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Handbook of Self and Identity

SECOND EDITION

Edited by
Mark R. Leary
June Price Tangney

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To Mike Kernis and Fred Rhodewalt,
whose enthusiasm, warmth, and contributions
to the psychology of the self are sorely missed

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CHAPTER 4

Self, Self-Concept, and Identity

Daphna Oyserman
Kristen Elmore
George Smith

Want a burger and fries or softly steamed fish and fungi? How about offering a bribe to win that contract? Feel like bungee jumping? People believe that they do not need to seriously weigh the pros and cons of these choices before deciding, that their identities provide a meaning-making anchor. They know who they are, and who they are directs their choices. In that sense, choices large and small feel *identity-based* and *identity-congruent*.

Identities are the traits and characteristics, social relations, roles, and social group memberships that define who one is. Identities can be focused on the past—what used to be true of one, the present—what is true of one now, or the future—the person one expects or wishes to become, the person one feels obligated to try to become, or the person one fears one may become. Identities are orienting, they provide a meaning-making lens and focus one's attention on some but not other features of the immediate context (Oyserman, 2007, 2009a, 2009b). Together, identities make up one's *self-concept*—variously described as what comes to mind when one thinks of oneself (Neisser, 1993; Stets & Burke, 2003; Stryker, 1980; Tajfel, 1981), one's theory of one's personality (Markus & Cross, 1990), and what one believes is true of oneself (Baumeister, 1998; Forgas & Williams, 2002). In addition to self-concepts people also know themselves in other ways: They have self-images and self-feelings, as well as images drawn from the other senses—a sense of what they sound like, what they feel like tactically, a sense of their bodies in motion. Though these self-aspects were part of the initial conceptualization of what it means to have a self (James, 1890/1927), they have received less empirical attention. People feel that they know themselves, since they have a lot of experience with themselves and a huge store of autobiographical memories (Fivush, 2011).

As we outline in this chapter, this feeling of knowing is important even though the assumptions on which it is based are often faulty. Feeling that one knows oneself facilitates using the self to make sense and make choices, using the self as an important perceptual, motivational and self-regulatory tool. This feeling of knowing oneself is based in part on an assumption of stability that is central to both everyday (lay) theories about the self and more formal (social science) theories about the self. Yet as we describe in the second half of this chapter, the assumption of stability is belied by the malleability, context sensitivity, and dynamic construction of

the self as a mental construct. Identities are not the fixed markers people assume them to be but are instead dynamically constructed in the moment. Choices that feel identity-congruent in one situation do not necessarily feel identity-congruent in another situation. This flexibility is part of what makes the self useful. As noted by William James (1890/1927), thinking is for doing. People are pragmatic reasoners, sensitively attuned to the contextual affordances and constraints in their immediate surroundings, though not necessarily to the source of these influences on their judgments and behavior (e.g., Schwarz, 2002, 2007, 2010). People do not simply respond to contextual cues; rather, their responses are both moderated and mediated by the effect of these cues on who they are in the moment (Oyserman, 2007, 2009a, 2009b; Smeesters, Wheeler, & Kay, 2010).

In this chapter, we consider these two core issues—the feeling of knowing oneself and the dynamic construction of who one is in the moment. We suggest that the self is an important motivational tool both because the self feels like a stable anchor, and because the identities that constitute the self are, in fact, dynamically constructed in context. The self is useful because people look to their identities in making choices and because these identities are situated, pragmatic, and attuned to the affordances and constraints of the immediate context.

For ease, we divide this chapter into sections. In the first section (Setting the Stage), we briefly operationalize what is meant by self and identity, drawing on other reviews from both sociological and psychological perspectives (e.g., annual review and other large summaries: Brewer, 1991; Callero, 2003; Elliot, 2001; Markus & Wurf, 1987; Owens, Robinson, & Smith-Lovin, 2010; Oyserman, 2007). In the second section (Understanding Process), we consider what the self is assumed to be—a stable yet malleable mental construct, and what gaps remain in how the self is studied. In the third section (Thinking Is for Doing), we address the basis for future research, and in the fourth section (Dynamic Construction), we outline predictions about what the pragmatic, situated, experiential, and embodied nature of mental processing imply for self and identity. Our final section (Wrapping Up and Moving Forward) provides a bulleted summary and highlights what we see as important new directions.

Setting the Stage

A number of years ago McGuire and McGuire (1988) cheerfully noted that the academic literature on the self is dull even though the topic is interesting; they call this the anti-Midas touch. In a reversal of Rumpelstiltskin's task, self-researchers somehow managed to spin piles of boring hay from the sparkling gold of their topic. A generation later, readers of the literature may still search for the gold in vain. Self and identity remain topics of high interest not only for psychologists, but also across the social sciences—psychologists, sociologists, anthropologists, political scientists, and even economists make reference to self and identity. Google Scholar yields 3 million citations, and limiting focus to professional search engines (the Web of Science, PsycINFO) still yields tens of thousands of articles in which self-concept or identity are included as key words. This unwieldy mass includes both studies in which self and identity are asserted as explanatory factors and in which something is empirically assessed or manipulated and described as some aspect of self or identity.

So what is this self (or identity) that is so important? Self and identity researchers have long believed that the self is both a product of situations and a shaper of behavior in situations. Making sense of oneself—who one is, was, and may become, and therefore the path one should take in the world—is a core self-project. Self and identity theories assume that people care about themselves, want to know who they are, and can use this self-knowledge to make sense of the world. Self and identity are predicted to influence what people are motivated to do, how they think and make sense of themselves and others, the actions they take, and their feelings and ability to control or regulate themselves (e.g., for conceptual models, see Baumeister, 1998; Brewer, 1991; Brown, 1998; Carver & Scheier, 1990; Higgins, 1987, 1989; Oyserman, 2007).

In this section we provide a set of brief operationalizations. Our goal is to provide some clarity with a number of caveats. First, self and identity are sometimes used inter-

changeably and other times used to refer to different things. Second, what self and identity refer to differs both across and within publications. Third, this ambiguity extends to whether the self and identity in the singular or plural; that is, whether there is one or multiple selves, identities, and self-concepts. Relevant reviews highlighting these issues from a sociological perspective (e.g., Callero, 2003; Owens et al., 2010), from a social identity perspective (e.g., Brewer, 1991; Ellmers, Spears, & Doosje, 2002), and from a social and personality psychology perspective (e.g., Baumeister, 1998; Markus & Wurf, 1987; Sedikides & Brewer, 2001; Swann & Bosson, 2010) provide some sense of the breadth of the topic. Our goal is not to attempt to revisit all of the issues raised in these reviews but rather to provide a working outline of the constructs in order to highlight ways forward in research. Like McGuire and McGuire (1988) our goal is to shed light on the gold—what makes the self so indispensible to understanding how people live in the world, make choices, and make meaning of their experience.

Basic Operationalization

Self

In common discourse, the term *self* often refers to a warm sense or a warm feeling that something is "about me" or "about us." Reflecting on oneself is both a common activity and a mental feat. It requires that there is an "I" that can consider an object that is "me." The term *self* includes both the actor who thinks ("I am thinking") and the object of thinking ("about me"). Moreover, the actor both is able to think and is aware of doing so. As the philosopher John Locke famously asserted, "I think, therefore I am." Awareness of having thoughts matters.

