

NOTICING THE SELF: IMPLICIT ASSESSMENT OF SELF-FOCUSED ATTENTION USING WORD RECOGNITION LATENCIES

By: Jan Eichstaedt and Paul J. Silvia

Eichstaedt, J., & Silvia, P. J. (2003). Noticing the self: Implicit assessment of self-focused attention using word recognition latencies. *Social Cognition*, 21, 349-361.

Made available courtesy of Guilford Press: http://www.guilford.com/cgi-bin/cartscript.cgi?page=pr/jnco.htm&dir=periodicals/per_psych&cart_id=

*****Note: Figures may be missing from this format of the document**

Abstract:

Self-focused attention is difficult to measure. Two studies developed an implicit measure of self-focus based on word recognition latencies. Self-focused attention activates self-content, so self-focused people should recognize self-relevant words more quickly. Study 1 measured individual-differences in self-focused attention. People scoring high in private self-consciousness recognized self-relevant words more quickly. Study 2 manipulated objective self-awareness with a writing task. People who wrote about distinctive self-aspects (high self-awareness) recognized self-relevant words more quickly compared to people who wrote about a neutral topic (low self-awareness) and people who did no writing (control). The discussion considers implications for future research on self-focused attention.

Article:

Self-focused attention is difficult to measure. Two studies developed an implicit measure of self-focus based on word recognition latencies. Self-focused attention activates self-content, so self-focused people should recognize self-relevant words more quickly. Study 1 measured individual-differences in self-focused attention. People scoring high in private self-consciousness recognized self-relevant words more quickly. Study 2 manipulated objective self-awareness with a writing task. People who wrote about distinctive self-aspects (high self-awareness) recognized self-relevant words more quickly compared to people who wrote about a neutral topic (low self-awareness) and people who did no writing (control). The discussion considers implications for future research on self-focused attention.

Objective self-awareness theory explores the consequences of focusing attention internally on the self or externally on events in the environment (Duval & Silvia, 2001, 2002; Duval & Wicklund, 1972). Focusing on the self has broad effects on motivational, emotional, and cognitive processes (Carver & Scheier, 1998; Silvia & Duval, 2001, 2004). Although a large literature describes the effects of self-focused attention, only a few studies examine self-focused attention as a dependent variable, measure variations in self-focus, or include checks of self-awareness manipulations. Self-directed attention is simply difficult to measure. Duval and Wicklund (1972, p. 221) even ended their book with caveats about measurement, noting "a practical consideration that is possibly unique to theories about self awareness. We can think of no easy way to ask a subject how self-aware he is without creating self awareness."

Research since Duval and Wicklund's (1972) pessimistic statement confirms that self-focused attention is not easily measured with conventional methods. In this paper we review research on measuring self-focused attention and then propose a new measure designed to assess implicit aspects of self-focus. Our new measure involves latencies of visual word recognition for neutral and self-relevant words. By assessing self-focused attention relatively directly, this measure circumvents several problems associated with other measures. After presenting two studies that evaluate the validity of this measure, we consider some implications of implicit assessment of self-focus.

MEASURING SELF-FOCUSED ATTENTION

Measures of self-awareness sort into three types. Self-report scales, the first type, use Likert-type items related to self-focused attention. Examples include the private self-consciousness scale reworded in terms of momentary feelings (Sedikides, 1992) and the situational self-awareness scale (Govern & Marsch, 2001). Unfortunately, self-report measures of self-focus are hindered by reactivity. As Duval and Wicklund (1972) noted, measuring self-awareness can increase self-awareness because responding to the questions promotes thinking about the self (Silvia & Gendolla, 2001). In fact, some researchers manipulate self-awareness by having people complete self-report scales (Brown, 1988; Osberg, 1985).

A second type of measure codes open-ended responses, such as thought-listings or daily diary entries, for self-relevant content (e.g., Greenberg & Pyszczynski, 1986). Coding systems tend to be ad hoc and unstandardized, and as a result they vary between studies. Some systems would code "I'm thinking about my family" as reflecting high self-focus; others would code it as reflecting mixed or low self-focus. Serious validity problems arise when studying relations between self-focus and internal states. For example, self-focus is guaranteed to covary with emotions when references to feelings are coded as self-focused responses (see Palfai & Salovey, 1992). Finally, the introspection required for monitoring and describing thoughts increases self-focused attention, thus reducing the sensitivity of the measure.

