

Implicit Egotism

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ABSTRACT—*People gravitate toward people, places, and things that resemble the self. We refer to this tendency as implicit egotism, and we suggest that it reflects an unconscious process that is grounded in people's favorable self-associations. We review recent archival and experimental research that supports this position, highlighting evidence that rules out alternate explanations and distinguishes implicit egotism from closely related ideas such as mere exposure. Taken together, the evidence suggests that implicit egotism is an implicit judgmental consequence of people's positive self-associations. We conclude by identifying promising areas for future research.*

KEYWORDS—*implicit; egotism; self-esteem*

Researchers have long known that how people view themselves plays an important role in virtually every aspect of their daily lives, including phenomena as diverse as personal achievement, interpersonal attraction, and even physical well-being. In recent years, however, researchers have argued that people's conscious self-evaluations provide an incomplete view of the self-concept. Specifically, researchers have argued that people's implicit (i.e., unconscious) self-evaluations also influence their judgment and behavior (Greenwald & Banaji, 1995; Hetts & Pelham, 2001). Implicit self-evaluations are not beliefs that a Freudian homunculus has banished to the unconscious. Instead, such beliefs are probably best conceptualized as part of the cognitive or adaptive unconscious (Kihlstrom, 1987). Presumably, some implicit self-evaluations consist of beliefs that were once conscious but have become highly automatized. Other implicit self-evaluations might be unconscious because they were formed prior to the individual's acquisition of language. Although few researchers have acknowledged the possibility, it may also be that implicit self-evaluations are a product of defensive processes to which people have little or no conscious access. Finally, implicit self-evaluations may be a

product of classical conditioning or implicit learning, that is, associative learning that occurs in the absence of conscious awareness. Thus, just as puppies do not know why they salivate, people may not always know why they trust a stranger who sounds vaguely like Garrison Keillor.

It is now well documented that people possess implicit self-evaluations—that is, unconscious associations about the self. It is also well-documented that most implicit self-associations are highly favorable. Two decades ago, Nuttin (1985) showed that people like the letters that appear in their own names much more than other people like these same letters—a phenomenon Nuttin called the *name-letter effect*. Nuttin also showed that people who preferred the letters in their own names were typically unaware of the basis of this preference. Similarly, Beggan (1992) showed that once people are given an object people evaluate the object more favorably than they would otherwise—a phenomenon called the *mere-ownership effect*. Give Ivan a puppy, and he will overestimate the puppy's worth, presumably because the puppy has become an extension of the self.

It is now well established that people possess positive implicit associations about themselves. Until very recently, however, it was unclear whether people's implicit self-associations ever predict meaningful social behaviors (but see Dijksterhuis, 2004; Shimizu & Pelham, 2004; Spalding & Hardin, 1999). To address this question, we investigated the role of implicit self-associations in major life decisions. Our primary hypothesis was simple. If Dennis adores the letter *D*, then it might not be too far-fetched to expect Dennis to gravitate toward cities such as Denver, careers such as dentistry, and romantic partners such as Denise. Pelham, Mirenberg, and Jones (2002) referred to this unconscious tendency to prefer things that resemble the self as *implicit egotism*. In a series of articles (Jones, Pelham, Carvallo, & Mirenberg, 2004; Pelham, Mirenberg, & Jones, 2002; Pelham, Carvallo, DeHart, & Jones, 2003), we reported the results of numerous archival studies (i.e., studies relying on public records such as birth, marriage, or death records) and experiments suggesting that implicit egotism influences major life decisions. As suggested by the list in Table 1, which summarizes many of our recent studies, implicit egotism appears to influence a wide variety of important decisions. In the remainder of this report, we address some of the strengths and limitations of our research on implicit egotism and then offer some suggestions for future research.

