

# Name Norms: A Guide to Casting Your Next Experiment

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Personality and Social  
Psychology Bulletin  
1–14

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DOI: 10.1177/0146167218769858  
pspb.sagepub.com



## Abstract

Psychologists often test hypotheses by constructing vignettes depicting people engaging in behavior and displaying characteristics designed to operationalize specific variables. People described in these vignettes are typically given names, but names have a variety of connotations that could lead to unwanted variance between conditions of an experiment and in other ways have implications for the results of a study. An up-to-date source of information to help guide the selection of names would be useful for researchers. Participants from four different regions of the United States rated a large sample of names in terms of perceived age, warmth, and competence. The full set of names is presented, along with some simple demonstration studies concretely illustrating the implications of name choice.

## Keywords

proper names, person perception, research methods

Received March 23, 2017; revision accepted March 12, 2018

Names matter. At least Demetria Guynes, Steveland Judkins, Archibald Leach, and Marion Morrison thought so. Readers of this article will probably better know them as Demi Moore, Stevie Wonder, Cary Grant, and John Wayne. And early in the year 2016, opponents of Donald Trump's candidacy for president of the United States, based on their belief that it would undermine his popularity, made an effort to publicize the original version of his surname (changed centuries ago by his ancestors): "Drumpf." Concerns with names and whether they should be changed are certainly not restricted to celebrities. In 2011, approximately 58,000 people in the United Kingdom had their names legally changed (McClatchey, 2011).

Evidence for the idea that personal names matter—that is, that they have effects on how people are perceived and treated by others—is more than anecdotal (for reviews of the empirical literature, see Christopher, 1998; Joubert, 1993; Lawson, 1984). For example, Harari and McDavid (1973) found that identical essays received significantly different grades from teachers depending on whether they were attributed to children with what were at the time popular, evaluatively favorable names (e.g., "Karen," "Lisa"), or to children with less desirable names (e.g., "Bertha," "Adelle"). In a study by Garwood, Sulzer, Levine, Cox, and Kaplan (1983), participants' decisions about whether people described in vignettes should be rewarded or punished were significantly affected by the desirability of those people's names. Bruning and Husa (1972) found that even elementary school students had

different behavioral expectations for people as a function of whether they had names with "active" (e.g., "Otto," "Bruno") or "passive" (e.g., "Alfred," "Milton") connotations. And research by Topolinski, Maschmann, Pecher, and Winkielman (2014) indicates that subtle differences in the movement of the tongue and lips as one articulates a person's name can influence one's attitude toward that person.

Names and their connotations thus matter for people in their daily interactions (and even long-term outcomes; see Anderson & Schmitt, 1990; Zwebner, Sellier, Rosenfeld, Goldenberg, & Mayo, 2017). But they are also an issue of concern for experimental psychologists. Social psychologists (and other behavioral scientists—see Evans et al., 2015; Hughes, 1998; O'Dell, Crafter, de Abreu, & Cline, 2012) often test their hypotheses by constructing vignettes (usually, but not always, written) depicting people possessing characteristics and engaging in behavior designed to operationalize variables of interest to them. Very often the people described

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in these vignettes are given names; if the vignette involves more than one character, doing so is especially important so that research participants can more easily follow the narrative. These names can be selected at random, or for idiosyncratic reasons. A researcher presenting a story about a person engaging in a series of evaluatively ambiguous behaviors for the purposes of testing trait priming effects might name the protagonist "Donald" (Higgins, Rholes, & Jones, 1977; Srull & Wyer, 1979). Another researcher interested in the biasing effects of stereotypes on memory might give the central character in the vignette presented to participants the name "Betty" (Snyder & Uranowitz, 1978). The first author of this article once created a series of vignettes populated entirely with the names of his graduate school classmates (Newman, Duff, & Baumeister, 1997, Appendices A and B).

However, the specific names selected for characters in vignettes could have implications for the results of one's studies. Researchers, of course, know this intuitively. For example, their vignettes rarely if ever include highly unusual, low frequency names. In addition, unless an investigation focuses specifically on stereotyping, prejudice, or discrimination, names strongly associated with specific national, ethnic, or racial groups (e.g., "Carlos Ramirez"—Bodenhausen & Wyer, 1985) are also avoided. Such intuitions are well-founded. Perhaps the most well-known empirical demonstration of the consequences of name selection was Kasof's (1993) analysis of the materials used in hundreds of studies of sexism. He found a tendency to select "male names that were more attractive, more youthful, and more intellectually competent in their connotations than were the female names with which researchers contrasted them" (p. 148). For example, of the 340 studies he reviewed, there were 204 cases in which a "younger" male name was paired with an "older" female name; the number of times that an older male name was paired with a younger female name was 15. In addition, these naming biases systematically covaried with the outcomes of such studies. Overall, the name confounds Kasof (1993) revealed threatened the internal validity of not just individual studies but an entire program of research.

Other lines of research could be prone to similar threats to validity, such as those consisting of correspondence audit studies (e.g., Bertrand & Mullainathan, 2014; Gaddis, 2015, 2017; Pager, 2007). Such studies might involve sending almost-identical job applications to multiple employers, varying only in the name of the applicants. Manipulations of the names' gender, ethnicity, and race could also be confounded with those names' other connotations.

Kasof's (1993) article included more than a critical analysis of prior research. He also made a contribution to subsequent research by presenting a set of age-matched names along with data on those names' perceived attractiveness and competence (see his Appendix B and Tables 4 and 5). Kasof suggested that researchers could consult his list of names when designing their own studies. By carefully selecting

names from among those he provided, one could perhaps avoid the confounds that plagued sexism research.

Quite a few researchers have utilized Kasof's name data—and they continue to do so (e.g., Brown & Diekmann, 2013; Gerhardstein & Anderson, 2010; Greitemeyer, 2009; Rosette & Tost, 2010; Ruthig & Holfeld, 2016; Schneider, 2014; Uhlmann & Zhu, 2014; Weine, Kim, & Lincoln, 2016). Note, though, that Kasof's norms were established close to 25 years ago; he himself pointed out that "because of historical variation in forename attractiveness and connotation, the name pairs that survived this statistical selection will surely become mismatched at some future time" (p. 153). Hence, continued use of Kasof's names for experimental vignettes would seem to be in violation of the spirit of his work. In fact, close inspection of the specific names and how they were classified reveals many of them to be quite outdated. The name "Linda," for example, is said to be a "younger adult" name. A search of Syracuse University's online directory (on March 2, 2017) revealed only five undergraduate women with that name, compared with 28 faculty and staff members. Similarly, only four undergraduate students had the first name "Gary" (also classified as "younger adult" by Kasof), compared with 23 faculty and staff members. By way of comparison, a search of the directory revealed 28 undergraduate women with the name "Kelsey," compared with one solitary staff member. And although the online directory revealed that there was just one faculty member at the institution with the first name "Dylan," after listing 50 Dylans from among the students, it could only display the following message: "The maximum number of results allowed has been exceeded. Please refine your search."