Another way to denote these three aspects (thinking, being aware of thinking, and taking the self as an object for thinking) is to use the term *reflexive capacity* (Kihlstrom, Beer, & Klein, 2003; Lewis, 1990). Rather than attempt to distinguish between the mental content (*me*) and the aspects of the mental capacity of thinking (*I*), modern use of the term *self* includes all these elements (Baumeister, 1998; Callero, 2003; Kihlstrom et al., 2003; Markus & Wurf, 1987; Owens et al., 2010). While theories converge on the notion that reflexive capacity is critical to having a self, theories diverge in how memory is considered in service of sustaining the self. On the one hand, the self can be considered primarily a memory structure such that the *me* aspect of self has existence outside of particular contexts and social structures. In contrast, the self can be considered primarily a cognitive capacity such that what constitutes the *me* aspect of self is created inside of and embedded within moment-to-moment situations. From the latter perspective, what is stable is not recalled content but rather the motivation to use the self to make meaning; memory is used but the *me* self is not stable.

While in some ways helpful, the shorthand *me* can inadvertently limit focus of attention to one way of conceiving the self—what cultural and clinical psychologists might call an *immersed individualistic* sense of self. While less studied, people can think of themselves in different ways. An individualistic perspective focuses on how one is separate and different from others, but people can also consider how they are similar and connected via relationships (sometimes called a *collectivistic perspective*). An immersed perspective focuses on the self up close and from inside the mind's eye, but people can also consider themselves in other ways. They can consider how they might look from a distance, how they might look from the outside, in the eyes of others. Each perspective highlights and draws attention to some aspects of "*me*" and makes other aspects less likely to come to mind.

Cultural psychologists have focused attention on between-society differences in the likelihood of focusing on the "me" versus the "us" aspects of the self (Markus & Oyserman, 1989; Oyserman, 1993; Triandis, 1989). For example, Americans are described as more likely than East Asians to take a "me" perspective (Markus & Kitayama, 1991). In contrast, social identity researchers demonstrate that whether one takes a "me" or an "us" perspective is not fixed by culture but influenced by context (Brewer, 1991; Brewer & Gardner, 1996; Hogg, 2003, 2006). More situated approaches demonstrate empirically that small shifts in contexts influence whether anyone, American or East Asian, takes on "me" or "us" perspectives (for reviews,

see Oyserman, 2007, in press; Oyserman & Lee, 2008a, 2008b; Oyserman & Sorensen, 2009). Taking on a "me" or an "us" perspective influences perception and mental procedures more generally, as we discuss in the section on self-concept.

In addition to being able to take both a separated and a connected perspective on the self, people can also consider themselves from immersed or distal perspectives (Kross, 2009; Kross, Ayduk, & Mischel, 2005). That is, people can consider themselves as actors buffeted by others and situations (Jones & Nisbett, 1972); conversely, they can take a step back and consider themselves from a more distal perspective. People can consider what others might be observing about them, seeing themselves, as it were, through the eyes of others (Cohen & Gunz, 2002). Memories include both close and distal perspectives, termed *field* and *observer memories* by Nigro and Neisser (1983). In observer memories, the actor takes the perspective of an observer, seeing oneself from the outside; this is not the case for field memories, which are from the original perspective of the actor. Switching perspective is consequential. Thus, thinking about the self from a more distal perspective focuses attention on one's broader goals and values (Wakslak, Nussbaum, Liberman, & Trope, 2008). It also reduces emotional investment in the self, reducing both rumination about the past (Kross, 2009) and perceived overlap between the self one is now and the self one will become (Pronin, Olivola, & Kennedy, 2008).

Ecologically, the two axes of self-perspective are likely related (Cohen & Gunz, 2002). Taking a relational "us" perspective on the self is likely to co-occur with taking a more distal perspective on the self to include what others might be seeing (for an applied review of the interface between culture and autobiographical memory, see Schwarz, Oyserman, & Peytcheva, 2010). However, people can be induced to take any combination of these perspectives, including the potentially less common combinations of separate "me" and temporal distal observer perspective, or relational "us" and close immersed perspective. Because they are able to reflect on themselves over time and from multiple perspectives, people can evaluate themselves using multiple standards, predict how social interactions will go, and self-regulate by acting in ways that facilitate future self-needs and wants. In that sense, there is not a single *me* but multiple me's, or at least multiple facets to each me. Rather than consider these multiple selves, we propose considering each of these as structuring self-concepts, as we explain next.

Self-Concept

Self-concepts are cognitive *structures* that can include content, attitudes, or evaluative judgments and are used to make sense of the world, focus attention on one's goals, and protect one's sense of basic worth (Oyserman & Markus, 1998). Thus, if the self is an "I" that thinks and a "me" that is the content of those thoughts, one important part of this "me" content involves mental concepts or ideas of who one is, was, and will become. These mental concepts are the content of self-concept.

While we focus on the structural aspect of self-concept (e.g., individualistic, collectivistic, proximal immersed, distal other), much of the literature focuses on content and evaluative judgment, asking what people describe when they describe themselves and how positively they evaluate themselves. This focus on content plus evaluative judgment is quite common in research on children and adolescents, and typically involves closed-ended rating scales in a series of domains (e.g., physical appearance, athletic ability, emotional stability, peer relationships, family relationships; see Harter, Chapter 31, this volume; Marsh, 1990). However, content can be studied separately from evaluative judgment, often with open-ended probes asking people to describe their current, ideal, and ought self-concepts, or their desired and undesired possible selves (for a review of measurement of possible self-concepts, see Oyserman & Fryberg, 2006). In the same way, some research focuses explicitly on self-judgments or self-attitudes. These self-judgments are typically operationalized as self-esteem or self-efficacy and are a distilled evaluation of the person's sense of worth and competence in the world (e.g., Bandura, 1977, 2001; Crocker & Park, Chapter 15, this volume; Rosenberg, 1979).

Self-concepts also differ in how they are structured. Researchers have documented

differences in which content domains are organized together, in complexity, in how positive and negative information is stored, and in the likelihood that strategies for action are linked to self-goals. Consider first the structural implications of how content is considered. People may organize and structure their self-concepts around some domains that others commonly use to make sense of them—their race or ethnicity, their gender, their weight, their age, or their academic standing in school. If this social information is used to organize self-concept, people may be said to be schematic for the domain, which implies that they will process information that is relevant to it more quickly and efficiently and remember it better than information that is irrelevant to it (Markus, Crane, Bernstein, & Siladi, 1982). It also implies that people will act in ways that fit their schemas (Oyserman, 2008; Oyserman, Brickman, & Rhodes, 2007).

Beyond particular aspects of content, some people may feel that all aspects of the self are related; others may feel that many aspects of the self function independently (Linville, 1987). Organization may hew to valence, so that a person may compartmentalize positive and negative self-views such that evidence one is a disorganized scholar does not disturb the sense that one is bound for great glory in academia (Showers, Abramson, & Hogan, 1998).

People may have multiple self-concepts, with some better organized and articulated than others (Banaji & Prentice, 1994; Epstein, 1973; Greenwald & Banaji, 1989; Markus & Wurf, 1987; Oyserman, 2001, 2007). Structure matters, and some self-concepts effectively facilitate self-regulation, whereas others leave one vulnerable to premature goal-disengagement and battered feelings of worth and competence (Oyserman, Bybee, Terry, & Hart-Johnson, 2004; Oyserman, Harrison, & Bybee, 2001; Schwinghammer, Stapel, & Blanton, 2006).

As we noted in the section on self, people can consider themselves from a number of perspectives—the individualistic "me" self or the collectivistic "us" self, the temporally near "now" self or the temporally distal "future" self, the immersed "mind's-eye" self or the observer's "eyes of others" self. While much of the literature terms these *self*, we propose considering each of these a self-concept structure. Multiple such structures are available in memory for use, though people are likely to differ in which structures are more chronically accessible. Self-concept researchers have documented that whether people focus on social roles and relationships or individuating traits and characteristics in describing themselves depends significantly on their immediate situational cues. Researchers can easily "prime" (bring to mind) one way of thinking about self-concept or the other.