A third type of measure assesses implicit aspects of self-focus. In a pencil-and-paper implicit measure, people select a pronoun that best fits a sentence (Wegner & Giuliano, 1980). Manipulations of self-awareness increase selections of I, me, and my (cf. Davis & Brock, 1975). This widely-used measure circumvents the ambiguity of coding open-ended responses and the reactivity of self-reports, although its reliability is usually low (Silvia & Abele, 2002). Furthermore, completing the long and absorbing pronoun-selection task seems to reduce self-awareness (see Silvia & Eichstaedt, in press).

The self-focus Stroop task is the only latency-based measure of self-awareness. Activated semantic content about the self should interfere with naming the color of self-relevant words, although the evidence for this effect is mixed. There are three different self-focus Stroop tasks. The first task (Geller & Shaver, 1976) confounded self-relevance with affective valence (see Green & McKenna, 1996; Higgins, Van Hook, & Dorfman, 1988). The control words were emotionally neutral, but the self-relevant words were emotionally strong (e.g., disliked, impotent, failure). The second Stroop task avoided this confound by developing a new set of words. Only one experiment has manipulated self-awareness and measured effects on this version of the Stroop. Mayer, Duval, Holtz, and Bowman (1985) told people that their astrological diagram was common or distinctive; feeling distinctive increased Stroop interference. The third Stroop task presents prime words that vary in self-relevance before showing the target words (Higgins et al., 1988, Study 3; Segal & Vella, 1990). Self-focus should increase color-naming latencies for self-relevant target words, particularly when they are primed by other self-relevant words. Neither experiment, however, found significant Stroop interference. Moreover, self-awareness tended to decrease latencies in one study (Higgins et al., 1988, Study 3) but it tended to increase latencies in the other (Segal & Vella, 1990). In sum, the reliability and validity of the self-focus Stroop paradigm has not been firmly established.

AN IMPLICIT MEASURE BASED ON VISUAL WORD RECOGNITION LATENCIES

Self-awareness research has used an eclectic bunch of measures, most of which involve self-reports. The study of self-awareness could benefit from additional measures, particularly measures that assess self-relevant cognition directly. We thus developed an implicit measure based on visual word recognition. In this measure, people view self-relevant and neutral words under difficult perceptual conditions and indicate when they recognize a word. Word recognition latencies can indicate the degree of self-focused attention because they reflect the accessibility of semantic information. Semantic categories that are salient facilitate recognizing words related to the categories (Besner & Smith, 1992; Eichstaedt, 2002, 2003; Eichstaedt & Scheffer, 2003; Neely, 1991; Stolz & Neely, 1995). Both chronic and momentary salience affect word recognition latencies. For example, people recognize self-referent trait adjectives faster than non-referent trait adjectives (Perdue & Gurtman, 1988), indicating effects of chronic accessibility. Likewise, emotional states decrease recognition

latencies for words related to the emotion (Niedenthal, Halberstadt, & Setterlund, 1997), indicating situational effects.

Two studies appraised the validity of an implicit measure of self-focused attention based on visual recognition of words. In Study 1, people completed measures of individual-differences in self-consciousness and the word recognition task. In Study 2, the word recognition task followed a manipulation of self-awareness. If word recognition latencies predict both dispositional and situational variability, then the recognition task would appear promising as an implicit measure of self-focused attention.

STUDY 1

We administered self-report scales measuring private and public self-consciousness (Fenigstein, Scheier, & Buss, 1975) along with the implicit measure in an Internet-based study. We expected private self-consciousness scores and word recognition latencies to correlate negatively—people high in private self-consciousness should recognize self-relevant words more quickly. Private self-consciousness scores usually replicate manipulations of self-awareness. No predictions were made for public self-consciousness because it does not usually replicate self-awareness manipulations (Carver & Scheier, 1978; Duval & Silvia, 2001, chap. 8; Gibbons, 1990; Wicklund & Gollwitzer, 1987).