It is the nature of such norms to become outdated. As just one more example, although Kasof (1993) identified the name "Anne" as being an "older adult" name, 30 years earlier, most research participants in a study by Sheppard (1963) assumed that Anne was a young woman. Thus, the primary goal of this article is to provide an up to date and extensive database of names and their connotations. As already noted, Kasof (1993) focused not just on ages associated with first names but also on how the names were rated in terms of competence and attractiveness. The current investigation also included perceptions of competence. But given the major role that the dimensions of competence and warmth have played and continue to play in research and theory in the area of impression formation (see Fiske, Cuddy, & Glick, 2007; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005; Rosenberg, Nelson, & Vivekananthan, 1968), we measured perceptions of warmth rather than general attractiveness.

A strength of this study is that participants were recruited from four different geographical regions of the United States. The purpose of this data collection plan was to help ensure that our results would not just reflect local idiosyncrasies (cf. Buchanan & Bruning, 1971, who published an earlier list of name connotations based entirely on a sample of participants from Ohio).

A second goal of the article is to provide evidence for the validity of the name norms by providing some simple empirical demonstrations of the consequences of using names that vary along the measured dimensions. Study 2 provides that evidence.

## Study 1

### Method

**Participants.** Participants ( $n = 497$ ) were recruited in late 2015 and early 2016 from four different study sites. One hundred thirty-four college students were recruited from Syracuse University (in the Northeastern United States), 154 from Mississippi State University (in the South), 71 from Dominican University (the Midwest), and 138 from Cerritos College (the West Coast). Students volunteered or received course credit for their participation at each respective site.

**Materials.** Names were extracted from the Social Security database for our use (<https://www.ssa.gov/OACT/baby-names>). All the names in the database are from Social Security card applications for births that occurred in the United States between 1879 and the end of February 2015 (excluding people born before 1937 who never applied for a Social Security card, and those who applied without indicating the place of birth).

For the purpose of the current research, we assembled, from the Social Security database, names of people born in the six decades between the 1950s (1950-1959) and the aughts (2000-2009). This range covers names of people who would now be as old as 67 or so years of age and as young as 8 years old. Using the ranking information provided by the Social Security website,<sup>1</sup> we identified the top 200 most popular names for each decade (the Top 200 list). Then, to select a manageable number of names in a systematic way (and to include both relatively common and relatively uncommon names), we identified the top 20 most common male and female names, and also names with position numbers 91 to 110 and 181 to 200 in the Top 200 list for each decade. As a result, we were left with 120 representative names from the Top 200 list (60 male names and 60 female names) for each of the six decades.

Because the popularity of some names remained somewhat consistent across the six decades, a number of names overlapped across the six lists. For example, “William” was ranked 6, 7, 9, 15, 18, 10, respectively, in each of the six decades. When combining the six lists of 120 popular names, we retained only one copy of each name that appeared in one or more of our lists. This procedure yielded a list of 485 uniquely spelled names (233 male names and 252 female names). In this list, there were a number of cases of alternate spellings of names that, in the judgment of the authors, would not have been considered by participants to be distinct in any meaningful way (e.g., “Isabel” vs. “Isabelle,” “Jeffery” vs.

“Jeffrey,” “Nichole” vs. “Nicole”). We retained only one form of spelling for the study in such cases.

The final list consisted of 200 male names and 200 female names. To reduce the burden placed on our participants (while also trying to ensure that all names would be rated an approximately equal number of times), these names were then randomly divided within gender into four lists of 50 names.<sup>2</sup> Each participant was randomly assigned to receive one of the sets of 50 male names and one of the sets of 50 female names (100 names total per participant).<sup>3</sup>

**Procedure.** The study was run using Qualtrics software, and participants completed the study online. Participants were asked to complete three rating tasks for the 100 names presented to them. They provided ratings of perceived age (How old do you think he or she is?), competence (How competent do you think he or she is?), and warmth (How warm do you think he or she is?) for those names. Participants always provided age ratings for all the names first; the order of the competence and warmth ratings was then randomized between participants. Names for each rating task were grouped by gender, so that participants rated names for one gender first, and then for the other gender. Whether a participant received male or female names first was randomized.

**Age rating task.** Participants were asked to “Imagine that you are about to meet FEMALE (or MALE, for the male names) individuals with the following names. How old do you think she (or he) is when you see the name? Please rate her (or him) in terms of age. If you feel uncertain, please use your intuition and make your best guess.” For each name, participants were asked “How old do you think he or she is?” Participants were asked to provide ratings on the following 9-point scale: <12, 12 to 17, 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, >75. For a given participant, the order in which the names were presented was randomized, so that no one participant received the names in the same order.

**Competence and warmth rating task.** After participants completed the age rating task, they provided ratings of competence and warmth for the names. First, the concepts of “Competence” and “Warmth” were defined for them. Participants were presented with the following information:

According to research on person perception (Fiske, Cuddy, & Glick, 2006), when people form impressions of others, they usually evaluate them in terms of two fundamental dimensions: competence and warmth. The competence dimension includes traits such as clever, competent, creative, efficient, foresighted, ingenious, intelligent and knowledgeable. The warmth dimension includes traits such as popular, honest, humorous, fair, generous, helpful, righteous, sincere, and tolerant.

Participants then began either the competence or warmth task, depending on the randomized order. For the competence rating task, participants were asked to “Imagine that you are

about to meet FEMALE (or MALE, for the male names) individuals with the following names. How competent do you think she is when you see the name? Please rate her in terms of competence. Again, the competence dimension includes traits such as clever, competent, creative, efficient, foresighted, ingenious, intelligent, and knowledgeable. If you feel uncertain, please use your intuition and make your best guess." For each name, participants were asked "How competent do you think she or he is?" Under each question, we reminded participants of competence's meaning by restating that "Competence = clever, competent, creative, efficient, foresighted, ingenious, intelligent, and knowledgeable." Participants rated competence on a 5-point scale ranging from 1 = *not at all* to 5 = *extremely*. Like the age rating task, the order in which a given participant rated the names was randomized.

The procedure for the warmth rating task was identical, but participants were asked to "Imagine that you are about to meet FEMALE (or MALE) individuals with the following names. How warm do you think he is when you see the name? Please rate him in terms of warmth. Again, the warmth dimension includes traits such as popular, honest, humorous, fair, generous, helpful, righteous, sincere, and tolerant. If you feel uncertain, please use your intuition and make your best guess." For each of the rating question, participants were reminded that "Warmth = popular, honest, humorous, fair, generous, helpful, righteous, sincere, and tolerant."

## Results and Discussion

Participants with 10 or more missing values ( $n = 39$ , less than 8% of participants) were dropped from analyses so as to exclude participants who might not have been putting sufficient effort into the (admittedly laborious) rating task. In addition, for 11 participants, there was no variance on one or more of the judgment tasks. They were also dropped from analyses, leaving a final sample of 447 participants.

