

CHAPTER 8

Implicit Self and Identity

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When William James (1890) wrote about the unique problem of studying self and identity, he immediately noted the peculiar blurring of the otherwise clear demarcation between the knower and the known. The object of scrutiny, the self, was also the agent doing the scrutinizing. This illicit merger of the knower and the known has created an epistemological unease that philosophers have worried about and psychologists have either ignored or turned into an assumption so as to ignore (see Klein, Chapter 28, this volume). The human ability for self-awareness and self-reflection is so unique that tapping it as a primary source of information about mind and social behavior has come at the expense of confronting the severe problems of the knower also being the known and of using introspection as the primary path to discovery. In this chapter, we argue that at least one circumstance can explicitly disentangle the knower from the known in the study of self: when it becomes explicit that the self-as-knower does not have introspective access to the self-as-known. When knowledge about oneself resides in a form that is inaccessible to consciousness, a happy situation arises of requiring other means of access. When such indirect methods of access show patterns of self-knowledge and self-affect that are disso-

ciated from what is obtained introspectively, we have a psychologically intriguing moment: Why are they not consistent? Which one is true, and according to what criteria? What does each predict independently? What is the developmental trajectory of both? Are they malleable? In this chapter, we focus on states of unconscious thought and feeling about the self—those marked by a lack of conscious awareness, control, intention, and self-reflection.

Over the past two decades, the study of implicit social cognition has created new paradigms for studying several traditional fields (for reviews, see Bargh, 2007; Devos, 2008; Gawronski & Payne, 2010; Petty, Fazio, & Briiiol, 2008; Wittenbrink & Schwarz, 2007). At first sight, this trend might seem to say little about the topic of self and identity. Indeed, it is a common assumption that studies of self centrally involve experiences of reflexive consciousness (Baumeister, 1998): Individuals reflect on their experiences, self-consciously evaluate the contents of consciousness, and introspect about the causes and meaning of things. In addition, the self is often viewed as playing a consciously active role in making meaning, implementing choices, pursuing goals, and initiating action. Studies that focus on

unconscious or automatic modes of thinking and feeling, when applied to self and identity processes, question these assumptions, and they do so based on the discovery of mental acts that are fully meaningful and lawful but that appear to arise without introspective access or deliberative thought.

In this chapter, we provide an overview of research on the implicit social cognition of self and identity. No attempt is made to review the literature at hand exhaustively; rather, we focus on reflections of self and identity in a particular social context—the context in which thoughts and feelings about oneself are shaped by membership in a larger collective, and in which such thoughts and feelings go beyond the self as target to represent and shape a view of the collective. Such a focus places us in the respectable company of others who also assume or demonstrate that the individual self is meaningfully considered in reference to social entities that transcend the individual self (Cooley, 1902; Hogg, Chapter 23, this volume; Mead, 1934; Turner, Oakes, Haslam, & McGarty, 1994; Walsh & Banaji, 1997). We limit our coverage to aspects of the self that emerge when (1) viewed in the context of social group memberships, and (2) measured via thoughts and feelings that are not consciously controllable or within awareness. We begin with research paradigms that link the study of self with social group and proceed to specific analyses of basic preference for the ingroup and other attributes associated with the self. We then include analyses of implicit self and identity processes as viewed in research on self-evaluation, performance and behavior, and goal pursuit. In the next major section, we attend to the top-down influence of societal and cultural factors on the construction of implicit self and identity. Together, the research we review reveals the plasticity of the self as it is shaped by the demands of social group and culture.

The term *implicit* is used to refer to processes that occur outside conscious awareness. Evaluations of one's self, for example, may be influenced by group membership, even though one is not aware of such an influence. A female college student who strongly identifies with her gender may unknowingly incorporate traditional gender role expectations about parenthood into her self-concept, while consciously identifying

with higher education (Devos, Blanco, Rico, & Dunn, 2008). There are multiple ways in which one may be unaware of the source of influence on thoughts, feelings, and behavior (Gawronski, Hofmann, & Wilbur, 2006). For example, one may in some circumstances be unaware of the existence of the source of influence, whereas in other circumstances one may consciously and accurately perceive the source of influence, while being unaware of its causal role in self-evaluation.

The term *implicit* is also applied to processes that occur without conscious control (Payne, 2005). Here, the circumstances are such that one may be perfectly aware of the contingencies that connect a particular stimulus to a response but be unable to change or reverse the direction of the thought, feeling, or action. A woman may deliberately disagree with romantic fantasies about men as chivalric rescuers of women and, at the same time, be unable to control her automatic endorsement of fantasies consistent with traditional gender role expectations (Rudman & Heppen, 2003). Although empirical investigations focus on one or another of these aspects of unconscious social cognition, as well as on those that elude intention and self-reflection, we use the term *implicit* here to encompass both the processes that occur without conscious awareness and those that occur without conscious control.

Self and Social Group

Since at least the 1970s, the self-concept has been profitably studied by representing it as an information structure with empirically tractable cognitive and affective features. From such a theoretical vantage point came the idea that the self-concept, like other mental representations (e.g., memory), could be viewed as potentially operating in automatic mode, and that aspects of self may be hidden from introspective awareness, as are aspects of perception and memory.

Research in the American social cognition tradition focused on the intrapersonal and interpersonal aspects of self and identity, whereas another tradition, with European roots, emphasized the association between self and social group, resulting in an intergroup emphasis (see Hogg, Chapter 23, this volume). The latter's most articu-

late and encompassing formulation, labeled *self-categorization theory* (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), holds that under particular conditions, group members perceive themselves as exemplars of the group rather than as unique individuals. In this mode, they highlight the similarities between themselves and other ingroup members, and they apply characteristics typical of the ingroup to the self (self-stereotyping). In other words, the representations of self and ingroup become inextricably linked. Until recently, tests of this hypothesis mainly involved self-report measures (e.g., Biernat, Vescio, & Green, 1996; Simon, Pantaleo, & Mummendey, 1995). However, a number of empirical investigations have revealed that the processes by which the ingroup may be said to become part and parcel of the self also can operate at an implicit level.

Adapting a paradigm developed by Aron, Aron, Tudor, and Nelson (1991), Smith and Henry (1996) examined people's psychological ties to significant ingroups. Participants were asked to rate themselves, their ingroup, and an outgroup on a list of traits. Next, they indicated, as quickly and accurately as possible, whether each trait was self-descriptive or not. Self-descriptiveness judgments were faster for traits on which participants matched their ingroup than for traits on which they mismatched. On the contrary, no such facilitation was observed for traits rated as matching or mismatching the outgroup. This finding has been taken to illustrate that the ingroup becomes part of the representation of oneself. Using a similar procedure, a follow-up study demonstrated that the reverse was also true (Smith, Coats, & Walling, 1999): Characteristics of the self influenced evaluations of the ingroup, in that participants were faster to make ingroup descriptiveness judgments for traits that matched their self-perceptions. Together, these results support the idea of a mental fusion of the self and social group (see also Coats, Smith, Claypool, & Banner, 2000).

The Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) is a technique developed to assess the strength of implicit associations between concepts (e.g., self, group) and attributes (e.g., evaluation of good-bad, specific traits), and it also has been used to study implicit self and identity. The assumption underlying the technique is

that the more closely related a concept and an attribute are (e.g., ingroup and good, outgroup and bad), the more quickly information representing the concept and the attribute should be paired (for a review of conceptual and methodological aspects of this technique, see Nosek, Greenwald, & Banaji, 2007).