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TABLE 1*A Selective Summary of the Most Comprehensive Studies Providing Support for Implicit Egotism*Pelham, B.W., Mirenberg, M.C., & Jones, J.K. (2002):

1. Four most common female first names that resemble Southeastern state names
2. Four most common male first names that resemble Southeastern state names
3. Eight largest U.S. states and surnames resembling these state names
4. Eight largest Canadian cities and surnames resembling these city names
5. Four most common male and female names that resemble the occupations “dentist” and “lawyer”
6. All U.S. cities that prominently feature number words in the names (matched with numbers corresponding to people’s day and month of birth)

Pelham, B.W., Carvalho, M., DeHart, T., & Jones, J.T. (2003):

1. The 30 most common European American surnames and all U.S. cities that include the surname anywhere in the city name (e.g., Johnson City, Johnsonville, Fort Johnson, etc.)
2. The three most common U.S. surname pairs (e.g., Smith–Johnson) and street names that include these surnames (each pair was replicated individually in each U.S. state)
3. Three sets of surnames chosen to avoid spurious name–street matches (e.g., Hill–Park) and street names that included these names or words (each pair also replicated individually in each U.S. state)

Jones, J.T., Pelham, B.W., Carvalho, M., & Mirenberg, M.C. (2004):

1. Matches for first letter of surname in two large counties, covering approximately 150 years
2. Single initial surname matches for parents of every birth occurring in Texas in 1926
3. Systematic surname match studies of four large Southeastern states over about 150 years
4. Nationwide joint telephone listing study of 12 systematically chosen male and female first names
5. Laboratory experiments involving (a) birthday numbers, and (b) first three letters of surname
6. Subliminal conditioning study using participants’ full names as conditioning stimuli

STUDYING IMPLICIT EGOTISM

In our initial article (Pelham et al., 2002), we argued that implicit egotism influences both where people choose to live and what people choose to do for a living. For instance, in Study 1 of this article, we identified four common female first names that strongly resembled the name of a Southeastern state. The names were Florence, Georgia, Louise, and Virginia, corresponding with the states Florida, Georgia, Louisiana, and Virginia. We then consulted Social Security Death Index (SSDI) records (kept since the advent of the Social Security system) to identify women who had died while living in each of the four relevant Southeastern states. This design yielded a 4×4 matrix of name–state combinations, and a total sample size of more than 75,000 women. Women named Florence, Georgia, Louise, and Virginia were all disproportionately likely (on average, 44% above chance values) to have resided in the state that closely resembled their first name.

Ruling Out Confounds

This study raised many concerns about possible confounds. One concern was the possibility that these women disproportionately resided in states whose names resembled their own first names simply because they had been named after the states in which they had been born (and had never moved). Although SSDI records do not indicate where the deceased were born, these records do indicate the state in which they resided when they applied for social security cards (typically as adults). Using these records, we were able to focus on people who got their

social security cards in one state and died while residing in another—that is, people who had moved into the states in which they died. An analysis of these interstate immigrants yielded clear and consistent evidence for implicit egotism.

Another concern about this study is that the results might reflect explicit rather than implicit egotism. It would be extremely surprising if Virginia failed to notice the resemblance between her first name and the state name that appeared on her driver’s license. Archival research methods do not always lend themselves well to documenting implicit effects. Nonetheless, we have tried. In other studies summarized in the same article (Pelham et al., 2002), we focused on names that, unlike Georgia and Virginia, shared only their first few letters with the states or cities to which people with those names gravitated. When Samuel Winters moves to Winnipeg, for example, it seems unlikely that he will conclude that the first few letters of his surname are the reason for his move.

Watering down a manipulation in this fashion tends to water down the size of the effect obtained. But to our surprise, implicit egotism proved to be sufficiently robust that it survived systematic tests involving relatively subtle manipulations. We were able to show, for example (Pelham et al., 2002; Study 6), that people disproportionately inhabit cities whose names feature their birthday numbers. Just as people born on February 2 (02-02) disproportionately inhabit cities with names such as Two Harbors, people born on May 5 (05-05) disproportionately inhabit cities with names such as Five Points. This birthday-number study also illustrated that implicit egotism is not limited to name-letter preferences. Presumably, any meaningful

self-attribute can serve as a source of implicit egotism. Another finding that seems likely to reflect implicit preferences comes from studies of street addresses. Whereas people whose surname is Street tend to have addresses that include the word Street (e.g., Lincoln Street), people whose surname is Lane tend to have addresses that include the word Lane (e.g., Lincoln Lane; Pelham et al., 2003).