Mixed-effects modeling was applied to the data using the PROC MIXED procedure in the SAS software package.<sup>4</sup> The simultaneous nesting of age/warmth/comp ( $Y_{ijk}$ ) responses within both raters and target names results in a cross-classified data structure described by the following Level 1 (response-level) equation:

$$Y_{ijk} = \beta_{0jk} + r_{ijk},$$

in which rating  $i$  provided by rater  $j$  evaluating name  $k$  is comprised of an intercept term that varies across both raters and name targets, in addition to a Level 1 residual  $r_{ijk}$ . Based on the standard "slopes as outcomes" formulation (see Raudenbush & Bryk, 2001), we decomposed the Level 1 intercept term into its constituent fixed and random components, as described by the following Level 2 equation:

$$\beta_{0jk} = \gamma_{00} + \gamma_{01} \times \text{male}_{\text{target}} + u_{0j} + u_{0k},$$

where  $\gamma_{00}$  is the fixed component of the intercept, which due to our use of an effect-coding scheme for gender (1 = female, -1 = male) corresponds to the grand mean rating of  $Y$  (age, warmth, or competence) across all observations.  $\gamma_{01}$  represents the average difference between male and female name ratings, averaging across all raters. Finally,  $u_{0j}$  and  $u_{0k}$  represent the subject-specific random effects (deviations) for rater  $j$  and target  $k$ . More specifically, the  $u_{0j}$  term is rater specific, in the sense that every participant provided his or her own rating representing the participant's deviation from the grand mean (in addition to the fixed-effect of target gender). For instance, participants with positive deviations rated all of their names as older, warmer, and more competent, averaging across all names. On the contrary, the  $u_{0k}$  term is name target specific, in the sense that every name target had its own rating score representing its deviation from the grand mean. Names with positive deviations suggested that those names were rated older, warmer, and more competent, averaging across all raters. These subject-specific deviations are typically summarized as variances ( $\tau_{00j}^2, \tau_{00k}^2$ ), along with the variance of the aforementioned Level 1 residual ( $\sigma^2$ ), which when combined will equal (within rounding) the observed marginal variance of all ratings  $Y_{ijk}$ .

Estimated average ratings of each name (E-B estimates) were then calculated based on the following equation:

$$\text{EB} = \gamma_{00} + \gamma_{01} \times \text{male}_{\text{target}} + u_{0k}.$$

These estimated mean ratings (see Table 1) took into account the disagreement between raters (and did not differ substantially from the raw mean ratings).

**Reliability.** The goal of the initial analyses was to determine whether or not participants were able to make the age, warmth, and competence judgments with a reasonable degree of reliability. Reliability in the current study takes the form of a *consensus* or *agreement* estimate (see Kenny, 1994, for a thorough discussion). According to generalizability theory (Cronbach, Gleser, Nanda, & Rajaratnam, 1972; see Raykov & Marcoulides, 2010, Chapter 9 for a parallel explanation), consensus (reliability of target ratings) was computed using the following formula:

$$\rho = \frac{\tau_{00k}^2}{\tau_{00k}^2 + \tau_{00j}^2 + \sigma^2},$$

which describes the proportion of total variance in ratings that is attributable to consensus across participant-raters regarding the attributes of specific name targets. In the present data, we found moderate consensus across raters regarding age,  $\rho = 0.31$ , but lower consensus across raters regarding competence,  $\rho = 0.05$ , and warmth,  $\rho = 0.04$ .

To provide other evidence for the meaningfulness of the ratings, agreement across the four different data collection



**Table 1.** Estimated Mean Ratings for Age Group, Warmth, and Competence for 383 Names.

Name	Gender	Age group	Warmth	Competence
Abby	Female	2.70	3.17	3.06
Abraham	Male	6.07	3.26	3.62
Adrian	Male	3.02	3.10	3.02
Adrianna	Female	3.49	2.89	3.01
Alan	Male	4.56	3.15	3.40
Alana	Female	3.19	3.03	3.16
Albert	Male	6.00	3.01	3.25
Alexander	Male	3.47	3.21	3.53
Alexis	Female	3.00	2.91	3.09
Allen	Male	4.39	3.26	3.30
Allison	Female	3.49	3.19	3.29
Alvin	Male	4.72	2.87	2.92
Alyssa	Female	3.08	3.09	3.01
Amanda	Female	3.63	3.08	3.31
Amber	Female	3.24	2.96	2.93
Amelia	Female	4.17	3.08	3.44
Amy	Female	3.74	3.17	3.36
Andrew	Male	3.01	3.35	3.33
Angel	Male	3.00	3.04	2.76
Angie	Female	4.40	2.94	2.94
Anita	Female	5.30	2.90	3.11
Ann	Female	5.42	3.19	3.46
Anna	Female	3.16	3.37	3.54
Anthony	Male	3.22	3.25	3.09
Arnold	Male	6.03	2.86	3.40
Arthur	Male	6.17	3.13	3.78
Ashley	Female	3.24	2.97	2.82
Audrey	Female	3.83	3.18	3.29
Austin	Male	2.81	3.34	3.02
Autumn	Female	3.04	3.11	2.86
Bailey	Female	3.20	3.24	3.26
Barbara	Female	6.40	2.88	3.49
Becky	Female	4.25	2.98	2.99
Beth	Female	5.12	3.05	3.13
Betty	Female	6.71	3.14	3.35
Bob	Male	6.01	3.00	3.02
Brad	Male	3.88	3.17	2.84
Brady	Male	3.33	3.11	2.91
Brandon	Male	2.89	3.31	3.10
Brandy	Female	4.12	2.81	2.84
Brenda	Female	5.09	2.87	3.34
Brendan	Male	3.14	3.30	2.99
Brent	Male	3.51	3.03	2.79
Brett	Male	3.62	2.98	2.87
Brian	Male	3.58	3.36	3.23
Brianna	Female	2.88	2.89	2.86
Brittney	Female	3.34	2.88	2.80
Brooke	Female	3.36	2.97	2.92
Bruce	Male	5.68	2.92	3.18
Bryce	Male	3.27	2.97	2.90
Calvin	Male	4.10	3.04	3.05
Camila	Female	4.03	3.00	3.09

(continued)

**Table 1. (continued)**

Name	Gender	Age group	Warmth	Competence
Candice	Female	3.96	2.94	2.91
Carla	Female	4.43	2.95	3.06
Carol	Female	6.06	2.83	3.36
Caroline	Female	3.89	3.14	3.38
Carrie	Female	4.25	3.26	3.24
Carson	Male	3.89	3.07	3.15
Casey	Female	3.33	3.08	3.14
Cathy	Female	5.30	3.09	3.28
Charlie	Male	3.14	3.50	3.27
Chase	Male	3.09	3.28	2.95
Chelsea	Female	3.39	2.93	2.90
Cheryl	Female	5.87	2.75	3.08
Cheyenne	Female	4.07	2.76	2.80
Chloe	Female	2.72	3.05	2.84
Chris	Male	3.43	3.54	3.17
Christian	Male	3.13	3.46	3.10
Christine	Female	4.33	3.11	3.31
Cindy	Female	4.64	2.94	3.02
Claudia	Female	5.16	2.72	3.26
Clifford	Male	5.82	3.08	3.20
Colby	Male	2.96	3.03	2.66
Colin	Male	3.25	3.26	3.23
Colleen	Female	4.99	2.81	3.29
Cory	Male	2.78	3.14	2.84
Craig	Male	4.84	2.94	3.10
Crystal	Female	3.59	2.77	2.80
Curtis	Male	4.57	2.89	3.01
Cynthia	Female	4.70	2.99	3.36
Dalton	Male	3.38	2.90	3.06
Dana	Female	4.75	2.88	3.13
Dana	Male	4.25	2.91	2.73
Daniel	Male	3.06	3.50	3.41
Danielle	Female	3.46	3.15	3.34
Danny	Male	3.09	3.49	3.02
Darlene	Female	6.51	2.87	3.08
Darrell	Male	4.50	2.86	2.87
Darren	Male	3.81	3.01	2.95
Daryl	Male	4.79	3.11	2.91
Dave	Male	4.64	3.20	3.27
David	Male	3.75	3.51	3.35
Dawn	Female	4.87	3.09	3.20
Dean	Male	4.53	3.07	3.28
Deanna	Female	4.94	2.77	3.15
Deborah	Female	6.19	2.74	3.33
Delaney	Female	4.21	2.80	3.00
Dennis	Male	4.63	3.10	3.06
Devon	Male	3.00	2.85	2.75
Diane	Female	5.90	3.05	3.58
Dolores	Female	7.28	2.71	3.19
Dominic	Male	3.71	2.89	2.73
Dominique	Female	3.86	2.58	2.66
Donald	Male	6.16	2.79	3.10
Donna	Female	6.20	2.89	3.33