Recent experiments have used this technique and variations of it to investigate the strength of self + group association, referring to this pairing as a measure of automatic identification with the social group. For example, Devos and Banaji (2005) used this procedure to capture the strength of implicit national identity among citizens of the United States. Participants were asked to categorize, as quickly as possible, stimuli presented on a computer screen. Some stimuli were pictures of American or foreign symbols (e.g., flags, coins, maps, monuments), whereas other stimuli were pronouns frequently used to designate ingroups (e.g., *we*, *ourselves*) or outgroups (e.g., *they*, *other*). Participants completed this task twice. In one case, American symbols were paired with words representing the ingroup (e.g., *we*, *ourselves*), and foreign symbols were combined with words representing the outgroup (e.g., *they*, *other*). In another case, American symbols were combined with outgroup words, and foreign symbols were paired with ingroup words. Results indicated that participants performed the categorization task more quickly when American symbols and ingroup words shared the same response key. In other words, it was easier to associate American symbols with words such as *we* or *ourselves* rather than with *they* or *other*. American symbols may be seen here as automatically evoking belonging and implying that, at least when unable consciously to control their responses, this sample of Americans identified with their national group.

In addition, such self + group associations can be assessed for multiple cultural identities. Using the same technique, Devos (2006) obtained patterns of self + culture associations indicative of an implicit bicultural identity: Mexican American and Asian American college students strongly identified with both American culture and their cultures of origin (Mexican or Asian culture). When the two cultures were pitted against

one another, respondents found it more difficult to pair "me" words with stimuli associated with either culture.

With similar methodologies, other empirical investigations have demonstrated implicit associations between self and attributes, roles, or domains stereotypical of gender categories (e.g., Greenwald & Farnham, 2000; Lindgren, Shoda, & George, 2007). For instance, automatic associations between self and the concept "math" for men and the concept "arts" for women have been obtained repeatedly (Nosek, Banaji, & Greenwald, 2002). Interestingly, identification with math among women (who initially displayed a weak identification with this domain) increased when they were trained to approach (rather than avoid) math as part of an experimental task (Kawakami, Steele, Cifra, Philis, & Dovidio, 2008). These implicit associations between self and group stereotypes also extend to negative stereotypes about ingroups. For example, using a sequential subliminal priming task, researchers have shown that women and European Americans implicitly associated the self with ingroup stereotypical traits but not outgroup stereotypical traits, and both groups implicitly self-stereotyped on negative ingroup traits (e.g., dependent and moody for women; snobby and materialistic for European Americans) as much as they did on positive ingroup traits (e.g., caring and compassionate for women; educated and successful for European Americans; Lun, Sinclair, & Cogburn, 2009). In addition, Lane, Mitchell, and Banaji (2005) have shown that implicit identification with a new ingroup could occur quickly and without extensive contact with the group. As predicted, Yale students showed stronger implicit identity with Yale as an institution (rather than with Harvard), but strength of implicit identity was equally strong among those who had been on campus for a few days and those who had been on campus for one year or longer. These findings indicate that group membership comes to be automatically associated with self, and that people automatically endorse stereotypical attributes of their group as also being self-descriptive.

Recent neuroimaging findings lend further support to the far-reaching influences of self-other linkages. For instance, Mitchell, Macrae, and Banaji (2006) showed that

distinct regions of the medial prefrontal cortex (mPFC) are activated when individuals are asked to make inferences about the opinions, likes, and dislikes of group members whose political views are similar versus dissimilar to self. More precisely, when self-other overlap could be assumed, inferences about the target's views engaged a region of ventral mPFC associated with self-referential thought, whereas inferences about a dissimilar other activated a more dorsal region of mPFC. Follow-up research revealed that conscious attempts to adopt another person's perspective also prompted individuals to engage cognitive processes typically reserved for introspection (Ames, Jenkins, Banaji, & Mitchell, 2008).

A Preference for Ingroups

The links between self and ingroup are not only visible in implicit knowledge and thought but also present in measures of attitude or evaluation. Tajfel (1974) emphasized this point when he defined "social identity as that part of an individual's self-concept which derives from his knowledge of his membership of a social group (or groups) together with the emotional significance attached to that membership" (p. 69). A large body of research shows that people evaluate ingroup members more favorably than outgroup members (Mullen, Brown, & Smith, 1992), and we examine those studies that used measures of implicit attitude or evaluation. The literature on implicit attitudes clearly suggests that groups unconsciously or automatically trigger more positive affective reactions when they are associated to the self. Assessments of ethnic attitudes without perceivers' awareness or control consistently reveal that European Americans have more positive feelings toward European Americans than toward African Americans (e.g., Dasgupta, McGhee, Greenwald, & Banaji, 2000; Fazio, Jackson, Dunton, & Williams, 1995; Greenwald et al., 1998; Wittenbrink, Judd, & Park, 1997). Research also shows; that undergraduate students hold a more favorable attitude toward the category "young" than toward the category "old" (e.g., Perdue & Gurtman, 1990; Rudman, Greenwald, Mellott, & Schwartz, 1999). Strong implicit preferences for American symbols have been

revealed in several studies (Ashburn-Nardo, Voils, & Monteith, 2001; Devos & Banaji, 2005; Rudman et al., 1999). Cunningham, Nezlek, and Banaji (2004) have shown implicit positive associations to the category white (rather than black), rich (rather than poor), American (rather than foreign), straight (rather than gay), and Christian (rather than Jewish) among students known to be white, American, and Christian, a majority of whom were also assumed to be high on the social class dimension and to be heterosexual. These researchers have taken the extra step of claiming that these implicit preferences do not develop in isolation, and that an individual difference marks the pattern: Those who show higher preference for one ingroup also show higher preference for all other ingroups; that is, they assert that there is evidence for an implicit ethnocentrism dimension.

In most of the research described, researchers have assessed the implicit attitudes of only people belonging to one particular group. Of the few studies that measured both sides, symmetry has been found under some circumstances. For instance, Greenwald and colleagues (1998) reported data from both Japanese Americans and Korean Americans, each of whom showed a more positive implicit attitude toward their own ethnic group. The level of immersion in Asian culture moderated this pattern of implicit preferences. More precisely, participants who were immersed in their particular Asian culture (i.e., had a high proportion of family members and acquaintances from that culture and were familiar with the language) showed greater ingroup preference. In another study, depending on their religious affiliation, individuals exhibited an implicit preference for Christian or Jewish people (Rudman et al., 1999).

In summary, implicit preferences for the ingroup are characteristic of a wide variety of groups (affiliations with nation, state, and city; school and sports team; family and friends). Interestingly, implicit ingroup favoritism extends to evaluations and perceptions of other ingroup members' behaviors. For instance, the term *implicit ingroup metafavoritism* was coined to account for the fact that people implicitly preferred an ingroup member who displayed ingroup bias, while verbally endorsing the behavior of an egalitarian ingroup member (Castelli, Tomelleri,

& Zogmaister, 2008). In addition, people tend to describe positive behaviors in more abstract language terms ("X is helpful") when performed by an ingroup member than when performed by an outgroup member ("X gave them directions to go to the station"), and the opposite holds for negative behaviors (Franco & Maass, 1996; Karpinski & von Hippel, 1996; Maass, Salvi, Arcuri, & Semin, 1989; von Hippel, Sekaquaptewa, & Vargas, 1997).

