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# Testing the Generality of the Name Letter Effect: Name Initials and Everyday Attitudes

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*The name letter effect is the tendency to evaluate alphabetical letters in one's name, especially initials, particularly favorably. Recent evidence suggests that name initials may even predict career choices. The authors investigated whether people possess favorable attitudes toward basic attitude objects beginning with name initials, both between individuals (e.g., does Judy like jam more than does Doug?) and within individuals (e.g., does Judy like jam more than honey?). Ratings of animals, foods, leisure activities (Studies 1-4) and national groups (Studies 2-4) revealed no object preference as a function of matching name initials. However, the name letter effect emerged (Studies 3-4), as did a clear preference for brand names starting with one's name initials (Study 4). Self-esteem, narcissism, and stimuli characteristics did not reliably influence these effects. Implications for extending name letter effects to basic attitude processes are discussed.*

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Psychologists have long recognized that people generally evaluate themselves positively (e.g., Allport, 1961; James, 1890/1950). One manifestation of this self-enhancing bias is people's tendency to consider positively valenced attributes or traits more descriptive of themselves than of others (e.g., Alicke, 1985; Brown, 1986; Dunning, 1993; Greenwald, Bellezza, & Banaji, 1988; Hodson & Esses, 2002; Van Lange & Sedikides, 1998). Theorists have hypothesized that positive self-regard has beneficial consequences, such as improving people's ability to cope with stress and increasing their persistence in the face of challenges (see Taylor & Brown, 1988, 1994).

Self-enhancing judgments occur not only for internal qualities but also for external objects or stimuli that can be associated with, or seen as extensions of, the self (e.g.,

Smith, 1999). For instance, the mere ownership effect (Beggan, 1992) demonstrates that people value material possessions simply as a function of owning them, as a means of self-enhancement. Relatedly, the name letter effect (Nuttin, 1985) is the tendency to evaluate alphabetical letters in one's own name—especially first and last initials—particularly favorably (e.g., Kitayama & Karasawa, 1997; Koole, Dijksterhuis, & van Knippenberg, 2000). The name letter effect occurs primarily because people feel ownership over their name letters and extend their favorable evaluation of the self to the letters (see Hoorens & Nuttin, 1993), rather than being the result of the mere exposure effect (Zajonc, 1968), with increased exposure to name initials leading to increased liking (Jones, Pelham, Mirenberg, & Hetts, 2002).

In a fascinating extension of the name letter effect, Pelham, Mirenberg, and Jones (2002) found that initials had predictive value for individuals' career choices. These researchers obtained information identifying owners of hardware stores and roofing companies, noting that owners of hardware stores were more likely to have H as an initial than R, and owners of roofing companies were more likely to have R as an initial than H.

These findings raise the possibility that, more generally, people might evaluate objects that begin with name initials relatively favorably. If such matching can influence career choices, then less dramatic effects on everyday attitudes seem plausible. Objects that match initials might trigger a sense of ownership just like the initials themselves. Indeed, Pelham et al. (2002) explicitly

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noted that people “should be attracted to people, places, and things that remind them of themselves” (p. 485). If the name letter effect generalizes in this fashion, then a nonobvious, implicit source of everyday attitudes will be identified. On the other hand, if the name letter effect does not generalize, then boundary conditions for Pelham et al.’s (2002) findings will be clarified. To our knowledge, researchers have not previously tested whether the name letter effect generalizes to attitudes of the sort commonly studied by attitude researchers, such as activities, foods, and national groups.

Pelham et al. (2002) also provided data suggesting that people may base other major life decisions, in part, on resemblance to their names. For example, people named Louis are more likely to live in St. Louis than would be expected by chance. It should be noted that these effects involved stronger name connections than simple initials and, therefore, may not be directly relevant to the present research. Nevertheless, the dramatic nature of the findings underscores the potential importance of implicit connections to the self (see also Koole & Pelham, 2003).

We also should note, however, that the reliability of Pelham et al.’s (2002) findings of name similarity effects was questioned by Gallucci (2003), who conducted reanalyses of the original data and concluded that matching effects were not reliable across the full set of targets. Gallucci’s reanalysis suggested that very strong effects for only a few name initials resulted in overall effects that appeared stronger than justified given the entire set of name matches. Pelham, Carvallo, DeHart, and Jones (2003) responded to Gallucci’s criticisms with new analyses and data that addressed these concerns but also called for additional research using a wider range of techniques to explore implicit egotism (including the name letter effect). In this article, we expand the scope of these investigations by examining name-letter-based preferences toward basic attitude targets, between and within individuals.

Investigating the generality of the name letter effect seems clearly warranted. With this goal in mind, the present research was designed to test whether people whose initials match those of attitude objects possess more favorable attitudes toward the attitude objects than those who do not match (e.g., Dennis likes doughnuts more than does Linda, whereas Linda evaluates lions more positively than does Dennis). We also test if, within an individual, there are preferences for attitude objects starting with name initials over control objects that do not (e.g., Frank likes foxes more than horses; Hank likes horses more than foxes). Both questions are of theoretical and practical interest in the attitude domain, and a strong test of these implicit biases should test for differences

both between and within individuals. We tested the hypothesis about implicit name-based preferences with a wide variety of attitude targets, in four studies, using participants from two countries and three universities.

We also explored whether a generalized name letter effect might be moderated by trait self-esteem. People with high self-esteem generally exhibit more self-enhancement than do people with low self-esteem (see Blaine & Crocker, 1993). Jones et al. (2002) found that high-self-esteem participants exhibited stronger name-letter preferences under conditions of self-concept threat, although this pattern was reversed in a control condition. We included a measure of self-esteem in all of our studies. In addition, we investigated whether generalized name letter effects might be more pronounced among (or perhaps even limited to) those who are high in narcissism. The original demonstration of the name letter effect (Nuttin, 1985) included the term “narcissism” in the title of the article, and researchers since then have commented on the narcissistic aspect of the phenomenon. For example, Pelham et al. (2002) suggested that name similarity effects represent a “particular form of narcissism” (p. 484) whereby we find ourselves “attracted to that which reminds us of the one person most of us love most dearly” (p.485), ourselves. To our knowledge, trait narcissism has not been directly examined in past studies on the name letter effect, so we examined narcissism in each study.

## STUDY 1

In the first study, participants’ attitudes toward three groups of objects were assessed: animals, food types, and leisure activities. Measures of self-esteem and narcissism were obtained, following which participants identified the alphabetical letters composing their names. Based on past research on name-letter effects, we anticipated that participants would report more favorable attitudes toward objects beginning with their name initials and that this tendency would be strongest among participants high in self-esteem or narcissism.