Moderators of Implicit Egotism

Can archival studies such as these shed any light on the psychological mechanisms behind implicit egotism? We believe so. To the degree that archival studies yield support for meaningful moderators of implicit egotism, such studies can suggest, albeit indirectly, that implicit egotism is based on self-evaluation. For example, laboratory research has shown that women show stronger first-name preferences than men do (perhaps because many women realize that their first name is the only name they will keep forever). In keeping with this established finding in the laboratory research, behavioral first-name preferences have also proven to be stronger for women than for men (Pelham et al., 2002).

The distinctiveness of a person's name also appears to moderate the strength of implicit egotism. Implicit egotism is more pronounced for rare (i.e., more self-defining) than for common names. The fact that rare names do a better job of distinguishing their owners from other people than common names do suggests that implicit egotism is grounded in identity. By definition, people with rare names are also exposed to their own names slightly less often than are people with common names (e.g., Zeke meets other people named Zeke less often than John meets other people named John). The fact that implicit egotism is stronger among those with statistically rare names also suggests that implicit egotism is not grounded exclusively in the mere exposure effect, that is, the tendency for people to prefer stimuli to which they have been exposed more often (see also Jones et al., 2002, where this issue is addressed in other ways).

The Problem of Sampling

One of the limitations of archival research on implicit egotism is that it is often impossible to sample people randomly in such studies. The researcher is usually forced to sample names systematically. In some studies, we tackled this problem by sampling surnames and city or street names from all 50 U.S. states (Pelham et al., 2003). For example, by systematically sampling the same common surname pairs (e.g., Smith–Johnson, Williams–Jones) in all 50 U.S. states, we were able to document robust name–street matching in six different nationwide samples. Thus, we were able to show, for instance, that the surname pair Smith–Johnson yielded supportive data for 45 out of 50 individual U.S. states.

Another way in which we have tackled the sampling problem is by sampling names exhaustively within large geographical units. In studies of interpersonal attraction, we were sometimes

able to sample entire states or counties. For example, using exhaustive statewide birth records, Jones et al. (2004) were able to show that people are disproportionately likely to marry others who happen to share their first or last initial. (Moreover, in samples in which it has been possible to determine people's ethnicity, we have also been able to control for ethnic matching (the tendency for people to marry others of their own ethnic group) by testing our hypothesis within specific ethnic groups (e.g., among Latinos only). Although archival studies of interpersonal attraction raise their own methodological problems, we have gone to great lengths to rule out alternative explanations, including not only ethnic matching but also age-group matching and proximity. For instance, we ruled out the possibility that people married those who were seated near them in high school (based on surname) by showing that our findings remained robust among couples whose ages differed by 5 years or more. Our studies have consistently yielded evidence for implicit egotism.

Assessing Implicit Egotism in the Laboratory

Thomas Edison once said that genius is 1% inspiration and 99% perspiration. With a little inspiration and a great deal of perspiration, researchers who rely on archival research methods can go a long way toward ruling out alternate explanations for a particular effect. But as Edison's contemporary, the methodologist R.A. Fisher, might have put it, neither inspiration nor perspiration is a match for randomization. The researcher who wishes to rule out numerous alternate explanations for a phenomenon, while gaining insights into its underlying mechanisms, must occasionally conduct experiments. In our research on implicit egotism and interpersonal attraction (Jones et al., 2004), we have done exactly that.