For example, just reading a paragraph with first-person singular (*I, me*) versus plural (*we, us*) pronouns, unscrambling sentences with these words, or considering differences versus similarities to one's friends and family shifts self-concept content (Trafimow, Triandis, & Goto, 1991; Triandis, 1989; for a review of the evidence, see Oyserman & Lee, 2007, 2008a, 2008b). Moreover, priming self-concept structure in this way influences not only how people think about themselves but how they think generally. For example, in one experiment, participants primed with me- or us-relevant pronouns were shown 64 unrelated objects on a page and told they would be asked to remember what they saw. They were equally good at the task but us-primed participants were better at the surprise part of the memory task in which they were unexpectedly also asked to recall where the objects were on the page (Kühnen & Oyserman, 2002). Me-primed participants remembered what they saw but not the relationships among objects (see also Oyserman, Sorensen, Reber, & Chen, 2009).

Identity

Erikson (1951, 1968) developed a widely used model of identity development that focused on development of identity via exploration and commitment. Erikson used the term *identity* in ways synonymous with what others have termed *self-concept*. However, the term *identity* can also be conceptualized as a way of making sense of some aspect or part of self-concept (Abrams, 1994; 1999; Hogg, 2003; Serpe, 1987; Stryker & Burke, 2000; Tajfel & Turner, 2004). For example, one can have a religious identity that contains relevant content and goals, such as what to do, what to value, and how to behave.

The social psychological and sociological identity literatures contrast personal and social identities, also termed *collective identities* (for a review, Brewer & Roccas, 2001; Hogg, 2003). *Social identities*, as defined by Tajfel (1981), involve the knowledge that one is a member of a group, one's feelings about group membership, and knowledge of the group's rank or status compared to other groups. Though this definition does not focus much on content of ingroup membership beyond knowledge, regard, and rank, other definitions have highlighted that social identities include content (Oyserman, 2007; Oyserman, Kemmelmeier, Fryberg, Brosh, & Hart-Johnson, 2003).

Just as there may be many self-concepts, identity theorists differ in how to conceptualize how many identities a person is likely to have. Much as James (1890/1927) described multiple selves, predicting that people have as many selves as they have interaction partners, identity and social identity theorists discuss multiple identities based in multiple situations. Identity theorists (Stryker, 1980; Stryker & Burke, 2000) focus on how cross-situational stability of identity content emerges. From this perspective, identities are distinct parts of the self-concept, the internalized meanings and expectations associated with the positions one holds in social networks and the roles one plays. In contrast, social identity theorists (Abrams, 1999; Onorato & Turner, 2002; Tajfel, 1981; Tajfel & Turner, 2004) focus on cross-situational malleability. In its strongest formulation, social identity theories predict that in each interaction, people take on a different identity (see Owens et al., 2010, for a review from a sociological perspective).

In thinking about identity content and identity function, social identity researchers sometimes focus on connection to and similarities with other ingroup members (Brewer, 2001; Oyserman et al., 2003). Other times they focus on the distinction between the ingroup and outgroup (Brewer, 2001; Spears, Gordijn, Dijksterhuis, & Stapel, 2004; Stapel & Koomen, 2001). The groups (gender, nationality, race/ethnicity, religious heritage groups, or first-year psychology majors) on which identities are based are likely to differ in their longevity and how psychologically meaningful they feel across time and situations (Brewer, 1991; Oyserman, 2007, 2009a; Sedikides & Brewer, 2001). Social identity and identity theorists also study two other kinds of identities, role identities and personal identities. *Role identities* reflect membership in particular roles (e.g., student, parent, professional) that require another person to play a complementary role. One cannot be a parent without children, a student without teachers, or a professional without clients or peers who recognize one's role. *Personal identities* reflect traits or characteristics that may feel separate from one's social and role identities or linked to some or all of these identities (for a review, see Owens et al., 2010).

Thus, personal identities refer to content quite isomorphic with what is typically referred to as *self-concept* in the psychological literature. An advantage in using the term *identity* rather than *self-concept* in this regard is that it reserves the term *self-concept* for broader perspectives, as we discussed previously—after all, being a shy person is likely to mean something different when considered as part of what makes one separate and different from others (individualistic self-concept) or as part of what makes one related and similar to others (collectivistic self-concept).

Summary

Self, self-concept, and identity can be considered as nested elements, with aspects of the "me"-forming self-concepts and identities being part of self-concepts. Yet scholars often use the terms *self* and *identity* as if they were synonyms (Swann & Bosson, 2010). Sometimes the terms are used in reference to the process of making sense of the world in terms of what matters to "me" or to the consequences of social contexts on a variety of beliefs and perceptions about the self, or simply to refer to membership in sociodemographic categories such as gender or social class (Frable, 1997). Other times what is meant is an implicit sense or a warm feeling of relevance and inclusion rather than a cold feeling of irrelevance and exclusion (see, e.g., Davies, Spencer, & Steele, 2005; Steele, Spencer, & Aronson, 2002). Thus, the terms can and often are used to explain what might be the process underlying outcomes but differ dramatically in terms of what, if anything, is assessed or manipulated.

That said, theories converge in assuming that self, self-concept, and identity come from somewhere, are stored in memory, and matter. We term these three core notions about self and identity *mental construct, social product*, and *force for action*, and discuss them in turn in the following sections. Thus, self, self-concept, and identity are mental constructs that are shaped by the contexts in which they develop and influence action. We address each of these core notions next. To accommodate this heterogeneity and still move forward in considering how self and identity may matter, in the rest of this chapter we use the phrase *self and identity* when this more general and vague usage is a better fit with the literature we are citing, and specific terms (e.g., identities) where relevant.

Self and Identity Are Mental Concepts

Self and identity theories converge in asserting that self and identity are mental constructs, that is, something represented in memory. This capacity develops early. When shown their faces in a mirror, many children age 18 months and nearly all children age 24 months touch their foreheads to remove a smudge unobtrusively produced by smearing some paint on their foreheads (Lewis & Brooks-Gunn, 1979). This response is interpreted to mean that children know what they look like and know a smudge should not be on their foreheads. This image-based self-recognition is not limited to the face; at this age toddlers also notice a sticker secretly placed on their legs (Nielsen, Suddendorf, & Slaughter, 2006).

Thus, children seem to have stored a visual image of who they are in memory. This image is likely to be quite fine-grained. For example, people prefer the visual image of themselves they are used to seeing (mirror image) to a nonmirror image (Mita, Dermer, & Knight, 1977). Other senses are also involved in mental representations of self in memory. Consider that infants begin to experience the self as physically distinct from context and as motorically acting in space (Bronson, 2000). This visceral sense of the self as a physical object having body parts and controlling action is not unique to early development (Botvinik & Cohen, 1998; Lenggenhager, Tadi, Metzinger, & Blanke, 2007). Traces of the self are believed to exist in one's handwriting, signature, bodily posture, and physical stance (Kettle & Häubl, in press). Thus, as early argued by James (1890/1927), at its core, the self is physical and material.

The emerging field of social neuroscience has attempted to pinpoint where in the brain the self resides, demonstrating different locations for self-relevant processing that is associative versus conscious and reflective (Beer, Chapter 29, this volume; Lieberman, 2007). While specificity of activity in particular neural regions is not a necessary feature of the self, the prefrontal cortex has been associated with conscious processes, and the medial wall is hypothesized to support processes related to introspection—aspects of what the self is assumed to be and do. Thus, current research programs point to frontal lobe activity as involved in cognitive processes related to the self. Activation in the anterior cingulate cortex is associated with reflecting on whether a trait is self-relevant or not (Macrae, Moran, Heatherton, Banfield, & Kelley, 2004) and with reflecting on one's own performance (Bengtsson, Dolan, & Passingham, 2011). Medial prefrontal activity connected to self-representation tasks may be visual modality–specific, at least for sighted individuals (for a review, see Ma & Han, 2011). That is, among sighted individuals, medial prefrontal activation and enhanced functional connectivity between the medial prefrontal and visual cortices occurs during self-judgments (compared to other-judgments) when trait words are shown rather than heard (Ma & Han, 2011).