### *Method*

*Participants.* Undergraduates enrolled in introductory psychology at the University of Western Ontario (Canada) participated as partial completion of course requirements. One participant was dropped from analyses for failing to answer numerous items, leaving a sample of 189 participants (45 men, 144 women).

*Materials and procedure.* Participants were told that we were interested in their attitudes toward a variety of objects. Participants then completed several pages of attitude items in private. They first reported their attitudes toward 23 animals using a 9-point rating scale (1 =

do not like at all to 9 = like very much). Each animal started with a different letter (e.g., beaver, rabbit, lion), with the presentation order on the page determined randomly. Participants next reported attitudes toward 23 food types (e.g., rice, lemons, garlic), followed by 21 leisure activities or sports (e.g., fishing, camping, soccer), using the same 9-point rating scale, with the order of the items on each page determined randomly. Participants then completed Rosenberg’s (1965) 10-item trait self-esteem scale ( $\alpha = .77$ ); a sample item reads, “On the whole, I am satisfied with myself,” rated along a 5-point scale (1 = disagree very much to 5 = agree very much). The 10-item Hypersensitive Narcissism Scale (Hendin & Cheek, 1997) was then administered after we had reversed the wording on five items to make it more balanced ( $\alpha = .49$ ). A sample item reads, “I easily become wrapped up in my own interests and forget the existence of others.” These items were rated along a 7-point scale (1 = very uncharacteristic or untrue to 7 = very characteristic or true). After completing all measures, respondents were asked to provide their first and last names and were debriefed and thanked for their participation.

*Results and Discussion*

Target evaluations varied widely: Mean ratings of the animals ranged from 3.13 to 8.04 on the 9-point scale (*SD* range = 1.45 to 2.74); foods ranged from 4.60 to 7.81 (*SD* range = 1.47 to 2.82); and leisure activities ranged from 2.72 to 8.60 (*SD* range = 0.84 to 2.70).

Testing the generality of name-letter preferences can be framed two ways. First, do individuals whose initials match the beginning letter of an attitude object prefer that object more than those individuals who do not match (e.g., Does Judy like jam more than does Doug)? This constitutes a between-subjects comparison. Second, within individuals, are attitude objects beginning with one’s name initials more preferred than objects not matching one’s name initials (e.g., Does Judy like jam more than honey)? This question constitutes a within-subjects comparison. We present both types of analysis to fully explore generalized name letter effects.

*Between-subjects comparisons.* For each attitude item, each participant was coded as a match (+1) or mismatch (0) depending on whether his or her first or last initial was matched or mismatched with the starting letter of the attitude object. We calculated point-biserial correlations between respondents’ attitude ratings (ranging from 1 to 9) and the match or mismatch status of the target (+1, 0), with more positive correlations reflecting support for the generalized name letter effect (i.e., more favorable ratings of attitude targets for those individuals with initials that also begin the attitude object than for those individuals who do not). Point-biserial correlations are conceptually and statistically identical to tests

**TABLE 1: Point-Biserial Correlations Between Attitude Ratings and Match Versus Mismatch of Attitude Target Initial and First or Last Name Initial (Study 1)**

Attitude Item Initial	Number of Matches	Animals	Food	Leisure
a.	31	.05	-.05	-.03
b.	18	-.01	-.13	.06
c.	33	.02	-.12	.04
d.	18	.07	.07	.09
e.	10	.05	-.19*	-.02
f.	4	-.15*	-.07	.03
g.	10	-.03	.09	-.09
h.	16	.05	.07	-.16*
i.	2	-.02	.04	-.12
j.	27	-.01	-.07	-.03
k.	23	.01	-.05	-.04
l.	26	-.02	.03	.19*
m.	38	.06	—	-.06
n.	12	-.06	.00	-.01
p.	13	.08	.07	-.05
q.	3	—	-.06	—
r.	9	-.04	-.03	-.10
s.	32	-.11	.10	-.01
t.	10	.05	.06	.06
v.	6	-.07	-.15*	-.04
w.	15	-.01	.03	.04
y.	3	-.01	.06	—
<i>M</i>		.00	-.01	-.01

NOTE: Canadian respondents. Positive correlations denote favorable attitudes for target words that match first or last name initials (i.e., support for a generalized name letter effect). Missing letters and/or correlations indicate either that there were fewer than two individuals whose initials matched the target letter or the absence of an item beginning with the target letter in the questionnaire. *N*s range from 187 to 189. \**p* < .05.

comparing the mean attitudes of individuals whose initials match the object versus individuals whose initials do not match.<sup>1</sup> Use of correlations allows a simple procedure that provides an effect size for each attitude item and a method of averaging effects into indices of overall effects.

Table 1 summarizes the principal analyses in Study 1; throughout the present article, missing letters and/or correlations indicate either that there were fewer than two individuals whose initials matched the target letter or the absence of an item beginning with the target letter in the questionnaire. Overall, evidence of a generalized name letter effect was not found. Only 5 of the 62 correlations were significant (one consistent with predictions and four inconsistent). Averaging across the attitude items, no significant effect was found in attitudes toward animals ( $\bar{r} = .00$ ), foods ( $\bar{r} = -.01$ ), or leisure activities ( $\bar{r} = -.01$ ), with an overall grand mean of  $r = -.01$ .

*Exploratory analyses: Possible predictors of effect sizes.* As noted by both Gallucci (2003) and Pelham et al. (2003),

**TABLE 2: Correlations Between Effect Sizes and Number of Matches, Item Frequency, Item Familiarity, Item Favorability, and Item Importance (Between-Subjects Analyses)**

<i>Effect Size</i>	<i>Number of Matches</i>		<i>Item Frequency</i>		<i>Item Familiarity</i>		<i>Item Favorability</i>		<i>Item Importance</i>	
Study 1										
Animals	.27	(21)	.34	(14)	.28	(16)	.43	(21)	—	
Food	-.02	(21)	.05	(13)	-.31	(13)	.00	(21)	—	
Leisure	.23	(20)	-.15	(10)	—		-.38	(20)	—	
Study 2										
National groups	-.27	(18)	-.12	(17)	—		.09	(18)	—	
Animals	.46*	(20)	.01	(14)	-.22	(17)	-.06	(20)	—	
Food	-.11	(19)	-.31	(13)	.09	(13)	.12	(19)	—	
Leisure	-.22	(20)	-.15	(11)	—		.04	(20)	—	
Study 3										
National groups	.52*	(20)	-.02	(19)	—		.07	(20)	.03	(20)
Animals	.04	(21)	.29	(15)	.66**	(17)	.00	(21)	.31	(21)
Food	.30	(19)	-.24	(13)	.22	(13)	-.14	(19)	-.15	(19)
Leisure	-.29	(19)	.00	(10)	—		-.29	(19)	-.27	(19)
Letters	.56**	(21)	-.27	(20)	—		.12	(21)	.15	(21)
Study 4										
National groups	.18	(19)	.42	(18)	—		-.31	(19)	—	
Animals	-.04	(21)	.23	(16)	.29	(18)	-.33	(21)	—	
Food	.04	(20)	.05	(14)	.03	(14)	-.43	(20)	—	
Leisure	.28	(20)	-.13	(11)	—		-.26	(20)	—	
Brand names	.37	(21)	—		—		.12	(21)	—	
Letters	.61**	(21)	.37	(20)	—		.26	(21)	—	

NOTE: Numbers in parentheses represent sample size. Only correlations based on samples greater than 10 are included.