The tendency to favor the ingroup attitudinally (e.g., along a good-bad dimension) sometimes underlies implicit stereotyping (e.g., the assignment of specific qualities that may also vary in evaluation). For example, both men and women hold similar implicit gender stereotypes but they exhibit them to a stronger extent when they reflect favorably on their own group (Rudman, Greenwald, & McGhee, 2001). Male participants are more likely to differentiate men and women with respect to an attribute such as power, whereas female participants are more likely to do so on a trait such as warmth. In other words, each group emphasizes stereotypes in a self-favorable direction.

Using measures of consciously accessible cognition, the ingroup bias has been shown to emerge under minimal conditions: The mere categorization of individuals into two distinct groups elicits a preference for the ingroup (Diehl, 1990; Tajfel, Billig, Bundy, & Flament, 1971). There is now evidence that a minimal social categorization is sufficient to activate positive attitudes automatically or unconsciously toward self-related groups and negative or neutral attitudes toward non-self-related groups. For example, Perdue, Dovidio, Gurtman, and Tyler (1990) found that participants responded faster to pleasant words when primed with ingroup pronouns (e.g., *we* or *us*) rather than with outgroup pronouns (e.g., *they* or *them*), even though they were unaware of the group-designating primes. Thus, the use of words referring to ingroups or outgroups might unconsciously perpetuate intergroup biases. More recently, Otten and Wentura (1999) showed that neutral words automatically acquired an affective connotation, simply by introducing them as group labels and by relating one of them to participants' self-concepts. The self-related group label functioned equivalently

to positive primes, whereas the other label functioned similarly to negative primes. In other words, as soon as a word designated an ingroup, it acquired positive connotation, whereas words referring to an outgroup immediately conveyed a negative valence.

Even when groups are fictional and there are no ingroup-outgroup references (e.g., memorizing the name of four members of a fictitious group), people spontaneously identified with and formed positive opinions about these novel groups, and this *implicit partisanship* extended to nonhuman objects (made-up car brands; Greenwald, Pickrell, & Farnham, 2002; Pinter & Greenwald, 2004). These experiments suggest that the ingroup bias occurs automatically and unconsciously under minimal conditions (see also Ashburn-Nardo et al., 2001; Otten & Moskowitz, 2000).

Given the increasing body of evidence that social identity processes can operate outside of conscious awareness and control, one might wonder about the developmental process of implicit identity formation and ingroup bias. Although implicit identity development has not been studied directly, we can draw from the literature on implicit attitude formation to inform our views about implicit identity development. Most often, implicit social cognition has been conceptualized as the result of a slow learning process through long-term experiences, such that implicit attitudes and beliefs emerge over time as people detect and internalize regularities in their social world (Rudman, 2004). However, theories of slow learning of implicit social cognition fail to account for fast-to-form and fast-to-stabilize implicit identities, such as the aforementioned study that found college students very rapidly develop an implicit identity associated with their school (Lane et al., 2005; see also Gregg, Seibt, & Banaji, 2006).

In addition, researchers have documented implicit intergroup biases in children as young as 3 years old. For example, in a cross-sectional study of European American children using the IAT, 6-year-olds, 10-year-olds, and adults displayed equally strong implicit pro-white-anti-black preferences (Baron & Banaji, 2006). In another cross-sectional study, white British children ages 6-16 displayed equally strong implicit pro-white-anti-black preferences (Rutland,

Cameron, Milne, & McGeorge, 2005). To understand the sources of these intergroup attitudes, Castelli, Zogmaister, and Tomelleri (2009) examined implicit and explicit racial attitudes of 3- to 6-year-old white Italian children and their parents. The parents' self-reported racial attitudes were not related to their children's responses, but the mothers' implicit racial preferences predicted their children's playmate preferences and attributions of negative and positive traits to a black child. As a whole, these studies suggest that even for young children, whose attitudes are constrained by their cognitive abilities, group perceptions are influenced by significant adults and their surrounding social environment (see also Olson, Banaji, Dweck, & Spelke, 2006). Most notably, these findings are consistent across cultures examined thus far, but only for members of the socially advantaged or dominant group, suggesting that implicit social cognition emerges early in life due to children's ability to make ingroup-outgroup distinctions and their sensitivity to social hierarchies within the larger social context (Dunham, Baron, & Banaji, 2008).

In terms of implicit identity development, the implicit ingroup-outgroup distinctions evident in young children probably serve as a basis for the implicit associations between self and different social groups. In turn, these implicit associations may be one of the building blocks for social identity as Erikson (1959) conceptualized it: The process of identity development necessarily involves both conscious (e.g., sense of individual identity) and unconscious (e.g., striving for continuity of personal character) components. Even when identity is conceptualized as a process of conscious, deliberate self-evaluation and self-reflection (e.g., McAdams, 2001), implicit self + group associations acquired in early childhood may influence the identities that people choose to explore and the value they assign to the groups to which they belong.

Preferences for Self Extend to Attributes Associated with Self

Evidence for implicit ingroup favoritism is reminiscent of research showing that the mere ownership of an object or its associa-

tion to the self is a condition sufficient to enhance its attractiveness. Nuttin (1985) found that when individuals were asked to choose a preferred letter from each of several pairs consisting of one alphabet letter from their names and one not, they tended reliably to prefer alphabets that constitute their names. This finding, known as the *name letter effect* (NLE) has been replicated in many countries and with samples from very different cultures (e.g., Albers, Rotteveel, & Dijksterhuis, 2009; Anseel & Duyck, 2009; Kitayama & Karasawa, 1997; Nuttin, 1987).

In order to test whether the preference for name letters depended on a conscious decision, Nuttin (1985) invited participants to search for a meaningful pattern in the pairs of letters presented. Despite the fact that no time limit was imposed and that a monetary award was promised to anyone who could correctly identify the prearranged pattern of letters, not a single participant could come up with the solution. This finding supports the idea that the NLE does not stem from a conscious recognition of the connection between the attribute and one's self. In addition, the NLE does not seem to be a remainder of the positive mastery affect or the intense positive emotions following initial success on a socially valued skill experienced by most people when they first succeed in reading or writing their own names (Hoorens, Nuttin, Herman, & Pavakanun, 1990; Hoorens & Todorova, 1988), or to be due to an enhanced subjective frequency of own-name letters compared with non-name letters (Hoorens & Nuttin, 1993). At present, the most convincing interpretation of this effect is that the preference for letters in one's name reflects an unconscious preference for self, and its generality is shown through research on preference for other self-related information, such as birth dates over other numbers (Kitayama & Karasawa, 1997; Koole, Dijksterhuis, & van Knippenberg, 2001).

Broadening this line of work, research shows that the implicit positive evaluation of self and associated attributes also influences where people choose to live and what they choose to do for a living. Across a dozen studies, Pelham, Mirenberg, and Jones (2002) found that people are more likely to live in cities or states and to choose careers whose names share letters with their own first or last names. For example, a person

named Louis is disproportionately likely to live in St. Louis, and individuals named Dennis or Denise are overrepresented among dentists (see also Anseel & Duyck, 2008, 2009). Correlational and experimental studies reveal that this implicit egotism extends to the selection of romantic partners: People were implicitly more attracted to others who shared their initials or birth date numbers than those who did not (Jones, Pelham, Carvallo, & Mirenberg, 2004).