In one experiment, we introduced participants to a bogus interaction partner whose arbitrarily assigned experimental code number (e.g., 02-28) either did or did not happen to resemble their own birthday number. Participants were more attracted to the stranger when his or her code number resembled their own birthday number. This study suggests that implicit egotism is not merely a corollary of the principle that people are attracted to others who are similar to them. After all, participants did not think that their interaction partner actually shared their birthday. In a second experiment, we found that implicit egotism is most likely to emerge under conditions of self-concept threat (i.e., when people have been forced to think about their personal weaknesses). Men who had just experienced a mild self-concept threat (by writing about their personal flaws as a potential dating partner) were especially attracted to a woman in a "Yahoo personals" ad when her screen name happened to contain the first few letters of their surname (e.g., Eric Pelham would prefer STACEY_PEL to STACEY_SMI). Together with past research suggesting that self-concept threats temporarily increase people's positive associations to the self, this study suggests that implicit egotism is grounded in self-evaluation (Beggan, 1992; Jones et al., 2002).



Fig. 1. Stimulus person from subliminal conditioning study (Jones, J.T., Pelham, B.W., Carvalho, M., & Mirenberg, M.C., 2004). Participants evaluated this woman after the number on her jersey (16 or 24) had or had not been subliminally paired with their own names.

In a third experiment on interpersonal attraction (Jones et al., 2004, Study 7), we found the most direct evidence yet for the underpinnings of implicit egotism. Male and female participants evaluated an attractive young woman on the basis of her photograph. The woman was depicted wearing a jersey that prominently featured either the number 16 or the number 24 (see Fig. 1). Prior to evaluating the woman, participants took part in 30 trials of a computerized decision-making task in which they made simple judgments about strings of random letters. At the beginning of each judgment trial, a row of Xs appeared briefly in the center of the computer monitor, to focus participants' attention. This task was actually a subliminal conditioning task: The row of Xs was always followed (for 14 ms) by either the number 16 or the number 24. One of these two numbers (16 or 24) was always followed by the individual participant's own full name (for 14 ms), and the other number was always followed by one of several gender-matched control names. Participants liked the woman more, and evaluated her more favorably, when her jersey number had been subliminally paired with their own names. Implicit egotism appears to be implicit.

FROM IMPLICIT EGOTISM TO IMPLICIT SELF-EVALUATION

We believe that we have established beyond a reasonable doubt that implicit egotism influences important decisions. Thus, we believe that future research should attempt to identify meaningful boundary conditions (i.e., predictable limitations) of implicit egotism. Along these lines, some questions that seem ripe for investigation involve close relationships, culture, and implicit self-esteem.

Do name-letter preferences apply exclusively to the self, or do the names of people to whom one is close also affect one's preferences? Do such preferences grow stronger as relationships grow closer? If Bill truly loves Virginia, will he be highly interested in moving to Virginia, just as she might be? Given recent developments in the psychology of culture, it might also be profitable to assess cultural influences on implicit egotism. One might expect that in collectivistic cultures (i.e., ones that celebrate collective as opposed to individual identities), name-letter preferences would be exaggerated for collective aspects of the self (e.g., surnames might have a greater effect than forenames). We are currently planning studies to test this idea. We have also begun to address the implications of implicit egotism for more mundane decisions. Specifically, we (Brendl, Chattopadhyay, Pelham, & Carvalho, in press) recently found that people prefer products (e.g., teas, crackers, chocolate candies) whose names share one or more letters with their own names.

If unconscious self-evaluations influence both mundane and important daily decisions, it is important to understand the origins and nature of these implicit self-evaluations—that is, to understand implicit self-esteem. Do negative social interactions early in life cause some people to develop low implicit self-esteem? Apparently they do. In three separate studies, DeHart, Pelham, and Tennen (in press) asked parents, their adult children, or both to report on parent-child interactions in the family when the children were growing up. Both the children's and their parents' reports of how nurturing the parents had been were associated with the adult children's levels of implicit self-esteem. This association still held true after controlling for participants' levels of explicit self-esteem. Studies such as these raise the question of whether we have observed consistent evidence for implicit egotism merely because most people are fortunate enough to possess positive implicit associations to the self. It is possible that our typical findings would be reversed among people who possess truly negative self-associations (i.e., for those with very low levels of implicit self-esteem). Such findings might have implications not only for theories of self-regulation but also for clinical theories of the etiology of depression and self-destructive behaviors. Of course, broad speculations such as these await empirical scrutiny. However, we hope that our research on implicit egotism will inspire researchers to take a closer look at the nature of implicit self-esteem. A complete understanding of the self-concept may

hinge, in part, on a better understanding why Jack loves both Jackie and Jacksonville.