\* $p < .05$ . \*\* $p < .01$ .

name similarity effects, to the extent that they are statistically reliable, should be stronger in larger samples. We examined the relation between the number of matches for a particular letter (i.e., the number of participants whose initials matched the first letter of a particular object; see Table 1) and the size of the point-biserial correlation for the same letter/object (representing the hypothesized generalized name letter effect; see Table 1). We reasoned that letters yielding more frequent matches might show stronger name letter effects. For these analyses, the sample size was the number of alphabetical letters in the attitude category that yielded at least two matches with respondents' initials. As can be seen in the top three values in Column 1 of Table 2, none of the attitude categories demonstrated a significant correlation between the number of name letter matches and the effect size.

Past research has demonstrated that mere exposure to letters does not explain preferences for letters in one's own name (e.g., Jones et al., 2002; Kityama & Karasawa, 1997). Nevertheless, frequency of exposure to, or subjective familiarity with, the attitude objects in the current study might have influenced participants' ratings, possibly interfering with the predicted name letter effects. Using the MRC Linguistic Database (Coltheart, 1981), we obtained two ratings of many of the stimuli we used: the frequency with which the target object is used in the English language and the mean perceived familiarity of

the target object. We examined whether these characteristics predicted the strength of the generalized name letter effect. For these analyses, the sample size was the number of objects for which we could obtain relevant data. The top three values in Columns 2 and 3 in Table 2 present these data for Study 1. As the table shows, neither target frequency nor target familiarity correlated significantly with the effect size for the objects, instead yielding both positive and negative nonsignificant correlations. These results suggest that exposure frequency and subjective familiarity did not moderate the anticipated generalized name letter effect.

It is possible that the baseline desirability of the attitude objects influenced the strength of the generalized name letter effect (see Pelham et al., 2002). Therefore, we calculated the correlation within each attitude category between the mean evaluation of the attitude objects and the point-biserial correlation for the same objects. As can be seen in the top three values in Column 4 of Table 2, the mean evaluations of the attitude objects did not correlate significantly with the effect sizes within any attitude category, although the correlation for animals approached statistical significance,  $r = .43$ ,  $p = .053$ . However, a negative correlation of approximately the same magnitude was found for leisure, and the overall mean correlation was close to zero. Thus, target desirability did not have a consistent or significant association with the magnitude of the generalized name letter effect.

**TABLE 3: Within-Subjects Comparisons Testing Mean Liking for Targets Matching Initials Versus Control Targets**

	M Match	M Control	Paired t Test	p Value
Study 1				
Animals	5.93	5.85	$t(188) = 0.66$	.513
Food	6.37	6.36	$t(183) = 0.07$	.944
Leisure	5.73	5.70	$t(188) = 0.27$	.785
Study 2				
National groups	5.83	5.72	$t(130) = 1.08$	.285
Animals	6.05	5.97	$t(131) = 0.65$	.519
Food	5.56	5.84	$t(127) = -1.69$	.093
Leisure	4.91	4.75	$t(131) = 1.01$	.316
Study 3				
National groups	6.46	6.42	$t(169) = 0.37$	.709
Animals	6.09	5.93	$t(174) = 1.31$	.192
Food	6.41	6.31	$t(169) = 0.75$	.455
Leisure	5.89	5.80	$t(175) = 0.58$	.563
Letters	7.64	5.63	$t(175) = 18.90$	<.001
Study 4				
National groups	6.31	6.16	$t(182) = 1.47$	.144
Animals	6.17	6.06	$t(185) = 1.05$	.295
Food	5.98	6.17	$t(176) = -1.43$	.154
Leisure	5.66	5.69	$t(184) = -0.19$	.853
Brand names	5.69	5.40	$t(185) = 2.74$	.007
Letters	7.50	5.57	$t(184) = 18.23$	<.001

*Within-subjects comparisons.* In these analyses, we compared, within each participant, the mean level of liking for an attitude object that started with his or her initials versus the mean level of liking for control attitudes (i.e., those that did not start with a name initial; see Jones et al., 2002). This kind of analysis has considerable power due to correlated within-subjects responses and, some might argue, captures the spirit of the name letter effect (i.e., increased liking for letters in one's name vs. letters not in one's name). Here, a "match" constituted a match between the first or last initial of a participant's name and the starting letter of the attitude object.

As evidenced in the top panel of Table 3, participants did not show increased liking for attitude objects, of any class, starting with their name initials. Because each participant provided ratings of the matched and control (i.e., mismatched) targets, resulting in an implicit measure of preference for each participant, tests of moderation by individual differences such as self-esteem could be conducted. After centering self-esteem (see Aiken & West, 1991), we conducted split-plot analyses of the Within-Subjects Preference (matched vs. control)  $\times$  Self-Esteem interaction for each attitude category, revealing no two-way interactions for animals, food, or leisure activities ( $ps > .564$ ). Similar moderation analyses testing centered narcissism also revealed no two-way interactions for these attitude objects ( $ps > .225$ ). Neither self-esteem nor narcissism, therefore, moderated the (null) effects.

## STUDY 2

Given the absence of a generalized name letter effect in Study 1 with either between- or within-subjects analyses, even after considering individual differences in self-esteem or narcissism, we decided to test the hypothesis again using a sample from a different country. We also added a fourth category of objects, national groups (e.g., Italians, Americans), to examine whether a generalized name letter effect might emerge for more socially engaging attitudes than those tested in the first study.

### Method

*Participants.* First-year undergraduate psychology students at the University of Wales Swansea (United Kingdom) volunteered to participate during an introductory psychology lecture. Six participants were dropped from the analyses for not providing name letters, leaving a sample of 132 participants (19 men, 113 women).