Interestingly, archival and experimental data indicate that this implicit preference for the self generalizes to negatively valenced events, even when people deliberately strive for success (Nelson & Simmons, 2007). For instance, baseball players whose name start with the letter *K* (the letter used in Major League Baseball to indicate a strikeout) were more likely to strike out than other players, and lawyers whose names start with *A* and *B* (letters associated with better academic performance) attended better law schools than lawyers whose names start with *C* and *D* (letters associated with worse academic performance). Together, these findings on the NLE and implicit egotism suggest that personal choices may be constrained by linkages to self that are not noticed, not consciously sought, and even surprising. They reveal introspectively unidentified (or inaccurately identified) effects of the self-attitude on evaluations of associated objects (Greenwald & Banaji, 1995).

Balancing Self and Social Group

Work reviewed so far highlights the cognitive and affective ties between self and group memberships, and stresses the fact that individuals are not necessarily fully aware of these bounds on their thinking, or that they are aware but unable to control their operation. Now we turn to the relationships among the cognitive and affective components that make up the self system. Several theories predict some consistency between constructs that represent self and social group. For example, social identity theory (Tajfel & Turner, 1986) assumes some interrelations among self-esteem, group identification, and ingroup bias. According to the theory, social identification serves as a source of self-esteem.

Generally speaking, individuals strive to maintain or increase their self-esteem. They can derive a sense of self-worth through favorable intergroup comparisons. Thus, self-esteem should be enhanced by membership in a valued group, and strong identification with the group should go hand in hand with positive evaluation of the ingroup. Evidence for the role of self-esteem in intergroup comparisons is mixed (e.g., Abrams & Hogg, 1988; Brown, 2000; Rubin & Hewstone, 1998). Moreover, support for the idea that there should be a positive correlation between group identification and ingroup favoritism is not overwhelming (Brewer, 2001; Brown, 2000). The absence of expected relationships has led to examinations of these constructs using implicit measures. For example, Knowles and Peng (2005) found that the strength of the automatic association between self and whites (ingroup identification) was positively correlated with the intensity of the pro-white implicit attitude (ingroup favoritism) and also accounted for the extent to which individuals possessed a restrictive representation of their ethnic group by showing a reluctance to categorize mixed-race individuals as white (ingroup overexclusiveness).

Based on the growing body of evidence regarding implicit processes involved in the self system, Greenwald, Banaji, and colleagues (2002) proposed a unified theory of social cognition that predicts patterns of interrelations among group identification, self-esteem, and ingroup attitude. Their approach draws its inspiration from theories of affective-cognitive consistency that dominated social psychology in the 1960s (Abelson et al., 1968) and allows them to integrate a range of otherwise isolated findings obtained with the IAT (Greenwald et al., 1998). This approach is based on the assumption that social knowledge (including knowledge about oneself) can be represented as an associative structure.

From this point of view, the structure of the self is a network of associations: The self is linked to traits, groups, concepts, or evaluations. A core principle of the theory is that attitudes toward self and concepts closely associated with self (i.e., components of self-concept or identity) tend to be of similar valence. In other words, according to the balance-congruity principle, if

someone holds a positive attitude toward the self and considers that a particular concept (e.g., a group, an attribute, or a domain) is part of his or her self-concept, this person should also hold a positive attitude toward that particular concept.

A study on women's gender identity illustrates this principle. For women, one would typically expect an association between self and the concept "female" (gender identity or self + female), and a positive association toward the self (positive self-esteem or self + good). Based on the balance-congruity principle, these two links should also be accompanied by a third link: a positive association toward the concept "female" (liking for female or female + good). More precisely, the strength of the positive attitude toward "female" should be a joint (or interactive) function of the strength of the associations between self and positive, and between self and female. Data supported this prediction: As gender identity increased, so did the positive relation between self-esteem and liking for women (Greenwald, Banaji, et al., 2002; see also Aidman & Carroll, 2003; Rudman & Goodwin, 2004). Support for similar hypotheses has been obtained using a variety of social groups and differing clusters of attributes that measure constructs such as attitude, stereotype, and self-esteem (e.g., Devos, Blanco, Rico, et al., 2008; Devos & Cruz Torres, 2007; Greenwald, Banaji, et al., 2002; Nosek et al., 2002). For instance, the more college women identified with motherhood, the stronger the correlation between self-esteem and liking motherhood, but the more they identified with college education, the stronger the correlation between self-esteem and liking for college education (Devos, Diaz, Viera, & Dunn, 2007). Interestingly, evidence for such balanced (similarly valenced) identities has been obtained primarily when implicit measures of self and group identity are used, and it has appeared in weaker form on measures of conscious affect and cognition (Cvencek, Greenwald, & Meltzoff, in press).

Relational and Contextual Self-Definitions

Having shown self and social group connections on attitude and beliefs, we turn to

research demonstrating that shifts in self-evaluation also occur without conscious intention. For example, the unconscious activation of significant others has implications for self-evaluation. Baldwin (1992) proposed that the internalization of relationships involves the development of relational schemas; these cognitive structures represent regularities in patterns of interpersonal interactions. Often, the sense of self can be derived from such well-learned scripts of interpersonal evaluations. In other words, activated relational schemas shape self-evaluative reactions, even when these schemas are primed below the level of awareness. Indeed, subliminal exposure to the name of a critical versus an accepting significant other led participants to report more negative versus positive self-evaluations (Baldwin, 1994). Similarly, graduate students evaluated their own research ideas less favorably after being subliminally exposed to the disapproving face of their department chair rather than the approving face of another person (Baldwin, Carrell, & Lopez, 1990). These effects occurred only when the prime was a significant other. For instance, Catholic participants rated themselves more negatively after exposure to the disapproving face of the Pope, but not after exposure to the disapproving face of an unfamiliar person. In addition, if the Pope did not serve as a figure of authority, self-evaluation remained unaffected by the priming manipulation.

Unobtrusively making a social identity salient or changing the parameters of a social context can also influence the social self. For instance, Haines and Kray (2005) showed that women's identification with social power was a function of the context or social role to which they were assigned. More precisely, women assigned to a high-power group displayed stronger implicit self + power associations than women assigned to a low-power group. Similarly, women assigned to a high-power role displayed a more masculine implicit self-definition than women assigned to a low-power role. In a study on men's gender self-concept, McCall and Dasgupta (2007) also found that subtly manipulating status in a social interaction changed automatic self-beliefs, but the dynamic was very different for men than for women: Men assigned to a low-status role nonconsciously counteracted this role

by exhibiting more leader-like self-beliefs than men placed in a high-status role. Also relevant to the aims of this chapter, studies showed that priming the construct "equality" decreased implicit ingroup favoritism, whereas priming the construct "loyalty" enhanced it (Zogmaister, Arcuri, Castelli, & Smith, 2008). In addition, contextual effects on implicit self-definitions were found for bilingual Latino college students (Devos, Blanco, Munoz, Dunn, & Ulloa, 2008): Participants who completed the IAT in English showed stronger identification with family than with school, but there was no difference in identification with these two constructs for those who completed the IAT in Spanish. Once again, the difference between the two language conditions (English vs. Spanish) suggests that implicit identities are anchored in the parameters of the social context. Internalized expectations about one's social group can shape self-definitions even when they are unobtrusively activated or assessed.

