with 4 ("somewhat") as the midpoint of the scale.

Finally, at the end of the survey, participants provided demographic information about their gender, age, type of workplace ("small college," "non-PhD granting university," "PhD granting university," "research institute/government agency," "business/corporation"), and country in which their workplace is located. Participants were also asked to indicate the journals on which they serve as editors or editorial board members.

## Results

### Characteristics of Sample

Of the 72 respondents, 75% were male ($n$ = 54) and 25% were female ($n$ = 18). The median age of respondents was 43 years ($SD$ = 9.3). Most respondents work in the U.S. ($n$ = 52, 74%), with the majority of the rest working in Europe ($n$ = 14, 20%) or Canada ($n$ = 3, 4%). Eighty percent of respondents work in PhD-granting research universities ($n$ = 57), followed by non-PhD granting universities ($n$ = 5, 7%), small colleges ($n$ = 4, 6%), research institutes/government agencies ($n$ = 4, 6%), and business/corporations ($n$ = 1, 1%).

### Research Designs and Approaches

We analyze and report the survey data in two ways. First, we treat the personality psychologists in our sample as a group and report their mean responses across each survey item. Second, we examine individual differences in the degree to which respondents indicated that they study topics and issues related to personality; by correlating this item with survey responses, we can determine whether, even within this select sample of personality psychologists, the degree of immersion in the field is associated with the use of particular designs, statistics, and measures.

The first column of Table 1 shows mean responses for each of the 12 research designs, as well as the percentage of participants who indicated that they had ever used that design (i.e., who gave any rating other than 1, "never"). The simple correlational design remains by far the most frequently used in personality research, followed by the longitudinal, cross-sectional, and experimental designs. Thus, contrary to many people's intuitions, the experimental design is relatively common in personality research; in fact, 86% of our participants indicated that they use the design more than "never" in their research (39% use experimental designs "sometimes" to "always").

Cross-species comparisons and case studies are the least frequently used designs in personality research. In the former case, the low frequency may reflect, at least in part, the fact that researchers who do comparative studies of animal personality typically identify themselves as comparative psychologists, primatologists, animal behaviorists, and so on, rather than as personality psychologists, and thus are not well represented in our sample (see Gosling & Capitanio, this volume). The low frequency of case studies, in contrast, might reflect a more general trend in the field away from case studies, psychobiographies, and other person-centered approaches (see Craik, this volume; Elms, this volume; Grice, this volume). Despite the low overall level of use of cross-species and case studies, they are nonetheless used at least somewhat by a non-trivial percentage of researchers (10% and 18%, respectively).

The second column of Table 1 shows correlations of the individual difference variable (the extent to which individuals study personality) with frequency of using each design. Consistent with the pattern of means, individuals who describe their research as focusing on issues and topics that are central to the field of personality psychology are more likely to use correlational, cross-sectional, and longitudinal designs. Interestingly, these individuals are less

likely to use experimental designs, despite the high overall mean for experimental research. Thus, experimental methods are frequently used by most personality psychologists, but those individuals who use them the most tend to see their research as less strictly about "personality" topics.

Statistical Procedures and Data Analytic Strategies

As Table 1 shows, the statistical procedures used most frequently by personality researchers are correlation, reliability analyses, multiple regression, factor/component analysis, t-tests, ANOVA, and partial correlation; these procedures are used by virtually all personality researchers. The least frequently used statistical procedures are mathematical modeling, multidimensional scaling, computer simulations, IRT analyses, and time-series analyses.

These results might simply reflect the most frequently (and least frequently) used statistical procedures in the broader field of psychology (Aiken, West, Sechrest, & Reno, 1990), rather than being particularly characteristic of personality research. However, the results shown in column two of Table 1 provide converging evidence for the pattern of means, at least for procedures that involve correlation and other indices of association between or among variables. Specifically, the degree to which researchers study topics central to the field of personality psychology is associated with greater use of correlation, reliability analyses, multiple regression, factor/component analysis, convergent/discriminant validity, and partial correlations. The relatively greater prevalence of these methods in personality research may reflect their application to the study of individual, rather than group, differences. In contrast, the two procedures that are more typically applied to the study of group differences – ANOVA and t-tests – are not especially common among those who study personality-relevant research topics, although they are still quite common overall.

It is also worth noting that despite their well known advantages, the interrelated procedures of structural equation modeling, hierarchical/multilevel modeling, and growth curve modeling have yet to reach the "frequent use" level in personality research (and, no doubt, in other areas of research as well). However, although these methods may not be used frequently, the majority of personality researchers do use these methods to some extent (56%, 79%, and 87% for growth curve modeling, hierarchical modeling, and structural equation modeling, respectively).