*Materials and procedure.* Students first rated 22 randomly ordered national groups (e.g., Italians, Americans, English) along 9-point rating scales (1 = *do not like at all* to 9 = *like very much*); each attitude target began with a different letter. The remainder of the questionnaire was identical to Study 1 except that "zucchini" was not included because the word is not common in the United Kingdom. Participants also completed the same measures of self-esteem and narcissism as in Study 1. At the end, participants provided the initials of their first and last names and afterward circled all letters in their first or

**TABLE 4: Point-Biserial Correlations Between Attitude Ratings and Match Versus Mismatch of Attitude Target Initial and First or Last Name Initial (Study 2)**

Attitude Item Initial	Number of Matches	National Groups	Animals	Food	Leisure
a.	22	-.05	.09	.02	.04
b.	11	.05	-.07	-.10	.01
c.	18	.02	.00	.08	-.11
d.	7	—	-.11	-.01	.06
e.	14	.02	.09	-.07	.03
f.	3	-.19*	-.17*	-.13	-.06
g.	14	.07	.10	.12	.16
h.	12	.09	.08	-.11	.16
i.	2	.06	-.11	-.20*	.13
j.	20	.04	.03	-.03	.01
k.	14	.00	.11	.20*	.08
l.	17	-.14	-.05	-.03	-.03
m.	12	.08	.03	—	.07
n.	2	-.08	.02	.03	.02
o.	2	—	-.03	.06	.13
p.	6	.14	.12	.02	-.09
r.	24	-.04	.13	-.04	-.07
s.	37	-.17	.05	-.18*	-.01
t.	11	-.12	-.13	.14	.01
w.	10	-.01	-.09	.04	-.12
<i>M</i>		-.01	.00	-.01	.02

NOTE: U.K. respondents. Positive correlations denote favorable attitudes for target words that match first or last name initials (i.e., support for a generalized name letter effect). Missing letters and/or correlations indicate either that there were fewer than two individuals whose initials matched the target letter or the absence of an item beginning with the target letter in the questionnaire. *N*s range from 129 to 132.

\* $p < .05$ .

last names (including their initials). Participants were then debriefed and thanked.

### Results and Discussion

Again, evaluations of the targets varied widely: mean ratings of the national groups ranged from 4.91 to 7.44 (*SD* range = 1.12 to 1.84); animals ranged from 3.86 to 7.31 (*SD* range = 1.37 to 2.66); foods ranged from 3.83 to 8.08 (*SD* range = 1.63 to 2.79); and leisure activities ranged from 1.98 to 8.17 (*SD* range = 1.06 to 2.81).

*Between-subjects comparisons.* Table 4 summarizes the principal results. Consistent with Study 1, no evidence of a generalized name letter effect was found in attitudes toward any of the target categories. Only 5 of the 77 correlations were significant (one consistent with predictions and four inconsistent). Averaging across the items, participants with name initials that matched those of the attitude targets exhibited no stronger preference for these targets than individuals with no matches: national groups ( $\bar{r} = -.01$ ), animals ( $\bar{r} = .00$ ), foods ( $\bar{r} = -.01$ ), or leisure activities ( $\bar{r} = .02$ ), with a grand mean across targets of  $r = .00$ .

*Exploratory analyses: Possible predictors of effect sizes.* As in Study 1, we conducted analyses to determine whether the size of the generalized name letter effect for an

object was influenced by features of the stimuli, such as the number of name-target matches (see the second portion of Table 2). Only 1 of 14 correlations was significant: the number of name-target matches was related to the magnitude of the effect size within attitudes toward animals,  $r = .46$ ,  $p < .05$ . However, this same relation was negative within each of the other three classes of attitude objects, yielding a mean correlation of  $r = -.04$  across the four categories. Frequency, familiarity, and favorability ratings were not significantly related to effect size within any of the attitude object categories.

*Within-subjects comparisons.* As in Study 1, we examined whether participants preferred attitude objects starting with their initials compared to control objects not starting with their name initials. As presented in the second panel of Table 3, participants showed no name letter preferences for national groups, animals, foods, or leisure activities. Tests of Within-Subjects Preferences (matched vs. control)  $\times$  Centered Self-Esteem ( $\alpha = .91$ ) revealed no interaction for national groups ( $p = .896$ ), animals ( $p = .231$ ), or leisure ( $ps = .615$ ) but found a two-way interaction for food,  $F(1, 126) = 5.23$ ,  $p = .024$ . This interaction was not overly informative because tests within each type of preference revealed nonsignificant correlations between self-esteem and evaluations for

matched targets,  $r = -.14$ , and mismatched targets,  $r = .09$ , respectively. Similar interaction tests for narcissism ( $\alpha = .61$ ) revealed no significant interactions for national groups ( $p = .231$ ), animals ( $p = .069$ ), food ( $p = .138$ ), or leisure ( $p = .744$ ). Overall, neither self-esteem nor narcissism moderated these (null) effects.

### STUDY 3

The findings in the first two studies provided little evidence that people are favorably disposed toward attitude objects that begin with one of their initials, regardless of individual differences in self-esteem or narcissism. One possible criticism of these studies is that they lacked sufficient statistical power to detect effects based on letter preferences. This criticism would have been muted if we had also measured participants' attitudes toward the letters of the alphabet and replicated the original name letter effect; we did not do so because we did not want to draw participants' attention to the alphabetical aspects of the research. Nevertheless, it seemed important to conduct a third study that included such a demonstration.

We also reasoned that the emergence of a generalized name letter effect might depend on the perceived importance of the attitude objects. If attitude objects can serve self-enhancement needs to the extent that they share letters in one's name, the effects might emerge only for attitude objects of some importance. To test this hypothesis, we asked participants in the third study to rate the importance of each attitude item in addition to their evaluations. Due to the relatively low internal consistency on the Hypersensitive Narcissism measure in the first two studies, and our concern that some of the items in this scale may not tap the aspect of narcissism most relevant to a generalized name letter effect (e.g., "I feel that I am temperamentally different from most people"), we also included a second, widely used, narcissism scale.

### Method

**Participants.** Introductory psychology undergraduates at the University of Western Ontario participated as partial completion of course requirements. The sample was composed of 177 participants (33 men, 144 women).