(continued)

Table 1. (continued)

Name	Gender	Age group	Warmth	Competence
Donovan	Male	4.19	2.85	2.97
Doreen	Female	6.45	2.81	3.28
Doris	Female	6.96	2.86	3.20
Duane	Male	4.71	2.56	2.50
Dustin	Male	2.89	3.09	2.83
Dylan	Male	2.64	3.32	2.94
Earl	Male	6.98	2.81	3.04
Eddie	Male	3.62	3.30	2.68
Edwin	Male	4.76	3.07	3.24
Elias	Male	3.95	3.01	3.18
Elijah	Male	3.01	3.27	3.12
Elizabeth	Female	4.19	3.34	3.80
Ellie	Female	2.95	3.13	3.05
Emily	Female	2.92	3.48	3.44
Emma	Female	2.88	3.47	3.54
Eric	Male	3.32	3.42	3.20
Erika	Female	3.36	2.88	2.96
Erin	Female	3.57	3.18	3.51
Ernest	Male	6.94	3.09	3.56
Ethan	Male	2.99	3.36	3.27
Eva	Female	3.88	3.10	3.30
Evelyn	Female	5.10	3.20	3.40
Felicia	Female	4.45	2.37	2.57
Francis	Male	5.48	3.05	3.14
Franklin	Male	5.44	3.11	3.49
Fred	Male	4.70	3.10	2.96
Gary	Male	5.67	2.85	3.08
Gavin	Male	3.53	3.10	3.11
Gene	Male	6.34	2.98	3.27
George	Male	5.40	3.22	3.42
Gerard	Male	5.45	3.03	3.37
Gilbert	Male	5.94	2.83	3.24
Gina	Female	4.71	2.96	3.10
Glenda	Female	6.76	2.74	3.18
Gloria	Female	6.41	2.96	3.27
Grace	Female	3.45	3.61	3.42
Grant	Male	4.30	3.09	3.34
Greg	Male	4.51	3.03	3.20
Hailey	Female	3.00	3.17	2.99
Hannah	Female	3.04	3.14	3.05
Harry	Male	4.54	3.20	3.43
Harvey	Male	5.58	3.06	3.41
Hayden	Male	2.53	3.24	2.93
Heather	Female	4.01	3.18	3.35
Hector	Male	4.64	2.76	3.01
Heidi	Female	4.51	2.96	3.15
Henry	Male	4.35	3.34	3.43
Herbert	Male	7.18	2.89	3.38
Herman	Male	6.62	3.00	3.25
Holly	Female	3.89	3.13	3.08
Hope	Female	3.21	3.44	3.26
Howard	Male	6.03	2.79	3.36

(continued)

Table 1. (continued)

Name	Gender	Age group	Warmth	Competence
Isaac	Male	3.04	3.06	3.23
Isabella	Female	2.55	3.39	3.34
Isaiah	Male	2.64	3.19	3.04
Jack	Male	3.44	3.23	3.14
Jacob	Male	2.69	3.47	3.26
Jacqueline	Female	4.09	2.91	3.39
Jade	Female	3.30	2.79	3.00
Jake	Male	2.75	3.34	3.10
James	Male	3.58	3.66	3.32
Jane	Female	5.03	3.05	3.45
Janet	Female	5.61	2.77	3.18
Janice	Female	5.85	2.89	3.22
Jared	Male	3.30	3.28	3.10
Jasmine	Female	3.22	2.97	3.09
Jason	Male	3.49	3.28	3.05
Jay	Male	3.40	3.27	2.79
Jean	Female	6.53	2.85	3.36
Jeanette	Female	5.65	2.70	3.13
Jeff	Male	4.50	3.18	3.12
Jennifer	Female	3.97	3.30	3.50
Jeremiah	Male	3.80	3.21	3.13
Jeremy	Male	3.30	3.12	3.05
Jerry	Male	4.94	3.20	3.14
Jesse	Male	3.16	3.38	2.87
Jessica	Female	3.41	3.23	3.16
Jill	Female	4.41	3.11	3.20
Jim	Male	5.08	3.11	3.11
Jo	Female	4.34	2.94	3.03
Joan	Female	6.04	2.96	3.50
Joanna	Female	4.82	3.04	3.30
Jodi	Female	5.09	2.86	2.99
Joe	Male	4.42	3.14	3.02
Joel	Male	4.04	3.24	3.10
John	Male	4.05	3.44	3.41
Jonathan	Male	3.24	3.43	3.34
Jordan	Female	3.29	2.86	3.16
Joseph	Male	3.70	3.26	3.41
Josephine	Female	5.50	2.95	3.48
Joshua	Male	2.61	3.51	3.17
Judith	Female	6.82	2.85	3.53
Julian	Male	3.33	3.15	3.18
Julie	Female	3.73	3.32	3.42
Justin	Male	2.98	3.48	2.94
Kara	Female	3.29	3.02	3.01
Karen	Female	4.81	2.96	3.38
Karla	Female	4.29	2.90	2.87
Katelyn	Female	3.37	3.15	3.13
Kathleen	Female	4.64	3.26	3.38
Kathryn	Female	4.13	3.13	3.47
Katie	Female	2.92	3.26	3.11
Kayla	Female	2.82	2.96	3.02
Kellie	Female	3.54	3.21	2.78

(continued)

