

# What Should They Be Called?

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“They” refers to the animals – human and infrahuman – in our experiments. It used to be simple: they were subjects, or in certain types of perceptual experiments, observers. In the older literature much was written about them in abbreviated form, *S* and *S*’s or *O* and *O*’s. However, those simple days are gone. Now we are treated by a bewildering array of rules to use in naming the creatures in our experiments. I count 18 pages in the American Psychological Association *Publication Manual* (2001) devoted to how our subjects (oops! participants) should be described, including a seven-page table, Table 2.1. Seven pages? What has the world come to?

Most of the people participating in psychology experiments are college students. We get a lot of grief about this, I know, and we often feel abashed and ashamed. I don’t know why. All scientists use samples and techniques that are readily available and can be adapted to make rapid scientific progress. I study human memory, and to me the college student is the ideal experimental animal. Millions of years of evolution have designed a creature that is a learning and memorizing marvel. Students in my experiments have also been carefully selected through 12 or more years of education before they get to my lab. Only the ones who have shown, year after year, that they can learn and remember material in courses make it to my experiments. The world could not have arranged a more ideal subject, rather like certain species of mouse that are bred to display particular behavioral characteristics. For cognitive psychologists, the student is the ideal subject. They are our *drosophila*, those hearty fruit flies studied by geneticists because they breed rapidly and have short lives and can be selectively bred for all sorts of traits.

Anyway, back to my story. What to call the people in our experiments? (I’ll rule out *human drosophila*). And how did we get to the fix we are in now? Let’s tackle the second question first, which brings us back to the APA *Publication Manual*. This column, which is finally about to get started, is intended as a review of five (actually, seven, or maybe even nine) editions of the *Publication Manual*, with particular attention to names applied to people and animals in the experiments. I have all the editions of the APA *Publication Manual* in front of me and have been having a surprisingly enjoyable time perusing them. (*Publication Manual Voyeur?*) The story actually starts before the first *Publication Manual* was published in 1952.

In 1928, editors and business managers of psychology and anthropology journals, under the sponsorship of the National Research Council, met to provide some guidelines for authors, which were intended as recommendations rather than mandatory rules. The first seven-page forerunner of what has become the *Publication Manual* appeared in the February 1929 issue of *Psychological Bulletin*. In 1944, John Anderson and Willard Valentine published a 32-page guide as an article, also in *Psychological Bulletin*. These were early precursors to the modern manual.

The first *Publication Manual* appeared in 1952 in the form of a supplement to an issue of *Psychological Bulletin* (Volume 49, Number 4, Part 2). Counting the index, it was 61 pages long, and the pages were small (8.5" by 5.5"). It could be bought separately for \$1.00. Up until 1952, somewhat different practices existed among the 10 APA journals, and one purpose of the *Manual* was to insure "that a greater uniformity of style will henceforth prevail in the Association's journals. ... Authors who write for several journals will find the uniformity of style advantageous." The editors of the 10 journals – called then and now the council of editors – were responsible for creating the *Manual*, with C. M. Louttit chairing the committee.

The second paragraph is worth quoting at length:

"The purpose of the publication manual is to improve the quality of the psychological literature in the interest of the entire profession. The ultimate beneficiary is the reader of psychological journals whose time and energy are spared when articles are clear and concise. Most directly, the manual serves the authors of articles. Following its instructions will save many authors the trouble of revising and retyping manuscripts acceptable in content but not in form. The editors also hope to benefit by being relieved from the necessity of reading and returning many manuscripts which deviate from acceptable standards of style" (p. 1).

It would be hard to argue against any of these sentiments, and the field should have been shouting a collective *bravo!* for the editors who took the time to write the first *Manual*.

Creators of the first *Manual* had little or nothing to say about what they should be called, but there was much on abbreviations (which were quite in vogue). The closest I can find to a reference to those who are in experiments (and who conduct them) is the statement on Page 20 that "the word *experimenter*, and its various forms – singular, plural, and possessive singular and plural – are abbreviated *E*, *Es*, *E's*, and *Es'*; analogous abbreviations are used for the terms *subject* (*S*) and *observer* (*O*)." Elsewhere the reader was told that *feeble-minded* should not be hyphenated; it seems safe to assume that the editors who created the first *Manual* were not critically concerned with bias in language.