However, self-concept research typically focuses on semantic memory rather than localization in the brain. Children rapidly develop both language and cognitive capacities, and with these capacities come language-based autobiographical memories (Fivush & Hammond, 1990). Organizing their memories with social norms of what matters and how to make sense, children can begin to create a semantic rather than visceral sense of self—what one does, what one is supposed to do (Fivush & Hammond, 1990; see also Harter, 2003; Harter, Chapter 31, this volume). Self-concept research has typically focused on children's capacity to describe and rate themselves across multiple dimensions. For example, by second grade children can report on multiple dimensions

of their self-concept (Marsh, Barnes, Cairns, & Tidman, 1984). Teens are able to articulate that they act and feel differently about themselves in different roles and contexts (Harter, Bresnick, Bouchey, & Whitesell, 1997; McConnell, 2011). The method used, rating scales, implies that the mental concept being studied is a set of ratings. Indeed, much self-concept research assumes that explicit self-report of the self as an attitude object is useful, implying that self-concept is stable, chronically accessible in memory, and accessed in the same way across situations. However, as discussed in the third section (Thinking is for Doing), each of these assumptions is open to question (Schwarz, 2007; Strack & Deutsch, 2004).

Self and Identity Are Social Products

Self and identity theories converge in grounding self and identity in social context. Contextual effects on the self may be distal—parenting practices, schooling, the culture, the time and place in which one lives, the experiences one has had early in life. Contextual effects on the self also may be proximal—the psychological implications of the immediate situations one is in (e.g., for reviews, see Hogg, 2003, 2006; Oyserman & Markus, 1993, 1998; Tajfel & Turner, 2004). Models differ in what context refers to. Some focus on macro-level contexts, especially the historical epoch, society, and culture within which one lives. Empirical analysis of effects at this level can involve historical and cross-group comparisons but is also amenable to experimental priming techniques (see, e.g., Oyserman & Lee, 2007, 2008a, 2008b; Oyserman & Uskul, 2008). Contexts can also be at a middle level; these contexts include family, school, and neighborhood, and the family processes and socialization practices with which one grew up. Here, too, analyses may be descriptive, comparative, or experimental (see, e.g., Chen & Chen, 2010; Oyserman & Yoon, 2009). Finally context may be more micro-level, the day-by-day, moment-to-moment situations one experiences because of these structures and institutions.

Each of these levels of analyses has roots in both psychological and sociological perspectives as described early on by James (1890/1927), Cooley (1902) and Mead (1934). Cooley's description of the *looking glass self* encapsulates James's (1890/1927) insight that how others see the self matters, suggesting that reflected appraisals, whether they reinforce or undermine one's self images, are important building blocks for the self. A large body of research has examined this assumption. Results support the social construction of self by showing that people do generally incorporate what they *think* others think of them in the self, though self-views are typically more positive than others' views (for summaries and original research, see Felson, 1993; Shrauger & Schoeneman, 1979).

Generally speaking, self and identity are social products in at least three ways. First, people do not create themselves from air; rather, what is possible, what is important, what needs to be explained all come from social context—from what matters to others. This means that people are likely to define themselves in terms of what is relevant in their time and place: Group memberships (e.g., religion, race, or gender), family roles, looks, school attainment, or athletic prowess should matter more or less depending on what is valued in one's culture and in one's place within social hierarchy. Second, being a self requires others who endorse and reinforce one's selfhood, who scaffold a sense that one's self matters and that one's efforts can produce results. This means that people should feel better about themselves, more capable of attaining their goals, and so on, in contexts that provide these scaffoldings than in contexts that do not. Third, the aspects of one's self and identity that matter in the moment are determined by what is relevant in the moment.

Because getting others to endorse one's identities matters, people change their behavior to get others to view them as they view themselves (Oyserman, 2007, 2009a, 2009b). A clear way to signal an identity socially is to act in ways that are (stereotypically) congruent with it. To test whether this happens, researchers can look for or create situations in which an important identity is ambiguous or actively undermined and see if people are more likely to act in ways that fit stereotypes in these circumstances. For example, black children who are worried that they are not viewed as African American and Asian Americans who are worried

that they are not viewed as Americans may choose to act in ways that help them fit in. To test this prediction, in one set of studies, the in-class behavior, friendship choices, and school grades of African American and Latino American middle school students were assessed (Oyserman, Brickman, Bybee, & Celious, 2006). The prediction was that children who did not believe they looked like ingroup members would be more likely to act in ways (stereotypically) congruent with their racial/ethnic identity because by acting like a (stereotypical) ingroup member they could convince others that they held the identity. Indeed, compared to dark skin-toned African Americans, light skin-toned African Americans reported feeling less socially accepted. This felt lack of acceptance translated to action; their report cards showed poorer academic attainment and teachers rated them as misbehaving in class more. Similar effects were found for Latino children who said they did not look Latino. These children chose less academically oriented peers as friends, attained worse grades, and were more likely to misbehave in class. Friendship choice mediated effects of "looking Latino" on academic performance. Fitting into the group they perceived as "acting" (stereotypically) like the ingroup mattered.

Rather than focus on school behavior, another set of studies focused on food choices (Guendelman, Cheryan, & Monin, 2011). To test the prediction that people will act in ways that (stereotypically) fit an ambiguous or undermined identity, these authors randomly assigned Asian American college student participants to either be welcomed to the study without comment or to first be queried as to whether they were American. The query regarding their American identity mattered. Asian Americans who were first asked if they were American chose more prototypically American foods to eat and said they liked these foods more than those who were not first asked if they were American. This occurred even though the American foods were less healthy than the Asian ones. Thus, the answer to one of our opening questions—"Want a burger and fries or softly steamed fish and fungi?"—was not fixed but instead depended on how Asian American identity was constructed in context.

Effects are not limited to minority groups and can involve undesired as well as desired identities. British undergraduates reported intending to drink less alcohol and to engage in healthier eating during the coming week after being induced to think of themselves as British rather than American or as British people rather than college students (the latter groups were stereotyped as unhealthy; Tarrant & Butler, 2011). American undergraduates reported that they had consumed less alcohol after being exposed to flyers that depicted graduate students (negatively stereotyped as nerdy) as heavy alcohol users (Berger & Rand, 2008).

Self and Identity Are Forces for Action

A common theme among self and identity theorists is that the self matters for behavior. Yet demonstrating that how one thinks about oneself produces action rather than simply being associated with it has proven difficult. A clear way to demonstrate that the self does influence behavior is to manipulate whether and how people think about themselves, and to show that this influences their subsequent behavior. To make the self salient, participants are asked to sit in front of a mirror (Carver & Scheier, 1978) or to do something else to bring the self to mind, such as signing their name (Kettle & Häubl, in press), describing what makes them similar or different from others (Markel, 2009; Trafimow et al., 1991), or circling first-person singular pronouns (Gardner, Gabriel, & Lee, 1999; Sui & Han, 2007). Each of these paradigms shifts responses, but the specific nature of the consequences of making the self salient for action depends on the interplay between which aspects of the self are brought to mind in the context and the task at hand (Oyserman, 2007).