**Materials and procedure.** Participants first rated their liking of each letter of the alphabet along 9-point rating scales (1 = *do not like at all* to 9 = *like very much*). Next, participants evaluated national groups, animals, food, and leisure activities using the materials from the earlier studies. After providing an attitude rating for a target, participants rated the extent to which the object was "important to you" along 9-point scales (1 = *not at all important to you* to 9 = *very important to you*). Participants then completed the same self-esteem ( $\alpha = .87$ ) and narcissism ( $\alpha = .58$ ) scales as in the previous studies. In

addition, they completed the 40-item Narcissistic Personality Inventory (Raskin & Terry, 1988), which utilizes 7-point response scales ( $-3 =$  *strongly disagree* to  $+3 =$  *strongly agree*). Sample items are "I like to be the center of attention" and "If I ruled the world it would be a much better place" ( $\alpha = .84$ ). At the end of the booklet, participants provided the initials of their first and last names and then circled all letters in their first and last names. Participants were probed for suspicion, fully debriefed, and thanked for participation. Three participants expressed that there might be a connection between their attitudes toward alphabetical letters and their attitudes toward other attitude objects, but none of these participants drew a further connection to the letters in their own names so they were included in analyses; results were similar whether these participants were included or excluded.

### Results and Discussion

Again, evaluations of the targets varied widely: mean ratings of the letters of the alphabet ranged from 4.05 to 7.46 ( $SD$  range = 1.59 to 2.54); national groups ranged from 5.79 to 8.44 ( $SD$  range = 1.14 to 2.18); animals ranged from 3.23 to 7.77 ( $SD$  range = 1.49 to 2.39); foods ranged from 4.65 to 8.00 ( $SD$  range = 1.47 to 2.59); and leisure activities ranged from 2.75 to 8.56 ( $SD$  range = 1.05 to 2.75). Ratings of importance also varied widely: mean ratings of letters of the alphabet ranged from 3.63 to 7.57 ( $SD$  range = 1.87 to 2.67); national groups ranged from 3.89 to 8.49 ( $SD$  range = 1.31 to 2.48); animals ranged from 2.88 to 7.41 ( $SD$  range = 2.00 to 2.85); foods ranged from 3.97 to 6.86 ( $SD$  range = 2.05 to 2.82); and leisure activities ranged from 2.13 to 8.04 ( $SD$  range = 1.34 to 2.83).

**Between-subjects comparisons.** The principal findings of the between-subjects analyses in Study 3 are presented in Table 5. Consistent with Studies 1 and 2, no evidence of a generalized name letter effect was found in attitudes toward any of the four attitude target categories (national groups, animals, food, or leisure). Indeed, only 1 of the 79 correlations was significant. Averaging across the items, participants who matched (vs. mismatched) name initials and attitude targets exhibited no preference for attitude targets starting with letters that matched their initials: national groups ( $\bar{r} = -.03$ ), animals ( $\bar{r} = .02$ ), foods ( $\bar{r} = .02$ ), or leisure activities ( $\bar{r} = .01$ ), with a grand mean across targets of  $r = .01$ .

In sharp contrast, however, strong evidence of the basic name letter effect was found, as illustrated in the most right-hand column of Table 5. Specifically, participants with initials that matched target letters showed significantly greater liking for these letters than individuals who did not match on 16 of 21 possible letters (76.2%),

**TABLE 5: Point-Biserial Correlations Between Attitude Ratings and Match Versus Mismatch of Attitude Target Initial and First or Last Name Initial (Study 3)**

<i>Attitude Item Initial</i>	<i>Number of Matches</i>	<i>National Groups</i>	<i>Animals</i>	<i>Food</i>	<i>Leisure</i>	<i>Letter</i>
a.	30	-.01	.00	.16*	.00	.14
b.	12	-.08	.07	-.04	-.02	.24**
c.	27	-.02	.06	-.01	-.01	.32***
d.	18	—	.08	.03	.02	.29***
e.	11	-.06	.11	.11	.02	.17*
f.	4	-.07	.06	.02	.02	.09
g.	8	-.14	.00	.05	.13	.23**
h.	19	-.06	.05	.09	.04	.23**
j.	23	.09	-.03	-.05	.01	.37***
k.	21	.01	-.11	.13	.00	.36***
l.	25	.02	-.06	.06	.06	.24**
m.	36	-.06	.05	—	-.05	.35***
n.	10	-.03	-.07	-.04	.04	.17*
p.	7	-.09	.01	-.04	-.04	.27***
r.	21	-.05	.04	-.11	-.01	.30***
s.	34	.09	.05	.04	-.02	.28***
t.	7	-.07	.09	.08	.00	.13
v.	5	-.03	-.02	-.09	-.01	.28***
w.	14	-.02	-.01	.04	-.01	.33***
y.	5	.01	.07	—	—	.07
z.	3	-.07	-.11	-.03	—	.12
<i>M</i>		-.03	.02	.02	.01	.24**

NOTE: Canadian respondents. Positive correlations denote favorable attitudes for target words that match first or last name initials (i.e., support for a generalized name letter effect). Missing letters and/or correlations indicate either that there were fewer than two individuals whose initials matched the target letter or the absence of an item beginning with the target letter in the questionnaire. *N*s range from 176 to 177.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

demonstrating a modest but reliable overall preference for one's initials ( $\bar{r} = .24, p = .001$ ).

*Exploratory analyses: Possible predictors of effect sizes.* The third panel of Table 2 presents the correlations between the effect sizes for particular attitude objects and a number of stimulus features. Only 3 of the 22 correlations were significant. The number of name-target matches correlated positively with the magnitude of the effect sizes within attitudes toward national groups,  $r = .52, p < .05$ , and also within attitudes toward alphabetical letters,  $r = .56, p < .01$ . The mean familiarity of the objects correlated positively with the magnitude of the effect sizes within attitudes toward animals,  $r = .66, p < .01$ . The ratings of target importance, collected for the first time in this study, did not predict effect sizes for any of the attitude object categories. In general, then, no consistent effects emerged for these stimulus features, with the possible exception of number of matches.<sup>2</sup>

*Within-subjects comparisons.* As in Studies 1 and 2, within-subjects contrasts in Study 3 revealed no significant name letter preferences for national groups, animals, food, or leisure (see the third panel of Table 3). However, a strong effect for letters was found, with

participants showing a preference for their name initials compared to control letters ( $p < .001$ ), as found in past research.<sup>3</sup>

Tests of the Within-Subjects Preference (matched vs. control)  $\times$  Centered Self-Esteem interaction pattern revealed no significant interactions for four of the five categories (animals, food, leisure activities, or name letters;  $ps > .266$ ) but found an interaction for national groups,  $F(1, 168) = 4.03, p = .046$ . Further tests revealed a significant correlation between self-esteem and matching on national groups,  $r = .19, p = .013$ , but no significant correlation for control national group targets,  $r = .08, p = .274$ . Tests of the interaction pattern with the Hypersensitive Narcissism Scale as a moderator revealed no evidence of moderation for any of the possible targets ( $ps > .163$ ). Tests with the NPI as a centered variable revealed no significant interactions for animals, food, leisure activities, or name letters ( $ps > .679$ ) but an interaction for national groups,  $F(1, 168) = 4.00, p = .047$ . This interaction was not very informative; for matched targets, the correlation between narcissism and national group liking was nonsignificant,  $r = .12$ , as for control targets,  $r = .01$ . Thus, of the 15 two-way interactions tested, 13 were nonsignificant.