Research on implicit self-esteem also indicates that contextual variations can produce an effect on unconscious or automatic preferences. For example, DeHart and Pelham (2007) demonstrated in a 3-week diary study that people with either low explicit self-esteem or low self-concept clarity (extent to which self-beliefs are clearly defined, internally consistent, and stable over time) were more likely to report lower implicit self-esteem on the days they reported more negative life events. These fluctuations in implicit self-esteem were not shown for people with high explicit self-esteem or high self-concept clarity. As another example, the NLE described earlier did not occur after participants had received failure feedback on an alleged IQ test, but it reemerged once participants were given the opportunity to affirm a personally important value (Koole, Smeets, van Knippenberg, & Dijksterhuis, 1999). Thus, it appears that a failure on an alleged intelligence test increases the accessibility of failure-related cognitions and reduces, at least temporarily, participants' implicit self-esteem. Affirming an important aspect of one's self-concept permits one to counteract the negative consequences of the feedback. Evaluative conditioning tasks have been shown to change implicit but not explicit self-esteem, whereas directed, conscious thinking about the self altered ex-

plicit but not implicit self-esteem (Grumm, Nestler, & von Collani, 2009; see also Bac-cus, Baldwin, & Packer, 2004; Dijksterhuis, 2004).

Together, these studies are in line with a growing body of research stressing that implicit associations are not fixed or rigid but relatively malleable (Gawronski & Bodenhausen, 2006). Such work also illustrates the dynamic nature of self-related processes (Markus & Wurf, 1987). It is a fact of modern life that people belong to a range of social groups, both chosen and given. As societies become more heterogeneous, the opportunity for comparing and contrasting oneself to others will increase. Across time and situations, varying identities may come forward or recede from consciousness. Effects that appear to be unsystematic and unpredictable may be quite lawful when unconscious social influences on self-evaluations are considered.

Performance and Behavior

If thoughts and feelings are transformed by the activation of social group membership, behavior should be influenced as well. Yet because cognition and affect are much better understood components of psychology than behavior, studies of the latter have been less frequently reported. Perhaps for this reason, and because behavior is the "gold standard" in the behavioral sciences, studies that show the influence of social group on self-relevant behavior receive much attention. This is certainly true of work on stereotype threat, situations in which the presence of a negative stereotype about one's group can handicap the performance of members of the group (Steele, Spencer, & Aronson, 2002). According to the proponents of this theoretical framework, when African American students perform a scholastic or intellectual task, they face the threat of confirming a negative stereotype about their group's intellectual ability. This threat, it is speculated, interferes with intellectual functioning and can lead to detrimental impact on performance. Support for this argument has now been obtained in many experiments showing the influence of subtle activation of race/ethnicity, gender, class, and age distinctions on performance on standardized tests.

For example, Steele and Aronson (1995) found that stereotype threat can affect the performance of African American college students, who performed significantly worse than European Americans on a standardized test when the test was presented as diagnostic of their intellectual abilities. This effect did not occur when the test was presented as nondiagnostic of their ability. Other studies have demonstrated that women underperform on tests of mathematical ability when the stereotype associated with their group was made salient (Spencer, Steele, & Quinn, 1999). Shih, Pittinsky, and Ambady (1999) showed that activating gender identity or ethnic identity among Asian American women shifted performances to be, respectively, inferior or superior on a math test. The manipulations producing these effects are often rather subtle. In some cases, it is sufficient to ask participants to indicate their group membership just prior to assessing their performance (Steele & Aronson, 1995). In other cases, researchers have subliminally primed the negative stereotype, which then impaired subjects' performance (e.g., Levy, 1996; Wheeler, Jarvis, & Petty, 2001). Interestingly, the manner in which the stereotype is activated in the testing situation determines its impact on performance (Shih, Ambady, Richeson, Fujita, & Gray, 2002): Positive stereotypical expectations (e.g., "Asians are good at math") boosted targets' performances when these expectations were subtly activated, but not when they were blatantly activated. Other programs of research demonstrate that stereotype threat effects occur through automatic, unconscious processing of stereotype-relevant information relating to the performance situation. For example, women who implicitly associated "math" with "men" faster than "math" with "women" chronically experienced stereotype threat, even under "reduced threat" conditions (i.e., when they were told the math test was not diagnostic of their math ability); thus, they performed worse on math tests than women who did not implicitly hold stereotypical expectations (Kiefer & Sekaquaptewa, 2007).

Considerable evidence shows that the activation of trait constructs or stereotypes also can automatically or unconsciously influence social behavior (e.g., Bargh, Chen, & Burrows, 1996; Chen & Bargh, 1997; Dijk-

sterhuis, Aarts, Bargh, & van Knippenberg, 2000). When trait constructs or stereotypes are primed in the course of an unrelated task, individuals subsequently are more likely to act in line with the content of the primed trait construct or stereotype. For instance, priming the stereotype of "professors" or the trait "intelligent" enhanced performance on a general knowledge task (similar to Trivial Pursuit), while priming the stereotype of "soccer hooligans" or the trait "stupid" decreased performance on the test (Dijksterhuis & van Knippenberg, 1998). These effects are mediated by passive perceptual activity and are direct consequences of environmental events (priming manipulations). Indeed, manipulations or factors known to produce changes in perception also affected behaviors. For example, priming stereotypes of social categories produced assimilation effects like the ones we just described, whereas activating specific exemplars of the same categories led to contrast effects (Dijksterhuis et al., 1998). More precisely, if participants were primed with the category "professors" (rather than "supermodels"), their own intellectual performance was enhanced (assimilation effect), but if they were primed with the exemplar "Albert Einstein" (rather than "Claudia Schiffer") a decrement in their performance resulted (contrast effect).

Other studies have demonstrated that individuals can fail to detect changes in their actions when those actions were induced implicitly. For example, people can be unaware that their behaviors shift in accordance with the behaviors of others. Chartrand and Bargh (1999) coined the term *chameleon effect* to describe the tendency to mimic unconsciously the postures, mannerisms, or facial expressions of one's interaction partners. They showed that the mere perception of another's behavior automatically increased the likelihood of engaging in that behavior oneself. Individuals were more likely to rub their faces or shake their feet if they interacted with someone who was performing that behavior. Such an effect is assumed to serve an adaptive function by facilitating smooth social interaction through increases in liking between individuals involved in the interactions; thus, it may occur automatically to aid these interactions. These findings are consistent with the notion that there is a motivational component

to automatic social behavior. Cesario, Plaks, and Higgins (2006) argued that people use stored information about social groups to prepare for appropriate interactions with a group member. Automatic social behavior that stems from the activation of such information is the result of perceivers preparing for the interaction. Consistent with this point of view, participants primed with "gay men" (a negatively evaluated outgroup) displayed hostility, a behavior consistent with the motivated preparation account rather than the direct expression account of automatic behavior (which would have elicited stereotype-consistent behaviors, or passivity and femininity in response to this prime). In addition, participants primed with "elderly" were more likely to walk slowly if they displayed implicit liking for the elderly, whereas participants who displayed implicit disliking for the elderly were more likely to walk fast. Such findings suggest that participants were motivated to prepare for social interactions after the activation of social categories. These effects are not restricted to common social groups, but social groups tend to be among the dimensions of social life that provide clear and consensual stereotypes and may be particularly effective at producing a connection to oneself.