METHOD

Participants

A total of 130 people—86 women and 44 men—participated voluntarily over the Internet. The average age was 25.9 years ($M = 22.5$, $SD = 9.2$). The study was announced through links on a list of Internet studies hosted by the American Psychological Society (APS) and at a web site of the Universität der Bundeswehr Hamburg.

Procedure and Apparatus

After reading an introduction to the study, people were randomly assigned to complete the self-consciousness scales before or after the word recognition task. The private self-consciousness scale has 10 items related to focusing on inner aspects of self; the public self-consciousness scale has seven items related to focusing on observable aspects of self. These items were answered on 7-point scales.

Semantic effects on word recognition emerge more clearly when the recognition process is impaired. Impeding the recognition process increases the effects of semantic influences on word recognition (Borowsky & Besner, 1991; Stolz & Neely, 1995) and thus enables stronger relationships between the salience of semantic categories and recognition latencies (Eichstaedt, 2002, 2003). When the recognition task started, the participant saw a box with three rows of flickering random letters. The participant was instructed to concentrate on the center row because it contained a hidden target word. Each presentation of a target word of 400 ms was followed by random letters for 200 ms. Each target word was repeated at a different position in the center line until the participant hit a key. A text field then appeared, prompting the participant to type the word he or she recognized. The dependent measure was the latency from stimulus onset to the answer. The next trial started after the participant hit the return key.

The word recognition measure displayed five self-relevant words (me, myself, self, face, mine) and 5 neutral words (up, theory, walk, drop, they), which were matched for length and frequency (Kucera & Francis, 1967). After 10 practice trials with neutral words, people saw the 10 test words in a random order.

The word recognition measure was implemented as a JAVA-applet that controlled the presentation and timing. An inaccurate-timing filter (Eichstaedt, 2001) was incorporated to minimize technical sources of error. This filter identifies inaccurate measurements by testing whether the client-side JAVA implementation produces false measurements of a time interval of a known length during the measured reaction time. Reaction times that indicate such inaccuracy can be discarded to increase the reliability of the remaining data.

After completing the word recognition task, people received a code number along with detailed information about the study. People could e-mail the code number to the experimenters and receive feedback about their performance on the recognition task.

RESULTS

Data Reduction

Only words that were recognized correctly were analyzed. Word-specific effects on latencies were controlled by z-scoring with respect to the word's mean. Individual performance level was controlled with z-scoring as well (Perdue & Gurtman, 1988). A score for each person was calculated by subtracting the average latency for neutral words from the average latency for self-relevant words. Negative values indicate relatively quicker recognition of self-relevant words, and positive values indicate relatively quicker recognition of neutral words. Private ($[\alpha] = .69$) and public ($[\alpha] = .82$) self-consciousness scores were computed by averaging the scores from their respective items.

Private and Public Self-Consciousness

Multiple regression analyses were conducted to test whether private and public self-consciousness predicted word recognition latencies. We centered all predictors prior to analysis (Judd & McClelland, 1989). No main effects or interactions involving the counterbalanced order appeared (all $[\beta]s < \pm .02$, ns), so order is not discussed further.

Private and public self-consciousness were correlated, $r = .42$, $p < .001$, consistent with past research (Fenigstein et al., 1975); they were thus considered simultaneously in a regression analysis. Private self-consciousness significantly predicted recognition latencies, $[\beta] = -.267$, $p < .005$. As expected, people recognized self-relevant words more quickly as private self-consciousness increased. Public self-consciousness also significantly predicted latencies, but in the opposite direction, $[\beta] = .200$, $p < .037$. People recognized self-relevant words more slowly as public self-consciousness increased. The interaction between private and public self-consciousness was not significant, $[\beta] = .05$.

Discussion

Study 1 offered support for the validity of the implicit measure of self-focus. Participants completed measures of individual-differences in self-focused attention along with the word recognition task. As predicted, people high in private self-consciousness recognized self-relevant words more quickly. Public self-consciousness, in contrast, had the opposite relation. We had not made predictions concerning public scores because past research has shown null and negative relations between public self-consciousness and measures of self-directed attention (Gibbons, 1990; Wicklund & Gollwitzer, 1987).