## STUDY 4

In the first three studies, no clear evidence of name letter preferences for basic attitude objects emerged. Although participants in Study 3 clearly preferred their name initials more than did individuals without those name initials, and more than other letters, this preference was not shown to extend to basic attitude objects. Several aspects of the present research differ, however, from the past literature on name letter effects.<sup>4</sup> For instance, most prior examinations of these implicit egoism biases have focused on proper names (e.g., Jones, Pelham, Carvallo, & Mirenberg, 2004; Pelham et al., 2002). Although two of our studies employed national groups as targets, which are proper names, individuals generally do not make volitional decisions about their ethnicity or nationality. Brand names (e.g., Honda, Nike), on the other hand, refer to objects that are chosen so they might benefit from the enhancement effect of implicit associations with name initials. Past research also suggests that implicit biases may particularly affect high self-esteem individuals under ego threat conditions (see Jones et al., 2002, 2004). In light of these considerations, we tested generalized name letter preferences one more time in Study 4; we included well-known brand names as a target category and introduced an ego-threat manipulation.

### Method

**Participants.** Psychology undergraduates enrolled at Brock University (Canada) participated as partial completion of course requirements. Six participants accurately reported the specific hypothesis being tested when probed and were dropped from the analyses, leaving 188 participants (33 men, 155 women).

**Materials and procedure.** We adapted the ego-threat manipulation employed by Jones et al. (2002); participants were randomly assigned to write one page about either an aspect of the self that they wished they could change but have had little success changing or the last movie they watched. All participants were given 4 min for this first task. Six items from the state self-esteem scale (Heatherton & Polivy, 1991) were completed immediately after the 4-min task and served as a manipulation check ( $\alpha = .77$ ). A sample item reads, "I feel confident about my abilities," with possible responses ranging from 1 (*not at all*) to 5 (*extremely*). Participants then evaluated each letter of the alphabet (see Study 3). Participants next provided liking ratings for 26 brand names, each starting with a different letter of the alphabet (e.g., Honda, Nike, Timex), along the same 9-point rating scale used for all attitude assessments. Participants then evaluated national groups, animals, food, and leisure activities. Afterward, respondents completed the

Rosenberg Self-Esteem Scale ( $\alpha = .90$ ) and a shortened 20-item version of the NPI (based on the top 20 item-total correlations from Study 3;  $\alpha = .89$ ). Finally, at the end of the booklet, participants provided their first and last name initials and indicated any alphabet letters in their names. After probing for suspicion about the study's hypotheses, all participants were debriefed and thanked.

### Results and Discussion

Evaluations of the targets varied widely: mean ratings of the letters of the alphabet ranged from 4.38 to 6.84 ( $SD$  range = 1.77 to 2.38); brand names ranged from 3.30 to 6.85 ( $SD$  range = 1.92 to 2.73); national groups ranged from 5.18 to 8.30 ( $SD$  range = 1.21 to 2.44); animals ranged from 3.53 to 7.98 ( $SD$  range = 1.55 to 2.87); foods ranged from 4.88 to 7.60 ( $SD$  range = 1.79 to 2.96); and leisure activities ranged from 3.39 to 8.38 ( $SD$  range = 1.21 to 2.69).

Although we gave participants 4 min to write full-page responses in the ego-threat manipulation, the manipulation check revealed no significant differences in state self-esteem between the ego-threat ( $M = 3.02$ ) and control ( $M = 3.13$ ) conditions,  $t(184) = 1.10$ ,  $p = .272$ . Consequently, the ego-threat factor was not included as a factor in the analyses.<sup>5</sup>

**Between-subjects comparisons.** Table 6 presents the between-subjects comparisons of attitudes. Consistent with Studies 1 to 3, no evidence of a generalized name letter effect was found in attitudes toward any of the attitude target categories (brand names, national groups, animals, food, or leisure), with only 4 positive and 2 negative significant correlations out of 101 correlations. Averaging across the items, participants who matched (vs. those who did not) exhibited no greater preference for attitude targets starting with letters that matched their initials: brand names ( $\bar{r} = .00$ ), national groups ( $\bar{r} = .01$ ), animals ( $\bar{r} = .00$ ), foods ( $\bar{r} = .00$ ), or leisure activities ( $\bar{r} = -.01$ ), with a grand mean across targets of  $r = .00$ . As in Study 3, the name letter effect emerged (see right-hand column of Table 6), revealing significantly greater liking of letters by those with these letters as initials ( $\bar{r} = .24$ ,  $p = .001$ ).

**Exploratory analyses: Possible predictors of effect sizes.** The bottom portion of Table 2 presents the correlations between the effect sizes for particular attitude objects and a variety of stimulus factors. As in earlier studies, these analyses did not reveal consistent effects, with only 1 significant correlation out of 19, which was between sample sizes and effect sizes for the basic name letter effect.

**Within-subjects comparisons.** As revealed in the lower panel of Table 3, participants showed no greater liking for those attitude categories tested in Study 3 (national

**TABLE 6: Point-Biserial Correlations Between Attitude Ratings and Match Versus Mismatch of Attitude Target Initial and First or Last Name Initial (Study 4)**

<i>Attitude Item Initial</i>	<i>Number of Matches</i>	<i>Brand Names</i>	<i>National Groups</i>	<i>Animals</i>	<i>Food</i>	<i>Leisure</i>	<i>Letter</i>
a.	30	.04	.21*	.04	.17*	.08	.41***
b.	18	.00	-.07	-.04	-.06	-.06	.21**
c.	25	-.05	-.02	-.05	-.04	-.14	.34***
d.	26	-.08	—	.09	-.03	.01	.28***
e.	8	-.14	-.13	.00	.03	-.04	.21**
f.	4	.10	.13	.05	-.01	.05	.12
g.	10	-.07	-.11	-.24**	-.16*	-.02	.34***
h.	14	.06	-.03	.03	.11	-.07	.18*
j.	28	.11	.10	-.09	-.08	.00	.40***
k.	23	.01	-.12	-.04	-.11	.04	.32***
l.	25	.04	.03	-.05	.01	-.01	.41***
m.	43	.16*	.01	-.04	—	.08	.28***
n.	10	-.12	.15*	.05	-.03	.08	.12
o.	5	.03	—	-.05	-.02	-.09	.06
p.	15	-.10	-.06	-.12	.03	-.06	.29***
r.	15	.03	-.04	.05	-.08	-.05	.26***
s.	29	-.04	.03	.09	.05	.02	.14
t.	13	.02	.01	.13	-.03	-.07	.15*
v.	5	-.06	-.04	.10	.01	-.01	.23**
w.	13	.08	.08	.02	.11	.08	.24**
z.	2	-.02	.00	-.02	.06	—	.08
<i>M</i>		.00	.01	.00	.00	-.01	.24**