To examine these processes more closely, researchers often manipulate the salience of a particular aspect of the self. For example, in one study, participants were provided with rigged feedback to induce them to believe that they were generally competent or incompetent. This influenced their self-esteem, and their self-esteem influenced their subsequent prejudicial responses to others (Harmon-Jones et al., 1997, Study 1). In another study, researchers reminded participants of their identity as psychology students, then, using an elaborate cover story, led them to believe that psychology students

are neater (or less neat) than a comparison group (economics students). Students acted in ways that fit how their psychology student identity had been presented to them, coloring more neatly after reading stories about neatness ostensibly written by psychology students and more messily if these stories were attributed to economics students (Spears et al., 2004).

Some researchers go beyond documenting effects of context on self-concept or of self-concept on behavior to predict that context affects behavior by affecting self-concept content (self-concept change mediates the influence of context on behavior). For example Jiang, Cho, and Adaval (2009) manipulated context by exposing Hong Kong Chinese participants either to words and numbers related to having luck (e.g., "lucky," number strings containing 8) or to not having luck (e.g., "unlucky," number strings containing 4) either subliminally or supraliminally with a variety of cover stories. They demonstrated that both a self-rating "I am a lucky person" (Studies 1 and 2) and a risk preference (e.g., preferring a chance to save money over a sure thing; Study 3) were significantly higher for participants randomly assigned to the lucky versus the unlucky condition. Moreover, when both self-rating and a risky behavior choice were measured at the same time, the effect of condition on risk preference (e.g., willingness to pay to participate in a gamble) was mediated by a change in self-rating (Studies 3 and 4). Experiments such as these clarify that small changes in contexts do shift at least some aspects of self-views and so are a promising trend for the field. While necessarily artificial and not attempting to articulate what exactly is meant by use of the terms *self* or *identity*, experiments of this type demonstrate how contexts influence momentary perceptions about the self and identity.

To increase ecological validity, some experimenters conduct field research on the effect of identity in context. One way to examine effects of context on behavior is by asking people to consider an identity either before or after they engage in an identity-relevant behavior (Oyserman, Gant, & Ager, 1995, Study 2; Oyserman et al., 2003, Studies 2 and 3). Another possibility is to subtly prime a particular behavior as either relevant or irrelevant to a core identity such as gender (Elmore & Oyserman, in press) or, for college students, one's major (Smith & Oyserman, 2011).

For example, in a number of studies we asked students to complete a novel math task either before or after we asked them about their racial/ethnic identity (what it is, what it means in their everyday lives). In these studies, African American, Hispanic and Native American (American Indian) children mostly described their racial/ethnic identity in terms of connection to the ingroup. Some also described a connection to larger society generally or specifically reported that school attainment was part of their racial/ethnic identity. Those who did describe connection to larger society and school attainment worked harder on the math task, especially if they did the task after first considering their racial/ethnic identity (Oyserman et al., 1995, Study 2; 2003, Study 2). The results of this experimental manipulation of identity salience were replicated with Arab Israeli middle and high school students (Oyserman et al., 2003, Study 3).

Understanding Process

As demonstrated in the previous section, effectively demonstrating that the self influences action often involves manipulating which self-concept or identity comes to mind. Perhaps one of the reasons that few such studies of this nature exist is that many theories assume that the self is relatively stable. Stability can be assumed to emerge from early plasticity; that is, social contexts may shape the self as it is developing, but once developed, the self may be difficult to change. Stability can be assumed even in theoretical perspectives that articulate self-concept and identity as memory structures that are updated and revised with each use. In this section, we consider people's experience of the self as stable and ask what evidence there is for malleability and dynamic construction.

Experienced Stability

A conundrum for the study and understanding how self and identity operate is that even if self and identity change, people can still have an experience of stability, so self-report may not be helpful. Consider Plato's analogy

of a ship whose owner mends and repairs it, replacing planks as needed. Eventually all the planks are replaced. Is it the same ship? Depending on what the questioner means, the answer could be "yes" or "no." That is, the ship functions as always, so it is the same ship, even though all the components are new, so it is a different ship. The self may be considered in the same way. Over time self and identity do their job. Like Plato's ship that keeps its owner above water while getting him where he needs to go, self and identity do their job of making meaning, focusing attention, and sustaining goal-focused self-regulation. But at the same time, like the ever-changing planks, what self and identity mean may be dynamically constructed. As a result, what one focuses on, what one's goals appear to be, and how one works toward them changes as well. Self and identity continue to function, thus feeling the same, even though the content changes dramatically. Thus, a feeling of stability can emerge whether people have a motivation to perceive the self as stable or not.

The Self as a Stable Essence

People assume that people, themselves included, have a stable essence or core that predicts their behavior, that who they *are* matters for what they do, and that what they do reflects who they are (Arkes & Kajdasz, 2011; James, 1890/1927). The assumption that deeper essences constrain surface features or *psychological essentialism* is a basic cognitive organizing schema that is at the core of categorization (Medin & Ortony, 1989).

Even preschool children, age 2½, infer stability of traits in inanimate and biological categories from as little as one example (for reviews, see Gelman, 1999; Gelman & Diesendruck, 1999). For instance, they infer that flamingos but not bats feed their young mashed up food after learning that flamingos and blackbirds are in the same category (birds) and being told once that blackbirds feed their young mashed-up food. By age 5 children infer that both biological (e.g., has melatonin) and psychological (e.g., likes looking pretty) characteristics transfer across instances of a social category (Diesendruck & Eldror, 2011). By age 10 children are as willing as adults to use personality traits (e.g., generous) to predict behavioral consistency of individuals over time (Aloise, 1993; Kalish, 2002; Rholes & Ruble, 1984).

Once established, the notion of essences feels intuitively obvious, and adults are quick to infer the existence of enduring dispositions motivating people's behavior (Ross, 1977) and to infer traits from their behavior (Carlston & Skowronski, 1994). People often describe themselves in terms of stable traits (e.g., sincerity) and actions (e.g., giving loose change to homeless people) (Cousins, 1989; English & Chen, 2011; Semin, 2009). This essential sense of self appears universal although whether people use adjectives or action verbs to describe their traits, and whether they assume their traits apply within particular situations or across situations may vary cross-culturally (English & Chen, 2011, Semin, 2009; see also Cross & Gore, Chapter 27, this volume).

Is the Self Stable?

Separate from people's perceptions, it seems reasonable to ask whether the self is a stable mental construct. Most comprehensive social science theories of the self articulate both stability and fluidity as aspects of the self. Thus, identity and social identity theories describe the self as including both a stable set of evaluative standards and a fluid, ever-changing description in the moment (Turner, 1956). In some formulations, both stability and changeability have been viewed as part of maintaining a stable and positive sense of self-esteem (Tesser, 1988; Tesser & Campbell, 1983) or a stable sense of self more generally (Swann, 1983; Swann & Buhrmester, Chapter 19, this volume). Since maintaining a self-image requires doing "face work" to convince others of one's self-presentation (Goffman, 1959), proponents of some sociological perspectives have argued for stability of the self over time as a result of stability of social interactions (Serpe, 1987; Stryker, 1980). There is some support for this interpretation. For example, Serpe (1987) found that college students did not vary in how they rated six college role identities (e.g., coursework, dating) over three data points in their first semester of college, presumably because the context (college) remained the same.

One way to ask this question is whether a healthy or effective self is essentially stable

and invariant across time and situations. Some psychologists have argued that this is the case, noting that the self protects itself from change (for reviews, see Greenwald, 1980; Markus & Kunda, 1986), changing only when the conditions of life require it (Gecas, 1982; Kihlstrom & Cantor, 1984; Rosenberg, 1979; Swann 1983, 1985). If this is the case, then there should be individual differences in self-stability, and these differences should be consequential. Indeed, Kernis and colleagues (Kernis, Cornell, Sun, Berry, & Harlow, 1993; Kernis, Paradise, Whitaker, Wheatman, & Goldman, 2000) present evidence that people differ in how stable their self-esteem is and that stability is associated with well-being. Feeling that the self is not stable is in fact one of the diagnostic criteria for borderline personality disorder (Lieb, Zanarini, Schmahl, Linehan, & Bohus, 2004).