Assessment Methods/Measures

Finally, we examined the specific assessment methods and measures used by personality researchers. By far the most frequently used method is, not surprisingly, self-report scales and questionnaires, followed by the related category of "judgments of self and other;" these methods are ubiquitous in personality research, and everyone in our sample uses them at least some of the time. Less common, but still relatively frequently used methods include informant reports, behavioral observation, and structured interviews; these methods are also used by the vast majority of personality researchers, reflecting the multi-method approach that predominates in the field.

Despite widespread discussion of the rise of neuroscience and other biologically oriented approaches to personality, the use of such methods, including DNA, fMRI/ERP, hormone levels, and measures of autonomic arousal, remains quite infrequent. At the same time, these methods are used on occasion by a fairly large percentage of researchers (26%, 32%, 36%, and 57% for DNA, fMRI/ERP, hormone levels, and autonomic arousal, respectively). In general, this pattern may reflect a trend in the field as a whole; research on citation rates and dissertation topics suggests that neuroscientific psychology is becoming more predominant than in the past, but has

not yet begun to approach the levels of prominence seen by other major areas of the field (e.g., the cognitive perspective; Tracy, Robins, & Gosling, 2003).

Consistent with the pattern of means, the correlational analyses show that individuals who study issues and topics that are central to the field of personality psychology are particularly likely to use self-report scales, judgments of self and others, and informant reports, and less likely to use measures of autonomic arousal.

## Discussion

In this chapter, we reported findings from a survey of leading personality researchers. Our goal was simple: To peer inside their methodological toolkit and see what we find. Overall, the picture that emerged is one of extreme methodological pluralism. There is no particular research design, data analytic approach, or assessment method that characterizes our sample of elite personality researchers. Instead, the field seems to adopt a "by any means necessary" approach to research, using a wide range of approaches and techniques.

The findings generally converge with our intuitions about the prototypical personality approach, but they nonetheless reveal some interesting discrepancies and nuance. Certainly, one can find support in these data for the prevalence of the stereotypical personality study, in which self-report measures are administered and correlated. Yet, our data also show that this is just one of many kinds of studies that are common in the personality literature. Indeed, most personality researchers conduct experiments and use ANOVA to analyze their data. Many also conduct cross-cultural and field research; they study twins and patient populations; they use sophisticated statistical techniques such as hierarchical modeling; and they assess personality not only through self-reports but also through informant reports, behavioral observation, cognitive tasks, and

biological indicators. Thus, our findings paint a picture of personality psychology as a vibrant field, characterized by a rich array of methods and procedures.

We would like to point out two important limitations of our research. First, there might be a discrepancy between the methods that respondents report using and the methods that they actually use in their research. For example, respondents may exaggerate the degree to which they use a diverse set of methods and procedures, either because of self-deception or impression management (Paulhus & Vazire, this volume). One way to address this concern would be to content code articles published in leading personality journals, to determine the actual frequency with which each design, statistical procedure, and assessment method is used in personality studies (Fraley & Marks, 2005).

Second, our sampling procedure—focusing on members of editorial boards—may limit the generalizability of the findings beyond this elite group of personality researchers. It is possible that among less prominent and productive researchers, the range of methods used is more restricted.

Finally, we would like to point out that our results are necessarily limited to this particular snapshot in time. As Craik (this volume) points out, the field of personality psychology has gone through dramatic shifts in the prevalence of different research methods and approaches. What the future might hold for the field remains to be seen. But, at least based on the present analyses, we see a field well positioned to respond to the challenges and opportunities posed by the recent shift in psychology toward multi-level analyses of complex aspects of human behavior.

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Author Note

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Table 1

*The Methodological Toolkit of the Personality Psychologist: An Analysis of Research Designs, Statistical Procedures, and Assessment Methods*