NOTE: Canadian respondents. Positive correlations denote favorable attitudes for target words that match first or last name initials (i.e., support for a generalized name letter effect). Missing letters and/or correlations indicate either that there were fewer than two individuals whose initials matched the target letter or the absence of an item beginning with the target letter in the questionnaire. *N*s range from 182 to 186.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

groups, animals, foods, or leisure activities) starting with their name initials than those attitude objects that did not. As in Study 3, participants demonstrated an increased liking for their initials over control letters ( $p < .001$ ).<sup>6</sup>

Most importantly, however, participants exhibited a small but highly reliable preference for brand names (e.g., Nike, Honda) that started with their name initials than (control) brand names not starting with their initials ( $p = .007$ ). Thus, within individuals, brand name preferences may be influenced, to some extent, by matches between name initials and first letters of brand name products (see Table 3).

Tests of the Within-Subjects Preference (matched vs. control)  $\times$  Centered Self-Esteem interaction revealed no significant effects for national groups, animals, food, leisure activities, brand names, or letters ( $ps > .26$ ). Interaction tests with centered NPI scores as moderators also revealed no interactions in any of the attitude categories ( $ps > .10$ ).

#### GENERAL DISCUSSION

The goal of the present set of studies was to explore the boundary conditions for a generalized name letter effect in attitudes toward everyday objects. Are objects

that begin with one's name initials evaluated particularly favorably? Across a wide range of basic, everyday attitude topics (animals, foods, leisure activities, and national groups), no evidence of a generalized name letter effect emerged in four studies, either between or within individuals. On the other hand, Studies 3 and 4 replicated the basic name letter effect, with respondents exhibiting preferences for their name initial letters, both between and within individuals, suggesting that our procedures were powerful enough to detect preferences based on name letter similarity. Moreover, a significant generalized name letter effect was demonstrated for brand names in Study 4, with participants showing a preference for brand name products starting with their name initials as opposed to brands that did not. This effect was relatively small, as one would expect for an implicit source of attitudes, but highly reliable ( $p < .01$ ).

Why did name letter preferences generalize to brand names but not other attitude categories? One possibility is that brand names are more likely than the other categories in our studies to serve a value-expressive function. Value-expressive attitudes are formed to communicate one's values, beliefs, or identity (Katz, 1960). Past research has found that value-expressive attitudes tend

to be resistant to attack (e.g., Johnson & Eagly, 1989) and to be connected to individuals' personal goals (e.g., Maio & Olson, 2000). Brand names often carry with them images or impressions that relate to particular social values and social groups. For instance, brand names for clothes seem to be important to many people. Given that individuals can choose to buy, own, or display particular brand names, objects' brand names often may be used to communicate one's identity to others. The identity relevance of brand names may strengthen the impact of other features that draw implicit connections to the self, such as similarity between brand names' initials and individuals' initials.

Aside from the special case of brand names, however, we found no evidence for name letter preferences generalizing to basic attitude objects. In all four studies, our attitude measures yielded a considerable range of means and standard deviations, a prerequisite for demonstrating personal variation in name letter associations on any basis. In addition, the favorability of attitude objects did not predict effect sizes for the objects (see Table 2). We also tested whether effect sizes for a generalized name letter effect in each study were related to the frequency with which the attitude objects appear in the English language, ratings of the subjective familiarity of the objects, and ratings of the importance of the objects (see Table 2). None of these factors consistently predicted the strength of participants' name preferences in attitudes, so these characteristics cannot easily explain our null findings for most attitude categories.

Despite the implied narcissistic nature of these processes, past researchers have not included trait measures of narcissism in this domain. We included measures of both narcissism and self-esteem in all studies, reasoning that these individual differences could plausibly influence the strength of a generalized name letter effect. However, neither construct was consistently associated with liking or disliking attitude objects beginning with one's name initials. Furthermore, neither construct was associated in Studies 3 or 4 with stronger manifestations of the basic name letter effect, which was highly reliable across all participants. Other researchers have noted that explicit self-esteem may be only weakly related to implicit manifestations of self-regard (e.g., Bosson, Swann, & Pennebaker, 2000; Koole & Pelham, 2003); narcissism appears also to be largely unrelated to implicit egotism effects. Our findings add to those of Koole et al. (2000), who found that individual differences in need for cognition and faith in intuition did not affect name letter preferences.

It is important to establish the boundary conditions for psychological phenomena, particularly when the phenomena are provocative and surprising, such as Pelham et al.'s (2002) extension of the name letter effect to

choices of careers by owners of hardware stores and roofing companies. Sometimes this search for boundary conditions translates into demonstrations of null effects, such as Gallucci's (2003) critique of previous findings of name similarity effects. Debates stimulated by these searches (e.g., Pelham et al.'s, 2003, response to Gallucci) clarify the limits of particular data sets and the nature of underlying psychological processes. Our data identify some limits of the name letter effect—in particular, it does not appear to generalize to everyday attitudes (e.g., animals, food, leisure activities, national groups) but it does generalize to evaluations of brand names. These name letter findings are of interest not only in terms of basic attitude processes but they also speak to group phenomena such as ingroup favoritism, where favorable evaluations of the self (and one's group as an extension of the self) play a key role in prejudice and discrimination (see Plous, 2003).