To examine resistance to change, researchers can manipulate feedback experimentally or follow people over time or compare responses of people across age groups to make inferences about time. Experimental methods typically involve two steps. Researchers first obtain self-ratings, then provide unexpected feedback. The goal is to see whether people refuse to accept feedback that does not fit their self-image. Nonexperimental methods also involve more than one step. Either the researcher tracks the same participants over time or samples participants at different ages or points in their life course to make inferences about stability.

Experiments typically indicate that people go to great lengths to protect the images they have of themselves, ignoring or reinterpreting contradictory information and distancing themselves from the source of such information (Markus, 1977; Swann, 1983, 1985). Similar stability is inferred from longitudinal and cross-sectional studies. For example, Marsh and his colleagues have examined the stability of domain-specific self-concepts, asking children, adolescents, and young adults to respond to a battery of self-report measure ratings of their abilities in a number of domains (e.g., school, peer relationships, and problem solving). Reports are relatively stable in that the participants' relative ranks remain similar over time. They also show some fluctuation, such that higher ratings are reported on average by children and later adolescents rather than middle adolescents (Marsh, 1989; Marsh, Craven, & Debus, 1998).

Research on identity development (Erikson, 1951, 1968) assumes growth toward stability; that is, though children have identities, the adolescent to adulthood transition is theorized as involving reexamination of important identities. After trying on various possibilities, adolescents and young adults are predicted to stake a claim to an identity that then remains stable. Although cognizant that identity is a context-dependent mental construct, research in this tradition manipulates neither social context to test effects on identity nor identity to test effects on behavior. Instead, the focus is on empirically testing whether identity changes over time as expected and, once an identity is committed to, whether it is stable. Researchers focus on operationalizing the process of committing to an identity and testing whether this process is best described linearly (progress toward identity commitment) or cyclically (exploration and commitment followed by return to exploration; e.g., Bosma & Kunnen, 2001; Waterman, 1999). Rather than test for stability by assessing the extent to which children, adolescents, and young adults rate their self-concepts of abilities in various domains consistently over time, these researchers use closed-ended scales of self-reported extent of exploration and engagement either in specific identities (e.g., ethnic identities; Ong, Fuller-Rowell, & Phinney, 2010) or in identity as a whole (e.g., Crocetti, Rubini, & Meeus, 2008).

So-called "stage theories" of identity development posit a fixed attitude about the self, something that is difficult to document in the attitude field as a whole (on attitudes, see Schwarz, 2007). Indeed, these theories have generally failed to find support when tested over time (Cross, Smith, & Payne, 2002). That is, people who seemed to be at one stage of identity development often report being at an earlier stage at later points in time (Cross et al., 2002; Strauss & Cross, 2005). However, stage theory research continues. For example, research on racial and ethnic identity commonly asks whether adolescents move from exploration to commitment, as would be predicted by the theory (e.g., Kiang & Fuligni, 2009; Matsunaga, Hecht, Elek, & Ndiaye, 2010).

The Self as Context Sensitive

Even though lay and theoretical perspectives focus on stability, it is possible that a stable self is not necessarily an effective self. To the extent that the self is a tool for meaning making, maintaining sense of worth, and regulating behavior, then an effective self should be sensitive to new information and so be malleable and variant across change in features of the external (time, situation) and internal (motivation) environment. The appearance of stability in empirical studies may be deceptive. Self and identity may appear quite stable or quite changeable depending on how they are assessed. For example, if features of the situation matter and if the situation is stable, self and identity will appear stable, making it impossible to learn if they are context-dependent. Moreover, since people tend to experience the self in context, they may experience stability even though which aspects of the self are salient may depend on what makes one distinctive in the moment (McGuire & McGuire, 1988), what makes one similar to others in the moment (Brewer, 1991), and one's immediate feelings about being similar or distinct (Markus & Kunda, 1986).

Empirically, it is possible to disentangle situation-based invariance from situation-based variance by manipulating situations prior to assessing self and identity. Effects can be subtle. In an early test, Markus and Kunda (1986) used an elaborate cover story to manipulate whether their white, female, American college student participants experienced their tastes and preferences (e.g., about colors, objects, clothes) as being different from or just like the tastes and preferences of others like them. They were then shown words and asked to click a button marked "me" if the word described them and a button marked "not me" if it did not. Mixed with neutral words were words evoking difference (e.g., unique, different) and similarity (e.g., average, follower). Last, participants were asked to provide their associations to six words—three relevant to being different, and three relevant to being the same as others. The manipulation did not influence how people rated themselves. They chose just as many similarity words and just as many difference words as "me" whether they had just experienced their tastes and preferences as being different or just like others. If the researchers had only measured the number of "me" responses, these results would support the prediction that self-concept is stable. Indeed, most evidence that self-concept is stable comes from repeated assessment using a measure such as that used in this study.

But the researchers in this study also obtained reaction time (how long it took to respond "me" or "not me"). The manipulation did influence speed of response. Participants made to feel similar to others were faster to endorse "me" words relating to being distinct. What comes to mind quickly may well influence behavior in the moment more than what comes to mind more slowly, so that reaction time may matter in real-world settings. Yet if the goal of research is to make predictions about how the self and identity function in real ecologies, it might be useful to study real situations rather than artificial ones.

Studying context sensitivity in school, for example, would require sampling students as they enter varying situations (e.g., the hallway, homeroom, afterschool activities, see Oyserman & Packer, 1996) or move through their social networks (e.g., Kindermann, 1993). Naturalistic studies often find surprising stability in self-concept content and high predictive power of this content over time. For example, Altschul, Oyserman, and Bybee (2006) found both stability and predictive power in their assessment of three elements of racial/ethnic identity (connectedness, awareness of racism, embedded achievement) over four measurement points. Their data collection covered 2 school years and the transition from middle to high school. Not only were the three elements of racial/ethnic identity stable over time, but higher endorsement of these three elements of racial/ethnic identity predicted better performance over time (controlling for prior performance). In another study (Oyserman, 2008), content of racial/ethnic identity in ninth grade predicted academic performance and in-class behavior 4 years later (controlling for prior performance and behavior).

These studies clearly demonstrate that self and identity matter for behavior, but do they also mean that self and identity are basically stable and not context sensitive? We argue

that naturalistic studies typically do not allow inferences about context sensitivity (or context insensitivity). It is possible that racial/ethnic identity as assessed in these studies is highly sensitive to context but that the contexts did not feel psychologically different even though assessments were obtained across different classrooms, schools, and school years. Experiments allow researchers to manipulate those aspects of context predicted to be psychologically meaningful; natural settings do not. Thus, naturalistic and experimental research on identity provide information on different questions: Does the self appear stable, and can the self be made to change?

How Strong Is Empirical Support?

A rich array of social science theories assumes that the self matters for life choices and behavior, but a similarly robust body of evidence that this is so has yet to be assembled. The theory–evidence gap means that, to date, self and identity theories may or may not provide robust models of what self and identity do and how they function. This problem has been noted in some (e.g., Banaji & Prentice, 1994; Baumeister, 1998; Markus & Wurf, 1987) but not all reviews (e.g., Callero, 2003; Stets & Burke, 2003). However, given the large number of publications evoking self and identity as explanatory factors, failing to attend to the theory–evidence gap means that the field as a whole has not made as much progress as might be hoped in understanding self and identity as mental constructs and as forces for action. This means that context effects on self and identity may or may not work as theories describe them, and self and identity may be more or less powerful as meaning-making lenses and motivators of action than theories describe. At worst, the self may not matter at all.