Self-Motives and Goal Pursuits

As illustrated in the work we just described, research on self and identity over the past two decades has put a greater emphasis than before on the motivational mechanisms that propel social behavior. Relevant to our aims in the present chapter, research suggests that defending one's self-view may stem from a discrepancy between implicit and explicit self-esteem. Of particular interest is the case of individuals who hold relatively high explicit self-esteem and relatively low implicit self-esteem. This form of discrepancy has been characterized as *defensive high self-esteem* (as compared to *secure high self-esteem*) because these individuals tend to have high levels of narcissism and to engage in defensive behaviors including intergroup biases (Jordan, Spencer, & Zanna, 2005; Jordan, Spencer, Zanna, Hoshino-Browne, & Correll, 2003). As a result of the discrepancy in implicit and explicit self-esteem, in-

individuals may be motivated to denigrate outgroups when they are threatened, in order to feel better about themselves. Ironically, this phenomenon is likely to occur when European American participants are told that the IAT assesses racial bias (Frantz, Cuddy, Burnett, Ray, & Hart, 2004). Under these circumstances, participants showed greater racial bias than did participants who believed that the IAT assessed cultural bias. When the discrepancy between implicit and explicit self-esteem seeps into consciousness, individuals may experience self-doubts and may engage in enhanced processing of discrepancy-related information to resolve the discrepancy (Briiiol, Petty, & Wheeler, 2006). To relieve their doubts, they may pay more careful attention to relevant information in order to better understand the reasons for the discrepancy. The discrepancy between implicit and explicit self-esteem might be exacerbated under threatening situations. For instance, when male participants were told that they were gender-deviant or experienced social rejection, they showed an increase in their implicit self-esteem but not in their explicit self-esteem, suggesting that *implicit self-esteem compensation* may serve to protect the self and may reduce anxiety (Rudman, Dohn, & Fairchild, 2007). Although the psychological underpinnings of implicit-explicit discrepancies in self-evaluations are not fully understood yet, growing evidence suggests that the combination of high explicit self-esteem and low implicit self-esteem fosters defensiveness and compensatory self-enhancement activities (see also Bosson, Brown, Zeigler-Hill, & Swann, 2003; Kernis, Abend, Goldman, Shrira, Paradise, & Hampton, 2005; Kernis, Lakey, & Heppner, 2008; McGregor & Jordan, 2007; Schmeichel et al., 2009).

In terms of goals, work based on Bargh's (1990) auto-motives model is centrally relevant to the present discussion, beginning with the idea that goal pursuits can occur automatically and nonconsciously. Goals activated outside of awareness, control, or intention are pursued similarly to goals chosen through deliberate or conscious means. For example, Chartrand and Bargh (1996) demonstrated that information-processing goals, such as impression formation or memorization, can be automatically activated and pursued. Individuals primed nonconsciously

with an achievement goal performed better on an achievement task and were more likely to persist at the task than individuals who were not primed with such a goal (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001). In the same vein, when primed with various interpersonal relationships, people pursued goals related to those relationships, such as understanding their relationship partners' behaviors (Fitzsimons & Bargh, 2003). For example, although people have a strong tendency to generate dispositional (vs. situational) explanations for others' behavior, there is evidence that when properly motivated, people can overcome this tendency. In addition, people may be especially motivated to find situational explanations for their close relationship partners' behavior. Thus, when subliminally primed with their best friend's name, people were more likely to search for situational (vs. dispositional) causes for behavior in an unrelated attribution task. In other words, the mere psychological presence of a relationship partner led people to engage in goal-directed behavior.

Researchers have documented boundary conditions of goal-priming effects. For example, individuals ceased to pursue nonconsciously primed goals when these goals were coactivated with negatively valenced information (Aarts, Custers, & Holland, 2007). Thus, not only can goal-directed behaviors be initiated outside of conscious awareness or control, but the cessation of goal-directed behaviors can be triggered by the nonconscious processing of affective information.

Overall, the research reviewed here highlights the similarities between conscious and nonconscious self-motives or goals, with implications for interpreting research using implicit measurement. Research on self and identity has documented the pervasiveness of self-presentational concerns (Leary, 1995), and a common claim is that techniques assessing implicit attitudes or beliefs are usually free of self-presentational concerns. However, such an argument assumes that when people try to make a good impression, they ,...!... "-:... Brauer, &, are fully aware of doing so. Research raises the possibility that such implicit self-motives and goals may operate unconsciously, and that self-presentation itself is a complex process that may include strategic components that are inaccessible to conscious awareness

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and control (Schlenker, Chapter 25, this volume).

Societal and Cultural Foundations

We now turn our attention to the influence of societal and cultural factors on implicit identities. We have indicated already that stereotypes about social groups have an impact on the implicit self. Similarly, automatic associations involving the self often reflect an internalization of cultural stereotypes. We begin with the premise that more often than not, relations between groups are hierarchically organized (Sidanius & Pratto, 1999). In other words, social groups rarely occupy interchangeable positions, and groups that enjoy greater social favors usually remain in that position for extended periods, whatever may be the criteria that characterize the hierarchy (e.g., numerical status, social status, or power).

What is the impact of these factors on social identities? To what extent do members of dominant and subordinate groups exhibit a preference for their own group? On this issue, contrasting predictions can be formulated. On the one hand, one would expect that members of subordinate groups engage in more ingroup bias than members of dominant groups. This would be consistent with the idea that people in subordinate groups have a stronger need to achieve a positive social identity, which should be satisfied by increasing favorable intergroup distinctions. On the other hand, we might hypothesize that members of subordinate groups are less likely than members of dominant groups to display a preference for their group because social conditions consistently impose a less favorable evaluation of the subordinate group. At least in the case of ethnic comparisons in the United States, the evidence at hand seems to support the first alternative. For instance, African Americans often display more ethnocentric intergroup perceptions than European Americans (e.g., Judd, Park, Ryan, Brauer, & Kraus, 1995).

However, a different pattern of findings has emerged with some regularity when implicit social identity has been examined. Data collected through the Project Implicit website (*implicit.harvard.edu*) provide some insights on this issue (Nosek, Smyth, et al.,

2007): On a measure of explicit attitudes, European American respondents reported a preference for the group "European Americans" over the group "African Americans" ($d = 0.55$), and African American respondents reported an opposite and even stronger preference for their own group ($d = -0.93$). The strong explicit liking reported by African American respondents stands in sharp contrast to performance on the implicit measure. Unlike European American respondents, who continued to show a strong preference for "European Americans" over "African Americans" on the implicit measure of attitudes ($d = 1.00$), African American respondents showed no such systematic preference ($d = -0.05$).

Results from laboratory data confirm and extend these findings (Livingston, 2002): African Americans who believed that their group was held in low regard by mainstream American society did not exhibit an ingroup bias at the implicit level, only at the explicit level. African American students exhibited implicit liking and identification with their own ethnic group only when they believed that European Americans held African Americans in positive regard. In another intergroup context, Jost, Pelham, and Carvallo (2002) found that students from both high- and low-status universities implicitly associated academic characteristics with the higher-status group, and extracurricular activities with the lower-status group. Moreover, students from the high-status university exhibited significant ingroup favoritism on an implicit measure, whereas students from the low-status university did not. When dominant group members were compared to minority group members based on race, religion, appearance, and social class, dominant group members showed more implicit ingroup preferences than minority group members, but this difference was largest between the rich (highest-status group) and poor (lowest-status group) (Rudman, Feinberg, & Fairchild, 2002).