STUDY 2

Study 2 sought additional evidence for the validity of the implicit measure by manipulating self-awareness. We used a writing-task manipulation developed and validated in past research (Silvia, 2002; Silvia & Eichstaedt, in press). People in the high self-awareness condition wrote about how they differ from other people; people in control conditions wrote about self-irrelevant topics or wrote nothing at all. Feeling distinctive increases self-awareness because attention gravitates toward distinctive stimuli (Duval, 1976; Snow, Duval, & Silvia, 2003).

METHOD

Participants and Design

A total of 40 people-14 women, 26 men-participated voluntarily over the Internet. The average age was 26.6 years ($M = 25$, $SD = 8.13$). Each person was randomly assigned to one of three between-subjects conditions: self-focusing task, neutral task, or no task. The study was announced through links on a list of Internet studies hosted by APS, at a web site of the Universitat der Bundeswehr Hamburg, and through newsgroups devoted to computer games.

Procedure

The procedure was generally similar to Study 1. The program randomly assigned the participant to one of three conditions. People in the self-focusing task condition completed a writing task that increases self-awareness. One way to increase self-focus is to make people feel distinctive, such as by telling them that they deviate from a reference group or that they have an unusual personal quality (Duval, 1976; Mayer et al., 1985; Snow et al., 2003). The writing task asks people to respond to three questions: "What is it about you that makes you different from your family?/ from your friends?/ from people in general?." Past work has validated this task as a manipulation of self-focused attention (Silvia & Eichstaedt, in press), and the task replicates conventional manipulations (e.g., mirrors; Silvia, 2001, 2002).

Two control conditions were included. In the neutral task control condition, people wrote about a topic external to the self. Specifically, people wrote free responses to the following questions: "What are the most important features of your computer's hardware?/ your computer's operating system?/ your computer's network environment?" In the no writing control condition, people simply completed the word recognition task. After the manipulation, people completed the word recognition task. The task was implemented exactly as in Study 1. After 10 practice trials, people tried to identify the five self-relevant and five neutral words as quickly as possible; the words appeared in a random order. A filter controlled for possible client-side timing errors (Eichstaedt, 2001). After completing the study, people received a code number along with detailed information about the experiment. People could e-mail the code number to the experimenters and receive feedback about their performance on the recognition task.

RESULTS AND DISCUSSION

The data were reduced as in Study 1. Latencies were expressed as a single standardized score: negative values indicate quicker recognition of self-relevant words, and positive values indicate quicker recognition of neutral words. A one-way ANOVA found significant variation between the groups, $F(2, 37) = 5.07, p < .011$ (see Table 1). This overall test was followed by a focused contrast testing the predicted pattern of differences. We predicted that people in the self-focusing task condition would have quicker latencies than people in the other two conditions (weights: -2,1,1). This contrast was significant, $t(37) = 2.86, p < .007$. (The same contrast was significant when tested with raw latencies, $f(37) = 2.83, p < .007$, and log-transformed latencies, $t(37) = 3.23, p < .003$.) People who completed the self-focusing task recognized self-relevant words more quickly than people who wrote about a neutral topic, $t(24) = 2.19, p < .038$, and than people who did no writing, $f(25) = 3.14, p < .004$. The two control groups did not differ, $f(25) = 1.18, p < .25$.

TABLE 1. Effects of manipulated self-awareness on word recognition latencies

	<i>M</i>	<i>SD</i>	<i>n</i>	95% CI
Self-Focusing Task	-.344	.609	13	-.712 to .024
Neutral Task	.333	.932	13	-.231 to .896
No Task	.827	1.21	14	.129 to 1.52

Note. Means are z-scores. Negative means indicate quicker recognition of self-relevant words.

The implicit measure thus captured situational variation in self-awareness. When people wrote about ways in which they differed from other people—a reliable inducer of self-focus—they recognized self-relevant words more quickly, relative to when people wrote about a self-irrelevant topic or when people simply did the recognition task. This experiment conceptually replicates Study 1 by showing situational effects on word recognition and thus further validates the implicit measure.

GENERAL DISCUSSION

The present studies appraised an implicit measure of self-focused attention based on how quickly people recognize self-relevant words. Word recognition latencies can reflect the accessibility of semantic content (Besner & Smith, 1992; Neely, 1991). Focusing attention on the self should make self-relevant information more accessible and, as a result, should decrease latencies for recognizing words related to the self. In Study 1, people completed measures of dispositional self-focus. Persons scoring high in private self-consciousness recognized self-relevant words more quickly. Public self-consciousness scores, in contrast, predicted slower recognition of self-relevant words. In Study 2, people who wrote about ways in which they differed from other people recognized self-relevant words more quickly relative to people who wrote about neutral topics and people who did no writing. We thus found the expected relations between visual word recognition and self-awareness processes, for both dispositional and situational variations in self-focused attention.