What was called the "First Revision" of the *Publication Manual* came out five years later because "The exhaustion of stock of the 1952 edition ... late in 1956 made it necessary to reprint the *Manual*, with or without revision." The council of editors, now chaired by A. W. Melton, elected to revise the *Manual* and it was printed as a separate volume in 1957. However, with the same trim size as the 1952 edition, the pages still numbered only 70 and the price was still a bargain: \$1.00. Abbreviations were still required, which means that one often needed to learn a long paired-associate list of abbreviations (nonsense syllables) to psychological concepts in order to understand articles of this era. As in the 1952 edition, a list of "common abbreviations" was provided in the back (although to my eyes some are not so common; e.g., the reader was told that *Kwartalnik* should be abbreviated as *Kwart.*). Besides fine-tuning the first edition, the council of editors made one major change in the revision: "An entirely new section on literary quality has been added (section 2) which should be useful to students and to a minority of contributors who need help with respect to certain essentials of composition." By the way, *feeble-minded* was still used as an example of a compound word that should not be hyphenated. And the number of APA journals had risen from 10 to 12.

Ten years later the *Publication Manual* was again revised and this version was now called the “1967 Revision.” The price skyrocketed by 50 percent, to \$1.50 (but it had stayed at a dollar for 15 years). APA now published 13 journals. The foreword says that Estelle Mallinoff, editor of special publications, oversaw the revision, which was also vetted by the council of editors and the publication board. The volume contracted to the original 61 pages, but the same material about *S*, *O*, and *E* was included (although a couple of sections on compound words were dropped, so the *feeble-minded* example was eliminated).

1972 brought a more radical revision. Arthur Melton provided an informative foreword, from which some of the information above was taken. Melton was chair of the publications and communications board, which oversaw the project. However, the editors did not make the revision, but a task force did, assisted by APA staff in the publications office. Melton acknowledged that the *Manual* had become more prescriptive than in the early days, but he urged, “Although its style requirements are explicit, it recognizes alternatives to traditional forms and asks authors to balance the use of rules with good judgment.”

Let’s not dwell on whether a manual can actually recognize alternatives to traditional forms, but see what the *Manual* had to say about *Subjects*, which appeared as an index term for the first time. The term appeared as a heading on Page 17 with three short paragraphs included. One said that three questions about subjects should be provided: who they were, how many there were, and how they were selected. The *Manual* encouraged demographic variables to be reported for people, and for genus, species, strain number, and similar information to be provided for animals (or infrahuman animals, as the purists would insist). Finally, authors were told to indicate to the editor in the submission letter whether subjects were treated in accord with the APA ethical standards, as contained in a separate manual.

The 1972 volume was called the “Second Edition” of the *Publication Manual*, although it really was the fourth or maybe the sixth (after those in 1929, 1944, 1952, 1957, and 1967). However, in some sense the name is deserved, because the 1972 *Manual* was really the first thorough revision of the 1952 *Manual* (the first edition). The number of pages more than doubled to 136 in the second Edition, but the increase in number of words was probably much greater because the trim size increased, too. Subjects were still called by that name in 1972, but in a stunning departure from the past, the *Manual* stated “The APA journals use abbreviations sparingly.” That must have been shocking news to those who read APA journals in the 1960s. A later section admonished writers: “Do not use the abbreviations *S*, *E*, and *O* for subject, experimenter and observer.” Why this change was made from all prior manuals was not explained, as far as I could tell. However, that is typical – the field is told how the committee creating the manual thinks language should be used but not (usually) why changes directly countering those of previous editions are being made.

In 1983 the third edition of the *Publication Manual* appeared, expanded to 208 pages. Information about using subjects (and about not abbreviating the term) remained the same, but two sections were added on “Guidelines for Nonsexist Language in APA Journals” and “Avoiding Ethnic Bias.” These sections and an accompanying table (pp. 43-49) are worth reading today to show how far we have come. These guidelines might have been news and perhaps even controversial in 1983, but are commonplaces 21 years later. The second and third editions were the best editions in my opinion – relatively concise but complete.