**Table 1. (continued)**

Name	Gender	Age group	Warmth	Competence
Kelly	Male	4.12	3.01	2.95
Kelsey	Female	3.28	3.12	3.05
Kendra	Female	3.99	2.85	2.87
Kenneth	Male	4.72	3.06	3.29
Kerri	Female	4.06	2.87	2.96
Kerry	Male	4.59	2.87	2.95
Kevin	Male	3.42	3.35	3.25
Kimberly	Female	3.76	3.01	3.07
Kristen	Female	3.76	3.07	3.27
Larry	Male	5.70	2.86	2.86
Laura	Female	4.02	3.27	3.34
Lauren	Female	3.69	3.23	3.31
Lawrence	Male	5.31	2.89	3.32
Leah	Female	3.17	3.13	3.11
Lee	Male	4.53	3.02	3.35
Leon	Male	4.91	3.01	3.07
Leonardo	Male	4.92	3.23	3.53
Leslie	Female	4.18	3.12	3.14
Leslie	Male	4.73	2.89	2.89
Liam	Male	3.41	3.51	3.16
Lillian	Female	4.29	3.15	3.35
Lilly	Female	2.47	3.41	2.99
Linda	Female	5.56	3.02	3.36
Lindsay	Female	3.61	3.13	3.00
Lisa	Female	4.68	3.04	3.36
Logan	Male	2.77	3.30	2.85
Lonnie	Male	5.27	2.87	2.83
Lori	Female	4.97	3.11	3.27
Louis	Male	4.45	3.25	3.24
Lucas	Male	2.61	3.33	3.06
Luke	Male	3.04	3.51	3.30
Lynn	Male	4.30	2.84	2.95
Mackenzie	Female	3.07	2.92	3.01
Madeline	Female	3.03	3.31	3.51
Madison	Female	2.77	3.28	3.19
Malachi	Male	4.15	2.61	2.85
Mallory	Female	4.44	2.90	3.25
Marcia	Female	5.54	2.72	3.00
Marco	Male	3.61	2.88	2.75
Marcus	Male	3.68	3.14	3.01
Margaret	Female	6.25	2.83	3.39
Mariah	Female	3.99	2.79	2.69
Marianne	Female	5.42	2.87	3.36
Marisa	Female	3.88	3.07	3.18
Mark	Male	4.22	3.47	3.34
Martha	Female	6.44	3.09	3.43
Martin	Male	4.58	3.20	3.14
Marvin	Male	5.20	3.05	3.13
Mary	Female	5.21	3.23	3.44
Matthew	Male	3.11	3.79	3.39
Maureen	Female	6.56	2.72	3.35
Maurice	Male	5.37	2.74	2.94

(continued)

**Table 1. (continued)**

Name	Gender	Age group	Warmth	Competence
Mckenzie	Female	2.68	3.09	3.06
Meghan	Female	3.52	3.00	3.12
Melanie	Female	3.74	3.08	3.29
Melinda	Female	5.08	2.94	3.15
Melissa	Female	4.19	3.13	3.34
Melody	Female	3.50	3.33	2.85
Melvin	Male	5.88	2.76	3.04
Mercedes	Female	3.75	2.50	2.58
Mia	Female	2.78	3.16	2.87
Michael	Male	3.54	3.54	3.52
Michelle	Female	4.07	3.23	3.40
Mildred	Female	7.47	2.60	3.33
Milton	Male	5.70	2.94	3.24
Mindy	Female	4.37	2.88	2.74
Misty	Female	4.36	2.86	2.49
Mitchell	Male	3.71	3.19	3.26
Molly	Female	3.50	3.29	3.13
Nancy	Female	6.33	2.96	3.53
Natalie	Female	3.30	3.22	3.44
Nicholas	Male	3.29	3.59	3.59
Nicole	Female	3.42	3.15	3.11
Nina	Female	4.02	2.94	3.13
Noah	Male	2.84	3.68	3.39
Norman	Male	6.81	2.88	3.47
Oliver	Male	3.82	3.24	3.25
Olivia	Female	3.36	3.33	3.51
Omar	Male	4.27	2.68	2.60
Oscar	Male	4.74	2.92	3.00
Pam	Female	4.69	3.01	3.25
Parker	Male	3.47	3.25	3.17
Patrick	Male	4.13	3.23	3.15
Patty	Female	5.93	2.98	3.23
Paul	Male	5.07	3.37	3.35
Paula	Female	5.70	3.02	3.33
Peggy	Female	6.60	2.93	2.71
Penny	Female	4.98	3.11	2.94
Perry	Male	5.04	2.89	2.94
Philip	Male	4.54	3.34	3.50
Preston	Male	3.47	3.18	3.49
Rachel	Female	3.65	3.33	3.39
Ralph	Male	5.13	3.09	3.08
Randy	Male	4.61	3.01	2.98
Raymond	Male	5.18	3.07	3.26
Rebecca	Female	3.96	3.19	3.36
Regina	Female	4.90	2.48	2.79
Reginald	Male	7.11	2.69	3.32
Rex	Male	3.48	2.69	2.32
Richard	Male	5.25	3.09	3.47
Rick	Male	4.86	2.80	2.98
Riley	Male	2.86	3.28	2.89
Robert	Male	4.63	3.32	3.55
Robin	Male	4.34	3.06	3.16

(continued)

Table 1. (continued)

Name	Gender	Age group	Warmth	Competence
Robyn	Female	4.76	3.04	3.21
Roger	Male	5.15	3.05	3.09
Ronald	Male	5.96	2.97	3.28
Roxanne	Female	4.83	2.83	3.01
Roy	Male	5.23	2.81	2.92
Ruben	Male	4.50	2.87	2.97
Russell	Male	4.94	3.08	3.07
Ruth	Female	6.38	2.86	3.38
Ryan	Male	2.85	3.44	3.11
Sabrina	Female	3.37	2.96	2.96
Sally	Female	4.67	3.16	3.18
Samantha	Female	3.34	3.41	3.39
Sandra	Female	5.07	2.89	3.31
Sarah	Female	3.46	3.34	3.44
Scott	Male	4.24	3.18	3.39
Selena	Female	3.56	2.94	2.98
Seth	Male	3.67	3.11	3.05
Shane	Male	3.32	3.00	2.93
Sharon	Female	6.15	2.95	3.22
Sheila	Female	5.62	2.76	3.03
Shelby	Female	4.07	2.91	3.12
Shelley	Female	4.52	2.92	3.06
Sherri	Female	5.52	2.89	3.24
Shirley	Female	6.33	3.12	3.08
Sierra	Female	3.11	2.87	2.78
Sonia	Female	4.80	2.96	3.26
Sophia	Female	2.78	3.59	3.52
Spencer	Male	3.00	3.18	2.99
Stacey	Female	4.32	2.97	2.96
Stanley	Male	5.21	3.10	3.30
Stephanie	Female	3.54	3.07	3.25
Stephen	Male	3.83	3.39	3.43
Stuart	Male	5.30	2.96	3.52
Susan	Female	5.94	3.17	3.54
Suzanne	Female	5.45	2.86	3.39
Sylvia	Female	5.05	2.93	3.35
Tamara	Female	4.01	2.82	2.90
Tammy	Female	5.38	2.86	2.80
Tanner	Male	2.90	3.03	2.76
Taylor	Female	3.22	3.17	3.10
Ted	Male	4.90	2.99	3.00
Terrence	Male	4.57	2.92	2.96
Terry	Female	5.69	2.68	3.13
Thomas	Male	4.10	3.47	3.44
Tiffany	Female	3.58	2.89	2.94
Timothy	Male	3.27	3.25	3.24
Todd	Male	4.42	3.08	3.01
Tony	Male	4.29	3.08	2.76
Tracy	Female	4.82	2.83	3.11
Tracy	Male	4.83	2.87	2.78
Trenton	Male	3.34	2.92	2.75
Trevor	Male	3.13	3.07	3.00

(continued)

Table 1. (continued)