While research on autographical memory is continuing to grow (Fivush, 2011), the structure of self-concept(s) in memory is less understood (Greenwald & Banaji, 1989; McConnell, 2011). A main tension is between theories that assume a single hierarchically organized self-concept and theories that do not. The alternative to a single self hierarchically organized in memory could be that people have multiple, only loosely associated self-concepts stored in memory. But it could also be that people dynamically create a new self-concept each time one is called for. While appealing to a lay sense that the self must be a single entity, a single-structure model does not fit well with how memory and cognition work generally (Strack & Deutsch, 2004; Wyer & Srull, 1989), as we consider in the third section. Therefore, rather than focus on how a single *self-concept* might be structured in memory, much of the literature now focuses on "working," "online," or "active" self-concept, one's salient theory about oneself in the moment, or focuses on a particular self-concept content rather than attempting to study all self-concepts (e.g., for reviews, see Fishbach & Ferguson, 2007; Oyserman, 2007; Smeesters et al., 2010; Wheeler & DeMarree, 2009). By rooting their formulation of the self in situated and social cognition perspectives (Schwarz, 2007, 2009, 2010; Smith & Semin, 2004, 2007; Wyer & Srull, 1989), these theorists attempt to leverage social science knowledge about how the mind works to make predictions about the self as a mental construct (Oyserman, 2007; Oyserman & Destin, 2010; Wheeler, DeMarree, & Petty, 2007).

Social Comparison as Contrast

A large body of research has examined the contextualized nature of self-evaluations by setting up social comparisons. Early formulations assumed that people generally contrast themselves with others and that this can lead to better or worse self-evaluations (for reviews, see Blanton, 2001; Collins, 1996). A large number of experiments randomly assigned people to a no-comparison control, an upward comparison condition (someone more successful), or a downward comparison condition (someone less successful). Compared to no-comparison participants, those in the upward comparison condition reported more negative self-evaluations (Mussweiler, Rüter, & Epstude, 2004; Taylor & Lobel, 1989), while those in the downward comparison conditions reported more positive self-ratings (e.g., Pelham & Wachsmuth, 1995).

These results fit with social identity theorists' argument that downward outgroup comparisons contribute positively to social identity (Tajfel, 1981) and imply that people

may be motivated to find downward comparisons. But, as it turns out, people do not always contrast themselves with others. Consider the experiments conducted by Lockwood and Kunda (1997), who randomly assigned participants to either read materials about a 'superstar' student or not, and then judge their current and future selves. If people always contrast themselves to others, then the superstar comparison should have resulted in more negative self-evaluations whether considering oneself now or in the future. Indeed, students in the superstar condition did rate their current self more negatively. However, these same students rated their future possible self more positively. Why were the results different when considering one's future possible self rather than one's current self? One possibility is that in the present, participants could clearly see that they were not like the superstar, so the superstar was then a comparison standard. However, in the future, the superstar might be a role model; that is, participants might become like the superstar, so the superstar could be included in their self-judgment (see also Tesser & Collins, 1988; Tesser, Martin, & Cornell, 1996).

Incorporating Others into the Self

Rather than assume that people contrast themselves with others, a more appropriate question is under what circumstances are people likely to contrast themselves with others and under what circumstances are they likely to include others in their self-judgments? Consider the social context of school. In many urban school districts, failure rates are so high that students are likely to be aware of many other students who are doing poorly in school. If people routinely contrast themselves with others, then students in these schools should have plenty of downward social comparison opportunities and consequently judge themselves quite positively. Oyserman and colleagues (1995, Study 3) tested this prediction in a sample of students attending an urban middle school. Boys in the control condition (not assigned to a social comparison) did indeed judge themselves quite positively, rating themselves as highly likely to succeed in school in the coming year. Academic identities were just as highly positive for boys assigned to imagine someone they knew who was succeeding in school and how they were similar to this student (assimilate positive) or to imagine someone they knew who was failing in school and how they were different from this student (contrast negative). Effects were less clear for girls, who seemed more likely simply to include others in their self-ratings, reporting less optimism when considering others who were failing and more optimism when considering others who were succeeding.

One possibility is that the girls were more likely to perceive themselves as connected and related to others (i.e., have a relational self-concept; Cross & Madson, 1997; Markus & Oyserman, 1989). This interpretation was supported in a number of studies with college students in which women tended to incorporate others' academic outcomes into their academic identities (Kemmelmeier & Oyserman, 2001a, Studies 1 and 2). Women, whether sampled from an urban campus with predominantly first-generation college students or from an elite public university, rated their academic identities more negatively if they were randomly assigned first to consider their *similarities* with someone they knew who had failed (rather than consider their *differences* from this target other or make no comparison at all). These effects were especially strong if the comparison other was also a woman. Effects were in the same direction but weaker for men.

To test the possibility that these effects were due to relational self-concept, Kemmelmeier and Oyserman (2001b) assessed participants' relational self-concept (sample item: "My close relationships are an important reflection of who I am") before assigning them to either an upward comparison condition or a no-comparison control. The expected gender difference in relational self-concept was obtained (females reported being more relational than males). However, what previously seemed to be a gender effect was really a relational self-concept effect. Relational self-concept fully moderated the effect of upward comparison. Among participants low in relational self-concept, those in the experimental condition ("Think of someone who is succeeding in school") rated themselves more negatively than those in the control (no-comparison) condition. The reverse occurred for participants high in relational

self-concept; those in the experimental condition rated themselves more positively than those in the control condition.

These effects were replicated using a priming paradigm (Stapel & Koomen, 2001). After circling the words *I*, *me*, and *my* in a paragraph or unscrambling sentences including these words, participants were quicker to focus on differences between themselves and others. The reverse occurred after circling the words *we*, *our*, and *us* in a paragraph or unscrambling sentences including these words; then participants were quicker to focus on similarities between themselves and others. When primed to consider themselves relationally, participants included negative as well as positive information about the other in their self-judgments. When primed to consider themselves individualistically, participants excluded positive as well as negative information about the other from their self-judgments. Thus, effects did not seem to be motivated by a desire to enhance or feel good about the self.

Outside the laboratory, people may automatically include others with valued attributes in self and identity. For example, Cialdini and his colleagues (1976) tracked college students over a series of football weekends. On weekends in which the team won, students were more likely to wear school-theme clothing and refer to their university as "we." On weekends in which the team lost, students were less likely to wear school-theme clothing and were more likely to refer to their university as "they." People have been found to include in the self successful sports teams (Bernhardt, Dabbs, Fielden, & Lutter, 1998; Boen, Vanbeselaere, & Feys, 2002), winning politicians (Boen, Vanbeselaere, Pandelaere, et al., 2002), and successful marketers (Arnett, German, & Hunt, 2003). While in these studies people include successful and not failed others in their self-concepts, as we noted earlier, when made to feel connected, people do include both positive and negative features of others in the self.

Summary

Self and identity have been argued to be stable, as well as context sensitive. Evidence for both predictions is available. Yet simply providing supporting evidence does not address questions about process. We have just summarized evidence that people sometimes assimilate others into their self-concepts and identities, at other times contrastingly compare themselves to these others, and at still other times seem to do neither. Thus, the real question seems to be not whether context influences self-concept and identity, but how this happens. To address these issues, we return to the notion that thinking is for doing and articulate what is known about social cognition as relevant to the task of predicting how and when contexts construct online identities, and how these identities shape behavior.

Thinking Is for Doing

A recurrent theme within social psychology is that cognition is pragmatic, contextualized, and situated; that is, people think in order to act—how one thinks is profoundly shaped by the options available and what one is trying to do (Fiske, 1992). People think in contexts that are made up of others, human artifacts, physical spaces, tasks, and language (Smith & Semin, 2004). People are sensitive to meaningful features of their immediate environment and adjust their thinking and doing to what seems contextually relevant (Ferguson & Bargh, 2004; Fiske, 1992). Taken together this means that, far from being easily predictable from prior attitudes and judgments, human judgment is greatly influenced by the information accessible at the moment of decision making and what that information is taken to mean (Schwarz, 2007). Like other judgments, judgments about oneself are situated.