Together, these findings illustrate that ingroup favoritism is moderated by socio-cultural evaluations of social groups. On explicit measures, disadvantaged group members exert effort to report positive attitudes, but the lower social standing of their group is sufficiently internalized that they do not show an implicit preference for

their own group. On the other hand, advantaged group members' preferences show the combined benefit of both ingroup liking and the sociocultural advantage assigned to their group. Such results are consistent with the notion of system justification (Jost, Banaji, & Nosek, 2004), or the idea that beyond ego justification and group justification lies the more insidious tendency to justify the system or status quo, even when it reflects poorly on one's self or group. Members of dominant groups share thoughts, feelings, and behaviors that reinforce and legitimize existing social systems, which is in their interest but, surprisingly, so do members of less dominant groups. Examples reviewed in this section indicate that ideological bolstering can occur outside conscious awareness, and this prevents perceivers and even targets of prejudice from questioning the legitimacy of social arrangements. It has been argued that research underestimates ingroup favoritism among low-status groups because the most widely used measure of group attitudes, the TAT, is influenced by extrapersonal associations or cultural knowledge and, as such, is not tapping personal attitudes (Olson, Crawford, & Devlin, 2009). However, this alternative interpretation assumes a clear separation between cultural and personal knowledge that overshadows the societal foundations of implicit associations (Banaji, 2001).

Very little research has analyzed the relationship between self and identities that may be in conflict. We have chosen to study these by examining the interconnections between ethnic and national identities. The United States is a perfect testing ground because it is a pluralist society composed of identifiable ethnic groups that vary in length of association, immersion into mainstream culture, and conditions of immigration. We investigated the extent to which ethnic groups are implicitly conceived as being part of America in a culture that explicitly holds that all groups should be treated equally. We assumed that the hierarchy present in American society would structure associations between ethnicity and American identity (Sidanius & Petrocik, 2001). We hypothesized that European Americans would be unconsciously viewed as being more essentially American and as exemplifying the nation, whereas eth-

nic minorities would be placed psychologically at the margins.

Using techniques developed to assess implicit associations, we examined the extent to which various ethnic groups were associated with the concept "American" (relative to "foreign"). For example, we asked participants to pair, as quickly as possible, American or foreign symbols (e.g., flags, maps, coins, monuments) with faces that varied in ethnicity but were clearly understood to be American. Although participants were aware that all individuals were American, irrespective of ethnicity, the data consistently indicated that European Americans were more strongly associated with the concept "American" than were Asian Americans, African Americans, Latinos, and even Native Americans (Devos & Banaji, 2005; Devos, Gavin, & Quintana, 2010; Devos & Heng, 2009; Devos & Ma, 2008; Nosek, Smyth, et al., 2007; Rydell, Hamilton, & Devos, 2010). Such implicit associations are sometimes consistent with people's explicit beliefs. For example, Asian Americans and Latinos are viewed as less American than European Americans at both explicit and implicit levels of responding.

In other cases, discrepancies between explicit and implicit beliefs emerged. For example, in a domain such as track and field sports, black athletes were explicitly more strongly associated with the category "American" than were white athletes, but at an automatic level, it remained easier to link the concept "American" with white athletes than with black athletes (Devos & Banaji, 2005). This American = white effect was obtained even when known Asian American exemplars were contrasted to known white foreigners: Even though people were fully aware that someone such as Kate Winslet is not American, and that Lucy Liu is American, the white + American connection was not eradicated (Devos & Ma, 2008). We conclude from these studies that the national identity of being American is associated with the ethnic identity of being white, and even when it is consciously rejected, this association is strong at the implicit level.

Research examining the impact of participants' ethnic identity on implicit ethnic-American associations has revealed that Asian American and Latino participants

view their own group as being less American than the group "European American," showing an internalization that is detrimental to their personal and group interests (Devos & Banaji, 2005; Devos et al., 2010). Indeed, such implicit associations potentially hurt their national identity. African American participants, on the other hand, perceived their own group to be as American as the dominant group. In addition, the propensity to link "white" and "American" was positively correlated with the strength of national identification (self + American) for European American participants, but it was not related to national identification for Asian American and Latino participants (Devos & Banaji, 2005; Devos et al., 2010). In other words, ethnic-national associations account for the merging of ethnic and national identifications for European Americans, but there is a relative dissociation between ethnic and national attachments for Asian Americans and Latinos.

Interestingly, similar research conducted in New Zealand revealed a different pattern of ethnic-national associations (Sibley & Liu, 2007). European and Maori New Zealanders were explicitly and implicitly equally associated with the New Zealand national identity. There was a small tendency for European New Zealanders to associate their ingroup more strongly with the national identity, but this effect disappeared when pictures of famous European and Maori rugby players were used as stimuli. Variations across ethnic groups or national contexts are consistent with the notion that implicit associations are rooted in experiences, bear the mark of cultural socialization, and reflect sociocultural realities.

Research on culture and self-concept shows that members of different cultures often define and evaluate the self in different ways (Cross & Gore, Chapter 27, this volume). A major distinction in cross-cultural psychology is between collectivist and individualist societies (Triandis, McCusker, & Hui, 1990). In collectivist cultures, people define themselves as members of groups, subordinate their personal goals to group goals, and show strong emotional attachment to the group. In individualist cultures, people place a strong emphasis on self-reliance, individual achievement, and personal goals.

In their work on the self-concept, Markus and Kitayama (1991) argued that the self is defined in terms of interdependence in Asian cultures. In other words, the self is inherently collective in these cultures. In contrast, the typically Western conception of self is one in which individuals see themselves as distinct and independent from others. In a pioneering series of studies, Hetts, Sakuma, and Pelham (1999) used this distinction to compare the implicit and explicit self-concepts of people who varied in their exposure to individualistic cultures but were currently living in the same culture. They examined the extent to which explicit and implicit self-evaluations of recent Asian immigrants differed from those of European Americans and Asian Americans reared in the United States. At the explicit level, they found little difference between these groups. In particular, Easterners emigrating to a Western culture seemed to endorse the kind of self-concept promoted in individualistic societies. However, a different picture emerged at the implicit level. Using response latency and word-completion techniques, Hetts and colleagues found strong differences between groups in terms of personal versus group regard. For people reared in an individualistic culture, ideas that were automatically associated with the individual and collective identities were relatively positive. For people socialized in a collectivistic culture, the group or collective identity automatically elicited positive thoughts, but ideas tied to individual identity were neutral, ambivalent, or even negative. Such discoveries are consistent with the idea that the need for positive self-regard is expressed through social or collective identities in some cultures, and in individualistic ways in others. The cultural context can overshadow differences in cultural experiences when measured through explicit self-evaluations, but implicit self-evaluations reveal the mark of cultural socialization.

More recent investigations have focused on culture and self-esteem, and the overall pattern is that at the explicit level, Westerners have higher self-esteem than East Asians, whereas at the implicit level, there are no significant cross-cultural differences in self-esteem (e.g., Boucher, Peng, Shi, & Wang, 2009; Falk, Heine, Yuki, & Take-

mura, 2009; Heine & Hamamura, 2007; Yamaguchi et al., 2007). This also extends to another aspect of the self-concept, namely, *self-enhancement*, or the motivation to view oneself positively. For example, Heine and Hamamura (2007) conducted a meta-analysis of 91 cross-cultural comparisons between East Asians and Westerners on self-enhancement. On average, Westerners showed a clear self-serving bias ($d = 0.87$), but East Asians did not ($d = -0.01$). However, these cultural differences disappeared when results were separated by implicit versus explicit measurement: The average cultural difference between East Asians and Westerners was very large ($d = 0.83$ to 0.91) on 30 different explicit measures of self-enhancement, whereas the average cultural difference was very small ($d = 0.12$) when implicit measures of self-enhancement were used.