Recommended Reading

Fazio, R.H., & Olson, M.A. (2003). Implicit measures in social cognition research: Their meaning and uses. *Annual Review of Psychology*, *54*, 297–327.

Koole, S.L., & Pelham, B.W. (2003). On the nature of implicit self-esteem: The case of the name letter effect. In S. Spencer, S. Fein, & M. Zanna (Eds.), *Motivated social perception: The Ontario Symposium on Personality and Social Psychology* (Vol. 9, pp. 93–116). Mahwah, NJ: Erlbaum.

Wilson, T.D., & Dunn, E.W. (2004). Self-knowledge: Its limits, value and potential for improvement. *Annual Review of Psychology*, *55*, 493–518.

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REFERENCES

Beggan, J.K. (1992). On the social nature of nonsocial perception: The mere ownership effect. *Journal of Personality and Social Psychology*, *62*, 229–237.

Brendl, C.M., Chattopadhyay, A., Pelham, B.W., & Carvallo, M. (in press). Name letter branding: Valence transfers when product specific needs are active. *Journal of Consumer Research*.

DeHart, T., Pelham, B.W., & Tennen, H. (in press). What lies beneath: Early experiences with parents and implicit self-esteem. *Journal of Experimental Social Psychology*.

Dijksterhuis, A. (2004). I like myself but I don't know why: Enhancing implicit self-esteem by subliminal evaluative conditioning. *Journal of Personality and Social Psychology*, *86*, 345–355.

Greenwald, A.G., & Banaji, M.R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, *102*, 4–27.

Hetts, J.J., & Pelham, B.W. (2001). A case for the non-conscious self-concept. In G. Moskowitz (Ed.), *Cognitive social psychology: The Princeton Symposium on the Legacy and Future of Social Cognition* (pp. 105–123). Mahwah, NJ: Erlbaum.

Jones, J.T., Pelham, B.W., Carvallo, M., & Mirenberg, M.C. (2004). How do I love thee? Let me count the Js: Implicit egotism and interpersonal attraction. *Journal of Personality and Social Psychology*, *87*, 665–683.

Jones, J.T., Pelham, B.W., Mirenberg, M.C., & Hetts, J.J. (2002). Name letter preferences are not merely mere exposure: Implicit egotism as self-regulation. *Journal of Experimental Social Psychology*, *38*, 170–177.

Kihlstrom, J.F. (1987). The cognitive unconscious. *Science*, *237*, 1445–1452.

Nuttin, J.M. (1985). Narcissism beyond Gestalt and awareness: The name letter effect. *European Journal of Social Psychology*, *15*, 353–361.

Pelham, B.W., Carvallo, M., DeHart, T., & Jones, J.T. (2003). Assessing the validity of implicit egotism: A reply to Gallucci. *Journal of Personality and Social Psychology*, *85*, 800–807.

Pelham, B.W., Mirenberg, M.C., & Jones, J.K. (2002). Why Susie sells seashells by the seashore: Implicit egotism and major life decisions. *Journal of Personality and Social Psychology*, *82*, 469–487.

Shimizu, M., & Pelham, B.W. (2004). The unconscious cost of good fortune: Implicit and explicit self-esteem, positive life events, and health. *Health Psychology*, *23*, 101–105.

Spalding, L.R., & Hardin, C.D. (1999). Unconscious unease and self-handicapping: Behavioral consequences of individual differences in implicit and explicit self-esteem. *Psychological Science*, *10*, 535–539.

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