#### *Possible Concerns and Issues*

Could the argument be made that our studies lacked statistical power to detect real effects on the ratings of most attitude objects? We believe that power was not a critical issue in our research for several reasons. First, our sample sizes were actually quite large ( $N$ s = 189, 132, 177, and 188), certainly comparable to samples typically considered reasonable for detecting basic attitude effects in psychological research. Second, for most letter-attitude object pairings in the between-subjects analyses, there were relatively large numbers of people whose initials matched the first letter of the attitude target (see Tables 1, 4-6).<sup>7</sup> Moreover, the number of matches between name and target was a significant predictor of effect sizes in only 2 of 16 instances (excluding the name letter effect itself), with correlations generally oscillating between positive and negative (see Table 2). Third, given the large sample sizes, even small correlations (e.g., as small as .15 in Study 1) were statistically significant at the .05 level, yet few correlations reached this minimal criterion. Fourth, across studies, the majority of significant between-subjects correlations for attitude objects were actually negative (10 of 17, excluding attitudes toward alphabetical letters in Studies 3-4), contrary to predictions of a generalized name effect. Fifth, if statistical significance is ignored, across studies, the same numbers of correlations were negative (49%) as were zero or positive (51%), so it is not the case that small but consistently positive correlations "would have been significant" with larger sample sizes. Sixth, generalized name letter effects were not found for most attitude categories even when using within-subjects comparisons, which increased statistical power by increasing the number of "matches" per analysis and taking into account correlated responses. Even more telling is that these analyses,

similar to those of Jones et al. (2002), revealed significant effects for brand names (Study 4) and name letters (Studies 3-4). If our methodologies were powerful enough to detect these particular effects, they were presumably powerful enough to detect name letter preferences in general attitudes should such tendencies exist reliably. Indeed, we employed analytical techniques that are conceptually and statistically comparable to those of past researchers examining parallel effects in laboratory settings (e.g., Jones et al., 2002; Kityama & Karasawa, 1997; see Note 1), and our analyses also allowed us to consider the magnitude of each effect on a case-by-case basis so that small effect sizes would not be dwarfed by larger ones (see Gallucci, 2003). Nevertheless, the findings were largely null for all attitude categories except brand names, suggesting a unique property of this type of attitude category, for reasons outlined above.

It also seems unlikely that demand characteristics influenced the results because participants reported their attitudes before providing name letter information in all studies. In addition, for most of our attitude targets, there was not a socially desirable position that would interfere with honest responding. Finally, demand effects cannot easily account for why the predicted effects were found for brand names and letter ratings but not most attitude objects.

The present findings do not speak directly to the reliability of name resemblance effects involving more substantial overlap, such as those involving people named Louis living in St. Louis (see Pelham et al., 2002). Our research focused only on participants' initials or letters in their name, and it is possible that greater resemblance may be psychologically more powerful. It would be possible to test the effects of stronger resemblance between names and ordinary attitudes toward objects, such as testing whether Robert likes robins and Lizzie like lizards, but the sample sizes necessary to have sufficient matches of this sort are so large that we could not pursue this option in our studies. Our research is more closely linked to the recent work by Jones et al. (2004) showing that people prefer marriage partners sharing the single initial of the last name. The fact that such subtle findings can be found for marriage partners and brand name preferences suggests the powerful influence of name initials.

Our attempt to manipulate ego-threat in Study 4 was unsuccessful. Based on past findings, however, it seems likely that ego-threats may sometimes strengthen preferences influenced by name letter similarity. For instance, Jones and colleagues (2004) recently found that under mild self-concept threat (but not in the absence of any threat), men preferred women with whom they were interacting over the Internet when the women's Internet identification matched the first few letters of the men's

own names. Threats also can increase the value of objects that one owns (Beggan, 1992). If we assume that neither ego-threat condition in our Study 4 aroused any threat, it is interesting that we found a generalized name letter effect for brand name products. This effect in the absence of ego-threat supports the claim by Jones et al. (2004) that although threat can strengthen these implicit biases, "it seems unlikely that threat is a necessary condition" (p. 679).

### Conclusions

The absence of a generalized name letter effect across many categories of everyday attitudes does not mean that such an effect will not occur in some attitude domains, such as career choices (Pelham et al., 2002), marriage partners (Jones et al., 2004), or brand name products (Study 4). But caution certainly seems warranted in assuming that the name letter effect diffuses into ordinary evaluations in everyday life. Instead, variability on these kinds of everyday attitudes probably depends on such factors as direct experience and learning (see Eagly & Chaiken, 1993; M. A. Olson & Fazio, 2002) or even genetics (J. M. Olson, Vernon, Harris, & Jang, 2001).

In closing, Greenwald (1975) argued that research should be judged not on the basis of the statistical significance but rather in terms of the adequacy of its procedures and the importance of its findings. We believe that the present research meets these standards. Our research tested the hypothesis in a variety of ways using methodologies common in standard attitudes research, clarifying the boundary conditions of name letter effects. These results also highlight the importance of proper names, such as brand names, in self-enhancement (e.g., Pelham et al., 2002). Although name letter preferences do not appear to influence most everyday attitudes, such biases apparently affect attitudes toward brand names, which may serve a primarily value-expressive function that is strengthened by positive self-associations.

### NOTES

1. For instance, a *t* test between matched and mismatched participants on attitudes toward the animal letter *a* ("alligator") in Study 1 results in a nonsignificant result,  $t(187) = .74, p = .458$ . A point-biserial correlation between match versus mismatch status (+1, 0) and attitude ratings of alligators results in an identical finding, statistically speaking,  $r(187) = .05, p = .458$ .

2. Our test of the basic name letter effect (which we knew to be reliable) yielded a significant correlation between sample size and effect size. Both Gallucci (2003) and Pelham, Carvalho, DeHart, and Jones (2003) noted that if the effect of name resemblance is real, it should be stronger in larger sample sizes. The conclusion that the name letter effect does not reliably generalize to attitudes toward external objects is supported by the fact that these domains rarely yielded significant correlations between sample sizes and effect sizes.

3. Several results support the findings of Jones, Pelham, Mirenberg, and Hetts (2002). Participants preferred the six most frequently occurring letters ( $M = 6.45$ ) to the six most rare letters ( $M = 5.11$ ),  $t(176) =$

10.62,  $p < .001$ , suggesting mere exposure effects. However, participants with rare letters as initials preferred their name letters ( $M = 7.92$ ) more than the mean of the two most common letters ( $e, s$ ,  $M = 6.54$ ),  $t(24) = 3.87$ ,  $p < .001$ , suggesting that name letter preferences are more than frequent exposure to initials.

4. We thank Brett Pelham for these observations and suggestions.

5. Exploratory analyses on the principal dependent measures also revealed no consistent effects as a function of the ego-threat manipulation.

6. As in Study 3 (see Note 3), participants preferred frequent ( $M = 6.10$ ) to rare letters ( $M = 5.21$ ),  $t(187) = 7.65$ ,  $p < .001$ . In addition, those with rare name initials preferred these initials ( $M = 7.38$ ) more than  $e$  and  $s$  ( $M = 6.16$ ), the two most common letters,  $t(24) = 4.20$ ,  $p < .001$ , suggesting that letter preferences are not simply mere exposure effects.

7. Although name letter preferences for first and last name initials are stronger than for other letters in one's name (e.g., Kityama & Karasawa, 1997; Pelham, Mirenberg, & Jones, 2002), analyses examining matches using any letter in a respondent's name, which increased the number of matches available, were conducted but also failed to show a generalized name letter effect in any of the studies ( $-.02 \leq r_s \leq .02$ ).

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