Name	Gender	Age group	Warmth	Competence
Tristan	Male	2.66	3.08	2.79
Tyler	Male	2.73	3.32	2.95
Valerie	Female	4.13	2.97	3.24
Vernon	Male	5.72	2.48	3.11
Veronica	Female	4.20	2.67	3.03
Vicki	Female	4.44	2.62	2.90
Victor	Male	4.71	2.76	3.16
Victoria	Female	3.60	3.11	3.51
Vincent	Male	4.61	3.09	3.43
Virginia	Female	6.08	2.78	3.26
Walter	Male	6.13	3.17	3.60
Wanda	Female	6.47	2.71	3.09
Wayne	Male	5.28	2.88	3.08
Wendy	Female	4.91	2.94	3.07
Wesley	Male	4.17	3.12	3.24
Whitney	Female	4.74	2.67	2.85
William	Male	4.64	3.48	3.66
Zachary	Male	2.66	3.27	3.16

Note. Age group was rated on a 9-point scale, where 1 = <12, 2 = 12-17, 3 = 18-24, 4 = 25-34, 5 = 35-44, 6 = 45-54, 7 = 55-64, 8 = 65-74, and 9 = >75. Warmth and competence ranged from 1 (not at all) to 5 (extremely).

sites (the Northeast, Midwest, South, and West coast) was assessed taking a different analytical approach. Within each of the four sets of names, pairwise correlations were computed for each of the three different ratings (with individual names as the unit of analysis). For age ratings, these correlations between sites ranged from  $r = .80$  to  $r = .92$ , with a mean of .88 (calculated after Fisher's  $r$  to  $z$  transformations, and converted back to  $r$ ). For competence ratings, the range was  $r = .44$  to  $r = .75$ , with a mean of .58, while for warmth ratings, it was  $r = .40$  to  $r = .69$ , with a mean of .54.<sup>5</sup> Parallel analyses run separately for male and female names revealed correlations similar to those found for both genders combined.

In addition, to provide another estimate of reliability, split-half correlations were computed. Within each of the four sets of names, participants were randomly assigned to two groups, and means for the three ratings were calculated for each group. For the age ratings of the names, correlations ranged from  $r = .96$  to  $r = .98$ . For competence ratings, the range was  $r = .71$  to  $r = .86$ , while for warmth ratings, it was  $r = .73$  to  $r = .83$ .

Thus, the fact that consensus on warmth and competence was quite limited should not undermine the ratings' utility. The means presented in Table 1 can still serve as a guide to how different names will, on average, be perceived in terms of those attributes.

**Gender differences.** There was a slight tendency for the female names ( $M = 4.21$ ) to be rated younger than male names



**Table 2.** Names Eliciting Globally Positive, Globally Negative, and Ambivalent Reactions.

	High warmth		Low warmth	
High competence	<i>Ann</i>	Mark	Arnold	Lawrence
	<i>Anna</i>	Mary	Gerard	Norman
	<i>Caroline</i>	Matthew	Herbert	Reginald
	Daniel	Michael	Howard	Stuart
	David	Michelle		
	<i>Elizabeth</i>	Natalie		
	<i>Emily</i>	Nicholas		
	<i>Emma</i>	Noah		
	<i>Evelyn</i>	Olivia		
	<i>Felicia</i>	Paul		
	<i>Grace</i>	Rachel		
	James	Samantha		
	Jennifer	Sarah		
	John	Sophia		
	Jonathan	Stephen		
	<i>Julie</i>	Susan		
Low competence	<i>Kathleen</i>	Thomas		
	<i>Madeline</i>	William		
	<i>Hailey</i>	Kellie	Alvin	Leslie
	<i>Hannah</i>	Melody	Brent	Lonnie
	Jesse	Mia	Bryce	Malachi
			Cheyenne	Marcia Marco
			Colby	Mercedes
			Crystal	Omar
			Dana	Regina
			Darrell	Rex
			Devon	Roy
			Dominic	Tracy
			Dominique	Trenton
			Duane	Vicki
			Erin	Whitney
			Larry	

Note. Female names are italicized. "High" is operationalized as the upper quintile of the distribution, and "low" as the lower quintile.

( $M = 4.42$ ),  $\beta = -0.10$ ,  $SE = 0.05$ ,  $t(623) = -1.93$ ,  $p = .054$ . More pronounced was a gender difference in perceived warmth; the mean rating for male names was 3.00, but for female names, the corresponding figure was 3.12,  $\beta = 0.06$ ,  $SE = 0.01$ ,  $t(400) = 4.53$ ,  $p < .001$  (for a similar finding, see Eagly, Mladinic, & Otto, 1991). There were, however, no gender differences in ratings of perceived age ( $p = .014$ ) or competence ( $p = .016$ ) for the names.

**Interdimension correlations.** As already noted, the full list of names was divided into four sets, only one of which was presented to any given participant. For initial analyses assessing the relationships between age, warmth, and competence ratings, the Set variable was dummy-coded (Cohen, Cohen, West, & Aiken, 2003). In none of the hierarchical regressions run to examine the relationships between the rating dimensions (after centering the continuous variables) were there any interactions between predictor variables and the set of code variables. Thus, all names were combined into one list

for an analysis of the interdimension correlations, with names as the unit of analysis.

Consistent with the halo effect (Dion, Berscheid, & Walster, 1972; Kaplan, 1974; Thorndike, 1920), warmth and competence ratings were positively correlated,  $r = .42$ ,  $p < .001$  (see also Suitner & Maass, 2008; Wojciszke & Abele, 2008; cf. Imhoff & Koch, 2017; Judd et al., 2005). The correlations for male names only ( $r = .42$ ) and female names only ( $r = .47$ ) were consistent with that relationship. Given the positive correlation between the warmth and competence dimensions, a number of names were evaluated similarly on both of them. But as might be expected, given the modest size of that correlation, a number of names elicited relatively positive ratings on one dimension and negative ratings on the other. Thus, certain names, for different reasons, can trigger ambivalent reactions. The names associated with relatively extreme estimated mean ratings on both dimensions (identified by means of quintile splits of the distributions) can be found in Table 2. Consistent with cross-cultural gender stereotypes (Fiske, 2017), the "high-competence, low warmth" pattern is dominated by male names, while the "low-competence, high warmth" pattern is dominated by female names.<sup>6</sup>

Consistent with past research on ageism among college students (Nelson, 2005; North & Fiske, 2012), a markedly negative correlation between perceived age and warmth was found,  $r = -.50$ ,  $p < .001$ . The correlations for male names only ( $r = -.54$ ) and female names only ( $r = -.45$ ) were quite similar. Interestingly, perceived age and competence were *positively* correlated,  $r = .28$ ,  $p < .001$ , and a similar relationship was found when male ( $r = .30$ ) and female ( $r = .26$ ) names were analyzed separately. This finding is arguably consistent with others in the literature revealing ambivalent attitudes about aging; older people are often perceived as being relatively wise and honest, despite being negatively evaluated in a more general, global way (e.g., Chonody, 2016; Mueller-Johnson, Togli, Sweeney, & Ceci, 2007).<sup>7</sup>

## Study 2

The data collected in Study 1 could potentially be of interest in and of themselves, but for experimental psychologists, they will be of value primarily to the extent that they help them control for unwanted variance in their dependent variables. The goal of Study 2 was to provide a few straightforward examples of how the names selected by researchers for the targets of people's social judgments could meaningfully affect those judgments.