The implicit measure based on word recognition differs from most measures of self-awareness in its form of measurement. It avoids the introspection and reactivity involved in self-reports, and it circumvents the complex coding issues involved in open-ended responses. The word recognition measure most resembles the self-focus Stroop task. Like the Stroop task, our measure tries to target directly the cognitive processes associated with self-directed attention. Unlike the Stroop task, the word-recognition task magnifies top-down effects of self-focus by impairing the word recognition process (see Besner & Smith, 1992; Eichstaedt, 2003). The self-focus Stroop task, in contrast, makes no particular effort to amplify the top-down effect of self-focus on color-naming. Furthermore, the effectiveness of the Stroop paradigm for measuring self-focus remains uncertain. One experiment manipulated self-awareness and found the expected Stroop interference (Mayer et al., 1985); other experiments had confounds or found conflicting non-significant trends (Geller & Shaver, 1976; Green & McKenna, 1996; Higgins et al., 1988; Segal & Vella, 1990). Future work should examine the relative effectiveness of the word recognition measure in relation to other measures, particularly the self-focus Stroop task.

REFERENCES

- Besner, D., & Smith, M. C. (1992). Models of visual word recognition: When obscuring the stimulus yields a clearer view. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 18, 468-482.
- Borowsky, R., & Besner, D. (1991). Visual word recognition across orthographies: On the interaction between context and degradation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 17, 272-276.
- Brown, J. D. (1988). Self-focused attention, self-esteem, and causal attributions for valenced outcomes. *Personality and Social Psychology Bulletin*, 24, 252-263.
- Carver, C. S., & Scheier, M. F. (1978). Self-focusing effects of dispositional self-consciousness, mirror presence, and audience presence. *Journal of Personality and Social Psychology*, 36, 324-332.
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press.
- Davis, D., & Brock, T. C. (1975). Use of first-person pronouns as a function of increased objective self-awareness and performance feedback. *Journal of Experimental Social Psychology*, 11, 381-388.
- Duval, T. S. (1976). Conformity on a visual task as a function of personal novelty on attitudinal dimensions and being reminded of object status of self. *Journal of Experimental Social Psychology*, 12, 87-98.
- Duval, T. S., & Silvia, P. J. (2001). *Self-awareness and causal attribution: A dual systems theory*. Boston: Kluwer Academic.
- Duval, T. S., & Silvia, P. J. (2002). Self-awareness, probability of improvement, and the self-serving bias. *Journal of Personality and Social Psychology*, 82, 49-61.
- Duval, T. S., & Wicklund, R. A. (1972). *A theory of objective self-awareness*. New York: Academic Press.
- Eichstaedt, J. (2001). An inaccurate-timing filter for reaction-time measurement by JAVA-applets implementing Internet-based experiments. *Behavior Research Methods, Instruments, and Computers*, 33, 179-186.
- Eichstaedt, J. (2002). Measuring differences in pre-activation on the Internet: The content category superiority effect. *Experimental Psychology*, 49, 283-291.
- Eichstaedt, J. (2003). Magnifying effects on visual word recognition: A dynamic display for Internet-based experiments. Manuscript under review.