During the late 1980s, I edited the *Journal of Experimental Psychology: Learning Memory and Cognition* and so served on the council of editors. This group had created the *Publication Manual* in 1952, but the second and third editions were only “approved” by the council after having been created by others – APA publications staff and some psychologists agreeing to serve of the committee to revise the manual. The change was an important one, I suspect. Editors were too busy editing to worry with the next issue of the *Manual*, so some division of labor had to be made. And the *Manual* began to spiral out of control (in my opinion) without the editors to exercise careful oversight.

The council of editors meets yearly in Washington, DC, and for me a lowlight of the years in the late 1980s were seemingly interminable discussions about bias in language. The ideas were no doubt well-intentioned and certainly the proponents of massive change were earnest, but the council of editors deemed many of the ideas loopy and rejected them, or tried to. (Luckily, I tended to sit by Alan Kazdin and Jim Sherman during the meetings, so I was kept entertained). My favorite circumlocution proposed to our group was to replace the phrase *double-blind experiment* with “the experiment was created such that neither the experimenter nor the subject knew what it was about.” I paraphrase, but this is close. Many more concerns like these were expressed.

It came as no surprise to me that the fourth edition of the *Publication Manual*, published in 1994, had much more about “bias” in language than its predecessors. The *Manual* grew all out of proportion, ballooning to 400 pages, and nearly doubling the size of its predecessor published in 1983. Issues of language were apparently turned over to the special interest groups for whom these matters were a cause (Foreword, p. xxiii). Now, for the first time, the term *subject*, which had served psychology perfectly well for over 100 years, was to be banished. The third of the “Guidelines to Reduce Bias in Language” states, “Acknowledge participation” and begins “Write about the people in your study in a way that acknowledges their participation. Replace the impersonal term subjects with a more descriptive term when possible – participants, individuals ... ” (What group favored this change? Were college students writing in en masse saying “Don’t call us subjects any more; we participate!”). On Page 54, where the rule is reiterated in a table, the *Comment* appears “For human beings, *participants* is preferred to *subjects*.” This sentence violates the *Manual*’s prescription to use active voice, but for good reason. The sentence “The small group of language zealots who revised the *Manual* prefer *participants* to *subjects*” would have given the game away. Despite the fact that the *Manual* said it merely preferred *participants* and that it also averred (along with prior manuals) “that authors should balance the rules of the *Manual* along with good judgment,” the APA copyeditors were told to change every *subject* to *participant* in submitted papers.

Occasionally I get a note from someone asking why my papers are exempted from the rule to use *participants*. I get to use *subjects* when I write in APA journals (see Roediger & McDermott, *JEP:LMC*, 1995 and *Psychological Review*, 1999). The reason I was given special dispensation was owing to my delicate condition, as I expressed it to copyeditor Michael Cannon in the letter excerpted below that permitted me to be excused from using *subjects*:

Dear Mr. Cannon:

I am returning herewith the copyedited manuscript of my paper, co-authored by Kathleen B. McDermott, “Creating False Memories: Remembering Words Not Presented in Lists.” As you will see from the rest of this letter and from comments on the manuscript, I do have some complaints and resisted some suggestions you made. However, these are certainly not complaints

about your fine work, but about recommendations placed in that big clunker, the Fourth Edition of the *Publication Manual of the American Psychological Association*. Let me deal with some of the main problems in turn.

Use of the term participants. The new *Publication Manual* recommends that the term *subjects* be replaced by *participants*. As I read the *Manual* and your comment on page 2 of my paper (the Abstract), this is only a recommendation; a suggestion; a practice that the little committee creating the *Manual* would like us to follow. I certainly did not read this guideline as being an iron-clad rule, with the writers of the *Publication Manual* dictating what language authors should use. In my opinion, this change was a mistake. People in psychology experiments have been referred to as subjects since the 1800's. Why, in the mid-1990's, does a small group of writers of the new *Publication Manual* take it upon itself to effect this change? No reason is given in the *Manual*, or at least no compelling reason. Using the word subjects provides continuity with the past, saves characters, journal space, and ultimately trees. (Every time subjects is used in preference to participants, four characters are saved, and over all the twenty-some journals APA produces in multiple issues every year, the savings would be quite large.) In addition, subjects is the term preferred in most of our allied disciplines. And participants is jarring.