In summary, findings on self-enhancement and self-esteem point to differential cultural influences on the content of implicit attitudes about the self and the explicit expression of those attitudes. These results may be taken as evidence that implicit self-evaluations are less influenced by normative demands than their explicit counterparts. This being said, researchers are only beginning to grasp the complexities of cultural influences on implicit and explicit self-definitions, and work in this area often challenges common assumptions about cultural differences (e.g., Kitayama & Uchida, 2003; Kobayashi & Greenwald, 2003).

Implicit and Explicit Self-Concept

So far, we have emphasized research demonstrating that self-related processes can occur unconsciously or automatically. On several occasions, we have pointed out that findings at the implicit level converge with observations based on self-report measures. In other cases, we have stressed the fact that investigations of unconscious or automatic processes reveal a different picture than assessments of explicit self-concepts or identities. In this section, we examine how implicit and explicit self-related processes might be intertwined.

According to a recent meta-analysis, on average, the magnitude of the relationship

between implicit and explicit measures is small (Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005). More importantly, there is sometimes extreme variability in the magnitude of correlations between implicit and explicit measures, pointing to the need to identify factors moderating the relationship (Nosek, 2005). *Self-presentation* is the attempt to alter or mask a response for social or personal purposes, and people may be motivated to hide an identity that they do not want others to know for a variety of reasons (e.g., a Republican student on a liberal college campus, a gay man who has not revealed his sexual orientation at work). Because implicit measures are less vulnerable to deliberate control than explicit measures, when self-presentation concerns are high, the discrepancy between implicit and explicit reports is expected to increase. Another possible moderator of the relationship between implicit and explicit measures is the dimensionality or structure of the construct being assessed. Research conducted on the evaluations of a wide range of social objects has documented a greater correspondence between implicit and explicit attitudes when the attitude objects could be evaluated along a bipolar continuum (e.g., gun control vs. gun rights) than when they could not be appraised using a simple structure (e.g., being pro-women does not imply being anti-men; Nosek, 2005). From an information-processing perspective, responses regarding attitudes or identities with a simple, bipolar structure are easier and faster to make, whereas multidimensional attitudes or identities are more complex, less stable, and more difficult to retrieve. Thus, when the identity being assessed is multidimensional, a discrepancy between implicit and explicit measures is more likely to be found.

In the domain of self and identity, most studies have examined the correspondence between implicit and explicit measures of self-esteem. For example, Bosson, Swann, and Pennebaker (2000) examined the correlations between various measures of implicit and explicit self-esteem. Although some implicit measures correlated significantly with explicit measures, the magnitude of the observed correlations was relatively small (all r 's $> .27$). Using confirmatory factor analysis, Greenwald and Farnham (2000) demonstrated that implicit self-esteem and

explicit self-esteem were distinct constructs (positively, but weakly, correlated). In addition, different measures of implicit self-esteem are often weakly intercorrelated, raising questions about their convergent validity and the dimensionality of the construct of implicit self-esteem (Rudolph, Schroder-Abe, Schutz, Gregg, & Sedikides, 2008; Sakellaropoulou & Baldwin, 2007). However, Oakes, Brown, and Cai (2008) found a greater correspondence between implicit and explicit self-esteem when the implicit measure was based on self-relevant (vs. self-neutral) stimuli and the explicit measure captured the affective (vs. cognitive) component of self-esteem.

Several studies support the idea that, under some circumstances, self-descriptions may switch from a controlled mode to an automatic mode. For example, more positive automatic self-evaluations are obtained when participants are emotionally aroused or when their attentional capacity is reduced due to increased cognitive load (Paulhus, Graf, & Van Selst, 1989; Paulhus & Levitt, 1987). In related research, Koole and colleagues (2001) found that the opportunity to engage in conscious self-reflection affected the degree of congruence between implicit self-esteem and self-reported evaluations of the self. For example, slow self-evaluations were less congruent with implicit self-evaluation than fast self-evaluations. Similarly, when participants were under high cognitive load, implicit self-evaluations predicted self-reported evaluations, but that was not the case when cognitive resources were available (low cognitive load). These findings support the idea that when the capacity or the motivation to engage in conscious self-reflection is low, implicit, automatic self-evaluations are activated. More recently, Jordan, Whitfield, and Ziegler-Hill (2007) have shown that trust in one's intuitions moderates the relationship between implicit and explicit self-esteem: People who have faith in their intuitions (i.e., who are more likely to view their intuitions as valid) display more consistent implicit and explicit self-esteem than people who have less faith in their intuitions.

In summary, the evidence suggests that implicit and explicit self-concepts are distinct constructs, although, at least under some circumstances, connections may be detected.

An important challenge for future research is to understand the similarities and differences between implicit and explicit measures of self and identity, and to identify the circumstances under which these two types of measures yield convergent versus divergent responses. In this spirit, researchers have started to explore the predictive validity of implicit and explicit measures of self-esteem or self-concept. In a pioneering experiment, Spalding and Hardin (1999) found that implicit self-esteem accounted for the extent to which participants behaved anxiously in an interview situation (as rated by the interviewer). Explicit self-esteem did not predict participants' apparent anxiety, but it was related to participants' own ratings of anxiety. In a similar vein, Asendorpf, Banse, and Mucke (2002) showed that an implicit measure of self-concept (self + shy association) accounted for spontaneous behavioral responses in a realistic situation, whereas a parallel explicit measure did not. These findings demonstrate the predictive validity of implicit measures of self-concept and attitude (see also Back, Schmukle, & Egloff, 2009; Egloff, & Schmukle, 2002; Greenwald, Poehlman, Uhlmann, & Banaji, 2009).

Conclusion

The question of how we know ourselves and what we know about ourselves is of fundamental interest to understanding how self-knowledge is represented, the degree to which such knowledge is constructed in social context, and its implications for health and well-being. Yet the epistemological quagmire inherent in the empirical assessment of knowledge about oneself has always posed a problem, as noted at the start of this chapter. We suggested that analyses of unconscious self-processes may assist in this regard, and we focused on the social aspect of self and identity, focusing our attention on a particular aspect of the self—one that emerges in the context of social group memberships. From the initial research using implicit or indirect measures of self and identity, we already have evidence about the role of social group membership in creating a sense of self and self-worth.

The work reviewed in this chapter raised issues that are increasingly incorporated into

our understanding of the self. Processes that capture group identity can operate without introspective access or deliberative thought. Group identity and even knowledge about social groups (that is automatically learned even if consciously denied) can have indirect influences on people's judgments about themselves. An unspoken assumption has been that implicit attitudes, beliefs, and motives about oneself are hard to change given that they are overlearned associations about a well-known object. Several findings reported in this chapter would suggest, to the contrary, that implicit associations are not rigid, and that shifts in self-definitions and self-evaluations can occur without conscious awareness or intention. Situational or contextual manipulations reveal the plasticity of self-related implicit social cognition. Finally, several lines of research reported in this chapter show the subtle but crucial ways in which sociocultural variables shape self-related mental processes. In many instances, sociostructural influences on psychological processes become more obvious when research is focused on the nitty-gritty of mental processes that are not consciously accessible but may nevertheless be found using indirect measures. In that regard, work on implicit processes promises to renew thinking about the obvious interplay among the psychological and the social, the individual, and the collective.

Acknowledgments

Preparation of this chapter was supported by National Institute of Mental Health Grant Nos. R24 MH 065515 and 3R24 MH 065515-06S1.

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