## Method

**Participants.** All hypotheses were tested with  $t$  tests (with one exception, independent-sample tests); assuming a  $d = .3$  effect size (between small and medium, but closer to small),

a sample size of 352 would be adequate for .80 power with a  $p < .05$  criterion for statistical significance. Three hundred seventy-one college students from Syracuse University participated in Study 2 in exchange for course credit.

**Materials.** An online image search yielded headshot photographs of two people (one man, one woman) whose ages were—in the opinion of the first two authors and their research assistants—ambiguous (both people could have been anywhere from their late 20s to early 50s). We selected two male names that were rated in Study 1 to be among those associated with the oldest people (“Earl” and “Herbert”) and two that were at the other end of the distribution and associated with younger people (“Dylan” and “Logan”).<sup>8</sup> The same procedure was followed for female names, resulting in the selection of two “old” names (“Maureen” and “Delores”) and two young ones (“Abby” and “Isabella”). The ratings for these eight names were, on average, 1.9 *SDs* above or below the grand mean for perceived age. The pictures were presented to participants along with a name prominently appearing at the bottom of the image. To simplify the design (and to reduce the possibility that a participant would become suspicious if presented with two names clearly associated with much older people), four versions of the age rating materials were prepared with these combinations of pictures and names (in all cases, one “young” and one “old”): Dylan/Maureen, Earl/Isabella, Herbert/Abby, and Logan/Delores. The instructions to participants were as follows: “Below are photographs of two people. Please guess how old (in years) each one is.” A space was provided for each guess.

The data collected in Study 1 were also used to select names that represented relatively extreme levels (both high and low) of competence and warmth. For the competence rating task, participants were presented with a vignette describing the behavior of a female protagonist that was written to be ambiguous with respect to the intelligence or competence it indicated (see the appendix). They were asked to provide intelligence and competence ratings for the protagonist (in that order), whose name varied. Two female names that were rated high on competence in Study 1—“Elizabeth” and “Olivia”—and two that were rated low—“Crystal” and “Mercedes”—were selected for the name manipulation (ratings for these four names were, on average, 2.0 *SDs* above or below the grand mean for perceived competence). Ratings were made on 5-point scales (1 = *not at all*, 2 = *slightly*, 3 = *somewhat*, 4 = *very*, and 5 = *extremely*).

For the warmth rating task, participants were presented with a vignette describing the behavior of a male protagonist that was ambiguous with respect to the warmth or hostility it indicated; it was a modified version of the well-known “Donald” paragraph developed by Srull and Wyer (1979) and used by subsequent researchers (see the appendix). They were asked to provide warmth and hostility ratings for the protagonist (in that order), whose name varied. Two male

names that were rated high in warmth in Study 1—“Charlie” and “Thomas”—and two that were rated low—“Dominic” and “Brett”—were selected for the name manipulation (ratings for these four names were, on average, 1.2 *SDs* above or below the grand mean for perceived warmth). Warmth and hostility ratings were again made on 5-point scales ranging from *not at all* to *extremely*.

**Procedure.** Participants received a booklet that included all three tasks. All participants completed the age rating task first; whether the booklet they received presented the competence or warmth rating task next was randomized. A given participant’s booklet included one of the following pairs of names for the competence and warmth rating tasks: Mercedes/Charlie, Crystal/Thomas, Elizabeth/Dominic, or Olivia/Brett. Thus, when a participant’s booklet included a name expected to elicit relatively high ratings of warmth, it also included a name expected to elicit relatively low ratings of competence. Similarly, “hostile” names were paired with “competent” names.

## Results

**Age judgments.** Given the study design, each participant was presented with one picture of a person with an “older” name, and one with a “younger” name. A paired-samples *t* test revealed that people labeled with names associated with older people were perceived to be significantly older (39.7 years) than people labeled with names associated with younger people (38.6 years),  $t(370) = 2.19$ ,  $p = .029$ , 95% confidence interval (CI) = [0.112, 2.109],  $d = 0.11$ .<sup>9</sup>

**Competence/intelligence judgments.** Intelligence and competence ratings were surprisingly uncorrelated,  $r = .09$ ,  $p = .10$ . There was also significantly more variance in competence ( $s^2 = 0.71$ ) than intelligence ( $s^2 = 0.49$ ) judgments,  $F(370, 370) = 1.45$ ,  $p < .001$ . Participants might have been uncertain how to define “competence.” Thus, perceived intelligence and perceived competence were analyzed as separate dependent variables.

When participants read vignettes about someone with a questionable level of intelligence, they were significantly more likely to see her as being intelligent when her name was one associated by Study 1 participants with intelligence ( $M = 3.49$ ) than when her name was one associated by Study 1 participants with low levels intelligence ( $M = 3.31$ ),  $t(369) = 2.45$ ,  $p = .013$ ,  $d = 0.26$ , 95% CI = [0.038, 0.322]. Although the difference was in the same direction, the comparison for competence judgments did not reveal a significant difference ( $M = 2.86$  vs.  $M = 2.79$ ,  $p = .39$ ).

**Warmth/hostility judgments.** Warmth and hostility ratings were negatively correlated, as expected ( $r = -.24$ ,  $p < .001$ ). Hostility ratings were reverse scored; the mean ratings for hostility and warmth were then averaged to yield an overall measure

of warmth. When participants read vignettes about someone whose behavior was ambiguous with respect to warmth/hostility, they saw him as being warmer when his name was one associated by Study 1 participants with warmth ( $M = 2.57$ ) than when his name was one associated by Study 1 participants with low levels of warmth ( $M = 2.48$ ). However, in this case, the difference did not reach conventional levels of statistical significance,  $t(369) = 1.35$ ,  $p = .18$ ,  $d = 0.14$ , 95% CI =  $[-0.045, 0.240]$ . Post hoc ratings of warmth and hostility judgments separately also did not yield significant differences ( $p = .16$  and  $p = .44$ , respectively).

## Discussion

The goal of Study 2 was to provide some preliminary validation of the data collected in Study 1 by demonstrating how the names selected by researchers for the targets of people's social judgments could be associated with variation in those judgments. The small sample of names used for the stimulus persons in Study 2 were selected simply because they were examples of names perceived to be associated with younger and older, warmer and less warm, and competent and less competent people.

The mean differences were in the predicted direction for all three judgment types (age, intelligence, and warmth) and were statistically significant in the case of the first two. The differences found were modest in magnitude, but there is no reason to assume that Study 2's findings are representative of the effect sizes that might be associated with name differences. Those effect sizes will undoubtedly vary as a function of a number of factors, including the complexity and ambiguity of the other social information presented to research participants. For example, past research indicates that when a great deal of additional information is presented along with names, names are more likely to have modest effects on judgments (O'Sullivan, Chen, Mohapatra, Sigelman, & Lewis, 1988; Young, Kennedy, Newhouse, Browne, & Thiessen, 1993).<sup>10</sup> This could have played a role in the non-significant effects for warmth judgments (over and above the fact that the warm/cold exemplars were not as extreme as were those for the other two dimensions); the vignette presented for that purpose was over 20% longer than the vignette presented for intelligence/competence judgments.