But these are logical arguments, and I know your superiors at APA do not respond well to logic when it comes to the language used in APA journals. (I speak as one who was associate editor of *JEP:LMC* for three years and then editor for five years, from 1982 through 1989, as well as chair of the council of editors for a year.) What creates change in language at APA is special interest groups with various disabilities and agendas. Therefore, I should point out that I am a member (in fact, the founder) of a group called Sufferers of *Participant* Phobia (SPP). Because I have had to survive the use of the word participant in many APA journals, due to the new *Publication Manual* recommending this change, I am also a member of *Participant* Phobia Syndrome Survivors (PPSS). Use of the word participants in our journals has caused me mental anguish, has produced undue stress, and has caused me to write this letter and seek help from a support group (other experimental psychologists who think the language change is an abomination; Gordon Logan comes to mind).

Of course, I do have to read the word participants in other people's articles. (At least this is true in APA journals – copyeditors for other organizations, such as the Psychonomic Society, have a list of rules in the APA *Publication Manual* that they are to ignore. This is one of them.) Although it is bad enough for me to have to read participants repeatedly in other people's articles, I certainly should not be forced to use the term in my own articles, because this would abridge my First Amendment rights for freedom of expression and trample on my individual liberty of referring to people in my experiments in the way that I prefer. I realize that the changes instituted in the new *Publication Manual* were intended to reduce bias in language, but in my opinion, they only replace one set of biases with a different set. This different set discriminates against people suffering from SPP and who have PPSS.

I have used the writer's best friend (the stet) to return those in my experiments to their former status as subjects. However, I do not mean to imply by this term that the individuals who participate in my experiments are not vital and exuberant people, each with his or her own special qualities, as we now note in the Method section of Experiment 1. ...

I mean no disrespect to those with disabilities and believe many of the language changes have been good ones, but many (such as *participants* for *subjects*) are simply change for the sake of change and without regard for precedent and for the good of the field. No group was protected with this change and with others.

One might have thought that, with publication of the massive 1994 *Publication Manual*, it would be many years before a new one was needed. One would be wrong. The APA has discovered that the *Publication Manual* represents a renewable gold mine. Soon it might begin appearing every other year, like some introductory psychology textbooks. The price has been greatly jacked up over the years and the APA is making a fortune every time the *Manual* reappears, since the entire field (and libraries and departments and those in many other fields who use the *Manual*) must buy new ones. So it was 2001, after a mere seven years, when the fifth edition was published, in several different versions. My spiral paperback version cost \$33.95; a hardback version costs \$39.95. No longer is it a concise, authoritative manual providing service to the field, but now it seems to have been taken over by special interests and its primary mission is to make money. The latest edition says that *subjects* is an appropriate term only when the individuals gave no consent to be in the study – infants, or individuals with brain damage or dementia (see p. 65). And, somewhat to my surprise, people don't have sexual intercourse any longer; now we are supposed to say either "participants who had engaged in penile-vaginal intercourse" or "participants who had engaged in sexual intercourse or had sex with another person." As Dave Barry says, I am not making this up. See Page 74.

The *Manual* is now 468 pages long. One offshoot of its unwieldy size is that many books now exist that simplify the *Manual*. For example, Lenore Szuchman has a book called *Writing with Style: APA Style Made Easy* (Wadsworth) that is only 156 pages long and tells what students and others need to know. The fact that such books can sell well shows that the *APA Manual* is too bloated to be of use for students learning to write in APA style, and, at least to my eyes, the *Manual* has been hijacked and is no longer a service to the field, as it was in the 1950s through 1970s. Art Melton, who oversaw the elegant 1972 edition, is probably spinning in his grave. But we all have to use it.

Or do we? Is it time for another organization, one fully devoted to the science of psychology, to produce its own publication guide that could be used for journals published by scientific organizations? Perhaps the journal editors and scientists could once more take over producing a manual and eliminate the silliness. Then we could probably have a 150-page manual that would serve scientific psychology well. What would you think of there being created an *American Psychological Society Guide to Scientific Publication*? Please direct comments to [hroediger@psychologicalscience.org](mailto:hroediger@psychologicalscience.org).