- Eichstaedt, J., & Scheffer, D. (2003). Measuring implicit motives on the basis of word recognition latencies. Manuscript under review.
- Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology*, 43, 522-527.
- Geller, V., & Shaver, P. (1976). Cognitive consequences of self-awareness. *Journal of Experimental Social Psychology*, 12, 99-108.
- Gibbons, F. X. (1990). Self-attention and behavior: A review and theoretical update. *Advances in Experimental Social Psychology*, 23, 249-303.
- Govern, J. M., & Marsch, L. A. (2001). Development and validation of the situational self-awareness scale. *Consciousness and Cognition*, 10, 366-378.
- Green, M. W., & McKenna, F. P. (1996). Self-focused attention and the processing of threat-related information. *European Journal of Social Psychology*, 26, 1007-1010.
- Greenberg, J., & Pyszczynski, T. (1986). Persistent high self-focus after failure and low self-focus after success: The depressive self-focusing style. *Journal of Personality and Social Psychology*, 50, 1039-1044.
- Higgins, E. T., Van Hook, E., & Dorfman, D. (1988). Do self-attributes form a cognitive structure? *Social Cognition*, 6, 177-207.
- Judd, C. M., & McClelland, G. H. (1989). *Data analysis: A model-comparison approach*. New York: Harcourt, Brace, & Jovanovich.
- Kucera, H., & Francis, W. N. (1967). *Computational analysis of present-day American English*. Providence, RI: Brown University Press
- Mayer, F. S., Duval, T. S., Holtz, R., & Bowman, C. (1985). Self-focus, helping request salience, felt responsibility, and helping behavior. *Personality and Social Psychology Bulletin*, 11, 133-144.
- Neely, J. H. (1991). Semantic priming effects in visual word recognition: A selective review of current findings and theories. In D. Besner & G. W. Humphries (Eds.), *Basic processes in reading: Visual word recognition* (pp. 264-336). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Niedenthal, P. M., Halberstadt, J. B., & Setterlund, M. B. (1997). Being happy and seeing "happy": Emotional state mediates visual word recognition. *Cognition and Emotion*, 11, 403-432.
- Osberg, T. M. (1985). Order effects in the administration of personality measures: The case of the Self-Consciousness Scale. *Journal of Personality Assessment*, 49, 536-540.
- Palfai, T. P., & Salovey, P. (1992). The influence of affect on self-focused attention: Conceptual and methodological issues. *Consciousness and Cognition*, 1, 306-339.
- Perdue, C. W., & Gurtman, M. B. (1988). Self-reference and evaluative biases in the perception of trait information. *Personality and Social Psychology Bulletin*, 14, 578-586.
- Sedikides, C. (1992). Mood as a determinant of attentional focus. *Cognition and Emotion*, 6, 129-148.
- Segal, Z. V., & Vella, D. D. (1990). Self-schema in major depression: Replication and extension of a priming methodology. *Cognitive Therapy and Research*, 14, 161-176.
- Silvia, P. J. (2001). Nothing or the opposite: Intersecting terror management and objective self-awareness. *European Journal of Personality*, 15, 73-82.
- Silvia, P. J. (2002). Self-awareness and emotional intensity. *Cognition and Emotion*, 16, 195-216.
- Silvia, P., & Abele, A. E. (2002). Can positive affect induce self-focused attention? Methodological and measurement issues. *Cognition and Emotion*, 16, 845-853.
- Silvia, P. J., & Duval, T. S. (2001). Objective self-awareness theory: Recent progress and enduring problems. *Personality and Social Psychology Review*, 5, 230-241.
- Silvia, P. T., & Duval, T. S. (2004). Self-awareness, self-motives, and self-motivation. In R. A. Wright, J. Greenberg, & S. S. Brehm (Eds.), *Motivational analyses of social behavior: Building on Jack Brehm's contributions to psychology* (pp. 57-75). Mahwah, NJ: Lawrence Erlbaum Associates.
- Silvia, P. J., & Eichstaedt, J. (in press). A self-novelty manipulation of self-focused attention for Internet and laboratory experiments. *Behavior Research Methods, Instruments, and Computers*.
- Silvia, P. J., & Gendolla, G. H. E. (2001). On introspection and self-perception: Does self-focused attention enable accurate self-knowledge? *Review of General Psychology*, 5, 241-269.
- Snow, C. J., Duval, T. S., & Silvia, P. J. (2003). When the self stands out: Figure-ground effects on self-focused attention. Manuscript under review.

Stolz, J. A., & Neely, J. H. (1995). When target degradation does and does not enhance semantic context effects in word recognition, *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 21, 596-611.

Wegner, D. M., & Giuliano, T. (1980). Arousal-induced attention to self. *Journal of Personality and Social Psychology*, 38, 719-726.

Wicklund, R. A., & Gollwitzer, P. M. (1987). The fallacy of the private-public self-focus distinction. *Journal of Personality*, 55, 492-523.