## General Discussion

Experimental design, at the most abstract level, is an exercise in variance control. Researchers seek to minimize unwanted variance between conditions of an experiment, and maximize the potential of their independent variables to account for variance in their dependent variables. If they are interested in the effects of categorizing people as males or females, they would like to avoid having the conclusions they reach clouded by the consequences of having named a particular target person "Deborah" and another "Duane." If they are interested in the effects on social judgment and impression formation of

manipulating the kind of behavioral information provided to participants, they would prefer that the sizes of their effects not be constrained as a result of having named a target person "Marcia" or "Grace." Kasof (1993), among others, has alerted experimenters to the consequences of arbitrarily naming one's stimulus persons. Thus, the goal of this investigation was to provide researchers an extensive and up to date database of personal names and their connotations.

The naming of stimulus persons could also have implications for the replicability of research findings. Van Bavel, Mende-Siedlecki, Brady, and Reinero (2016) found that the replicability of a study is dependent to an extent on the likelihood that the study as it was originally run was context-dependent—that is, whether the procedure and/or materials have the potential to be construed differently by different groups of participants as a function of time and place. One of the variables that might lead to changes in the construal of research materials could be the names of stimulus persons. For example, conducting an exact replication of Higgins, Rholes, and Jones's (1977) and Srull and Wyer's (1979) classic trait priming studies from the 1970s would require one to name the person engaging in the ambiguous behaviors presented to participants "Donald." However, a glance at the data presented in Study 1 suggests that doing so today could be a mistake; it could lead one to find a bias toward negativity in impression formation that overshadows the priming effect. The results of previous research could fail to replicate, for reasons having nothing to do with the validity and reliability of the effects in the original studies.

The data presented in this article were collected from participants in the United States. The names in Table 1 could of course have different connotations elsewhere, including in other English speaking countries. Another limitation of this research is that although a person's age, warmth, and competence are important pieces of information for social perceivers, other characteristics have an impact on the impressions formed of others, and names could signal people's standing on some of those characteristics too. For example, names can signal socioeconomic status (Gaddis, 2015; Joubert, 1994); indeed, it is likely that social class inferences played a significant role in the competence ratings made by our participants. Slepian and Galinsky (2016) found that how names are pronounced—more specifically, the vocal cord vibrations involved—has implications for perceptions of people's genders. Names requiring more vibration of the vocal chords to pronounce are associated with males, but those involving unvoiced phonemes (which require no vibration of the vocal chords) are more likely to be associated with females. Names surely signal other social characteristics as well.

Also unaddressed in this article is the possibility that the effects of having specific names could *interact* with other characteristics of the people with those names—for example, people's ethnic or racial identities. There is no reason to assume that the consequences of assigning a given name to a Black, White, Asian, Latino, or any other kind of target person will be identical.

Finally, the data presented here will ultimately meet the same fate as Kasof's; they will become outdated. However, for the foreseeable future, we hope they will be of value to experimenters seeking both to avoid confounds in their experiments and to maximize the control of unwanted variance in their outcome variables.

## Appendix

### Vignettes, Study 2 (With Representative Names)

*Ambiguously intelligent/competent.* Crystal was late to the office yesterday because she forgot to set her alarm the night before. But she got right to work, and was one of the first of her colleagues to figure out how to use the new software that had been installed on everyone's computers. Unfortunately, she had trouble teaching anyone else how to use the software—they kept getting confused by her explanations.

Crystal and one of her colleagues then ate lunch together. They had to take an extra long lunch break, because the first restaurant they went to was closed; Crystal actually knew that the place had gone out of business, but she had forgotten. Because of that, she had to stay at the office extra hours last night to get her work completed. She got it done, though, and was able to hand it in to her boss just a few minutes past the time it was due today. Later, Crystal left work 25 min early, because she had an appointment to meet up with an online date for the first time and did not want to get stuck in traffic.

*Ambiguously warm/hostile.* I ran into my old acquaintance Brett the other day, and I decided to go over and visit him, since by coincidence we took our vacations at the same time. Soon after I arrived, a salesman knocked at the door, but Brett didn't want to talk to him. He also told me that he was not going to pay his rent until the landlord does some repairs in his apartment. We talked for a while, had lunch, and then went out for a ride. We used my car, as Brett's car had broken down that morning, and he told the garage mechanic that he would have to go somewhere else if he couldn't fix his car that same day. We went to the park for about an hour and then stopped at a hardware store. I couldn't find what I was looking for, but Brett suggested we walk a few blocks to another store. The Red Cross had set up a stand by the door and asked us to donate blood. Brett hates giving blood, and he got out of it by claiming he had diabetes and therefore could not donate. By the time we got to the other store, it was closed. It was getting kind of late, so I took Brett to pick up his car and we agreed to meet again as soon as possible.

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

## Notes

1. See <https://www.ssa.gov/OACT/babynames/decades/names1950s.html>
2. Some of the names—for example, “Chris,” “Robin”—are clearly gender neutral, but the instructions ensured that participants knew whether any given name was being rated as a male or female name.
3. Our procedure for assembling a set of names led us to come up with very few that would be uncommon among European Americans. However, seventeen names on the final list—Aaliyah, Antonio, Cesar, Fernando, Jaden, Jaime, Jalen, Javier, Jermaine, Jesus, Jose, Latasha, Latoya, Miguel, Pedro, Sergio, and Yesenia—were strongly associated with Latin- or African American individuals. Researchers in the United States (for whom the norms presented in this article would be most relevant) would be unlikely to select such names for their vignettes unless they were explicitly attempting to manipulate perceived race or ethnicity. Participant judgments about these names also raise very important issues that the current study was not designed to address; no attempt was made to systematically select representative sets of names associated with specific ethnic or racial groups. Thus, these data are not presented in the tables or included in the analyses reported here (although they are available upon request). Note that if our procedure had led to the selection of names such as Mingxuan, Yitzhak, Lyudmila, or Ahmed, the same considerations would have arisen.
4. We are grateful for the extraordinarily generous technical assistance provided by Robert Wickham with the analyses reported in this section and their write-up.
5. All *r*s were associated with *p* values of less than .001.
6. Relaxing the criteria a bit (using tertiary splits) allows for the identification of Chase, Jesse, Justin, Logan, Riley, and Tyler as male names relatively low in perceived competence and high in perceived warmth, and Carol, Deborah, Donna, Margaret, Maureen, and Mildred as female names relatively high in perceived competence and low in perceived warmth. Note, however, that the male names tend to be “younger” and the female names “older.”
7. Follow-up analyses revealed no evidence for a curvilinear trend; thus, the linear effect does not obscure any tendency for competence ratings to drop off for names more likely to be associated with the oldest people.
8. For the ratings associated with these and all other names used in Study 2, see Table 1.
9. Inspection of the means for individual names revealed that within gender, the names associated with older people elicited mean age judgments that were higher than names associated with younger people with one exception: Earl was seen as being younger than Dylan and Logan.
10. But not always—cf. Kasof (1993). It is not clear, though, what variables moderate the extent to which the quantity and complexity of social information will dampen the effects of names.



## Supplemental Material

Supplementary material is available online with this article.

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