| Survey question | Mean (std. dev.) | % ever used [a] | *r* with personality research orientation [b] |
|---|---|---|---|
| Research design/approach | | | |
| Correlational | 5.76 (1.03) | 100% | .44* |
| Longitudinal | 4.10 (1.59) | 93% | .26* |
| Cross-sectional | 4.03 (1.50) | 96% | .40* |
| Experimental | 3.76 (1.80) | 86% | -.41* |
| Quasi-experimental | 3.60 (1.75) | 86% | -.08 |
| Field studies | 3.44 (1.73) | 83% | .09 |
| Cross-cultural | 2.86 (1.51) | 76% | .04 |
| Dyadic or group interactions | 2.82 (1.61) | 71% | -.05 |
| Patient studies | 2.36 (1.56) | 58% | -.03 |
| Twin and adoption studies | 1.69 (1.49) | 22% | .14 |
| Psychobiography/case studies | 1.42 (1.14) | 18% | .17 |
| Cross-species | 1.33 (1.10) | 10% | -.10 |
| Statistical/data analytic procedure | | | |
| Reliability analyses | 5.96 (1.09) | 100% | .36* |
| Correlation | 5.94 (1.03) | 100% | .52* |
| Multiple regression | 5.60 (0.96) | 100% | .36* |
| Factor/component analysis | 4.76 (1.25) | 100% | .35* |
| T-tests | 4.73 (1.48) | 100% | .13 |
| ANOVA | 4.72 (1.44) | 97% | -.14 |
| Partial correlation | 4.67 (1.48) | 99% | .26* |
| Convergent/discriminant validity | 4.26 (1.64) | 93% | .30* |
| Mediation analyses | 4.10 (1.36) | 94% | .00 |
| Structural equation modeling | 3.79 (1.74) | 87% | .17 |
| Power analyses | 3.72 (1.73) | 89% | -.04 |
| Hierarchical/multilevel modeling | 3.44 (1.79) | 79% | .15 |
| Growth curve modeling | 2.57 (1.78) | 56% | .02 |
| Computer simulations | 1.73 (1.22) | 36% | .09 |
| Cluster analysis | 2.40 (1.41) | 68% | .33* |
| Meta-analysis | 2.36 (1.42) | 60% | -.00 |
| Discriminant function analysis | 2.12 (1.21) | 61% | .18 |
| Time-series analyses | 1.79 (1.23) | 40% | .13 |
| IRT analyses | 1.76 (1.26) | 37% | .16 |
| Multidimensional scaling | 1.72 (1.23) | 36% | .16 |

| | | | |
|---|---|---|---|
| Mathematical modeling | 1.65 (1.23) | 32% | .10 |
| Assessment methods/measures | | | |
| Self-report scales and questionnaires | 6.17 (0.93) | 100% | .43* |
| Judgments of self and others | 5.07 (1.57) | 99% | .26* |
| Informant reports | 3.68 (1.82) | 86% | .26* |
| Behavioral observation | 3.58 (1.47) | 89% | -.09 |
| Structured interviews | 3.15 (1.89) | 76% | .14 |
| Behavioral responses | 3.11 (1.55) | 81% | -.13 |
| Other judgment tasks (e.g., of stimuli) | 3.10 (1.61) | 79% | -.07 |
| Narrative/open-ended questionnaires | 3.03 (1.69) | 74% | .11 |
| Reaction time measures | 2.93 (1.90) | 61% | -.14 |
| Experience sampling | 2.89 (1.90) | 65% | .14 |
| Implicit measures | 2.76 (1.87) | 64% | -.12 |
| Memory tasks | 2.52 (1.58) | 62% | -.13 |
| Autonomic arousal | 2.22 (1.42) | 57% | -.30* |
| Judgments of groups/nations/cultures | 2.19 (1.68) | 43% | -.05 |
| Hormone levels | 1.94 (1.59) | 36% | -.18 |
| Neuroimaging (fMRI, ERP, etc.) | 1.75 (1.44) | 32% | -.11 |
| Molecular genetics/DNA testing | 1.60 (1.21) | 26% | .07 |

*Note*. $N = 72$.

* $p < .05$

[a] Percentage of respondents who indicated that they ever use the method in their research (i.e., who gave any rating other than 1, "never")

[b]Extent to which respondents indicated that they "study issues and topics related to the field of personality psychology."

Footnotes

[1] Fraley and Marks (2005) assessed the frequency with which a number of statistical procedures were used in 259 articles published in two of the leading personality journals (*Journal of Personality* and *Journal of Personality and Social Psychology: Personality Processes and Individual Differences*) between 2000 and 2002. The correlation, ANOVA, t-test, and multiple regression were the most frequent data analytic techniques, but a wide range of other procedures were also used. This study provided an interesting snapshot into the personality researchers' statistical tools, but the researchers did not ask broader questions about research approach, design, or assessment methods. Vazire (in press), in an article on the informant method in personality, analyzed all studies published in the *Journal of Research in Personality* in 2003 and found that 98% used self-reports but only 24% collected informant reports (i.e., ratings of the targets by well-acquainted others, such as friends, spouses, or co-workers). Finally, Aiken, West, Secrest, and Reno (1990) conducted a survey to determine how frequently PhD programs in psychology offer courses that cover a wide range of statistical procedures and methods, but they did not break their results down into subprograms such as personality psychology.

[2] Many survey respondents were on multiple editorial boards (most frequently *PSPB, PSPR,* and the first two sections of *JPSP*), including some non-personality journals.