Moreover, mental construal matters; people act based on how a situation feels and what it seems to be "about" (Cesario, Grant, & Higgins, 2004; Higgins, 1998; Schwarz, 2007; Schwarz, Bless, Wänke, & Winkielman, 2003; Schwarz, Sanna, Skurnik, & Yoon, 2007). This implies that which identity comes to mind and what it means is dynamically constructed. While experiments manipulate salient information to test particular processes, outside the laboratory, information can become accessible through rapid, associative networks and spreading activation, as well as through deliberative reflection on images, semantic content goals, rules, and feelings (Lieberman, 2007

Strack & Deutsch, 2004). As we discuss in the section on dual processing, repeatedly accessed identities may become part of the associative network and so become rapidly accessed; however, features of the immediate situation influence which other elements of the associative network are cued. Thus, what an identity actually means is likely to differ from situation to situation.

Cognitive and behavioral adjustments to what contexts seem to be about are often automatic and outside of conscious awareness (Smith & Collins, 2010; Smith & Conrey, 2010; Smith & Semin, 2004, 2007). This means that people may experience self and identity as stable, failing to notice sensitive adjustment of identity to pragmatics of the situation. However, the effects of contextually salient information on judgment can be profound (Schwarz, et al., 2003; Wyer & Srull, 1989). Implications for self and identity research are addressed throughout this and the final section.

Inclusion–Exclusion

In the previous section, we reviewed evidence that people sometimes compare themselves to others and incorporate others into identity. People were assumed to use others automatically as a standard of comparison. Yet the evidence did not support this assumption; people sometimes included and sometimes excluded others from their judgments. To understand when people include contextually salient information into their judgments about themselves and when they exclude this information, using it to form a standard against which to judge themselves, we now turn to the social cognition literature. The *inclusion–exclusion model* makes predictions for when each process is likely to occur (Bless & Schwarz, 2010; also termed the *assimilation–contrast model*—Blanton, 2001; Schwarz et al., 2003).

The inclusion–exclusion model makes the general prediction that information that feels relevant to the judgment task can be used in formulating either a standard for judgment or the target of judgment itself. People are likely to include social information into self judgment unless the social information is marked as different enough from the self that it becomes excluded and is used as a contrasting standard. Sufficient difference from the self may be cued by information that is non-normative or extreme, and by information referring to a particular instance or exemplar rather than to a broader category. Given that a specific other person is not oneself, people include specific others in their self-judgments only if the other feels close or similar to oneself.

Consider a person listening to a lecture. She begins to wonder about herself: To what extent has she been successful in life so far, and how likely is she to succeed in the future? Whatever comes to mind is likely to be used in her self-assessments. As reviewed in Bless and Schwarz (2010), the direction of the contextual influence can be classified as assimilation or contrast. *Assimilation* occurs when the implication of salient information has a positive relationship with the resulting judgment. *Contrast* occurs when the implication of salient information has a negative relationship with the resulting judgment.

Returning to our example, contextually salient information may influence either what she understands *success* to mean in the moment (the standard of comparison) or which self-attributes come to mind in making the judgment (aspects of the target). Information that informs the standard results in a mental process of contrasting the target with the information that comes to mind. For example, the speaker may be boring or interesting; the audience may be following along avidly or nodding off apathetically. If she is at or above the standard set by the focus of her attention, she will see success as likely for her and recall her past as being pretty successful as well. Information that informs the target results in a mental process of assimilating the target to the information that comes to mind. In this case, the same speaker and audience traits will be included into her own judgment. For example, the audience may include students from her cohort or her major; the speaker may be an alumnus of the same undergraduate institution as she is or they may share other attributes (a birthday, initials, favorite color) that facilitate assimilation. Then the speaker's vitality and the audience's capacity can inform her about herself. Thus, whether a person uses contextual information as a contrasting standard on which to judge the self or assimilates contextual information into self-judgment is not a feature of the in-

formation but rather a result of how the information is construed in the moment. One important way in which this has been studied is by demonstrating that people are more likely to assimilate when primed to use a collectivistic (relational "us") self-concept and are more likely to contrast when primed to use an individualistic (separate "me") self-concept. Online sense of identity is importantly influenced by whether information in the situation is included or contrasted with the identity.

Metacognitive Experience

Metacognitive experiences—the feelings that emerge while thinking, and one's interpretation of these feelings—are another major source of construal. People assume that feelings of *fluency* (ease) or *disfluency* (difficulty) that arise in the judgment context are informative for the judgment itself. Often this may be the case. However unless provided a reason to consider source, people are not sensitive to the source of their metacognitive experiences. This means that they are likely to use even irrelevant metacognitive experiences to inform judgment (Schwarz, 2004; Schwarz & Clore, 1996).

For example, if people experience difficulty thinking of reasons they are satisfied with their marriage, they infer that they are not satisfied; if they experience difficulty reading a recipe, they infer that it is more difficult to make; if they experience difficulty reading a question, they infer that they are not confident of the answer (Schwarz 2004; Song & Schwarz, 2008a, 2008b). While these inferences may often be correct, in these experiments, difficulty was manipulated to be external to and irrelevant for the judgment: Sometimes the print font was difficult to read, other times participants were asked to list many reasons—a standard deviation more than the average person otherwise would. This was difficult. However, unless their attention was drawn to the extraneous source of their experienced difficulty, people assumed that their metacognitive experience was informative.

Much as metacognitive experience influences judgment in other domains, metacognitive experience is likely to matter in judgments of self and identity. The meaning attributed to fluency and disfluency matters, and fluency and disfluency have different effects on judgments about self and identity depending on how these feelings are interpreted. What feels right in the moment often takes on the characteristics of a percept; that is, because it is effortlessly experienced, it feels necessarily true. This feeling of effortlessness, in turn, leads to a sense that one has accessed a "true" aspect of self or identity, with the implication that the self is stable. As outlined in the next section on dual-processing models, this feeling of effortlessness may arise as a result of associative (System 1) reasoning rather than the "truth" value of the online identity. Implications of mental construal for identity are drawn out in detail in the section "Dynamic Construction."

Dual-Processing Models

While not used in theories of self and identity, dual-processing models of automatic and controlled cognition have been proposed in nearly every other domain of psychology (Chaiken & Trope 1999). Dual-processing models distinguish between two processing systems, one that is effortful and controlled and another that is effortless and automatic (Chaiken & Trope, 1999). The effortless *reflexive* system involves associative links that are turned on via spreading activation. The effortful *reflective* system involves systematic and sequential processing of information (Lieberman, 2007; Strack & Deutsch, 2004). These systems have been variously labeled System 1 and System 2 (Stanovich & West, 2000), intuition and reasoning (Kahneman, 2003), and impulsive and reflective (Strack & Deutsch, 2004), among other terms.

Earlier formulations often postulated that thinking occurs in one or the other system. This left open the question of how thinking would shift from one system to the other. Emerging evidence clarifies that thinking occurs simultaneously in both systems; that is, System 1, the reflexive system, is always at work. System 2, the reflective system, may or may not be active. It becomes active when one has the time, resources, and desire to consider carefully (Strack & Deutsch, 2004). When both systems are working, each pro-

cesses with its own style, and whether a judgment or action is produced by the processing outcome of System 1 or 2 will depend on whether action takes place immediately or later among other constraints.

Associative, reflexive thinking, the results of System 1 reasoning, feels intuitive, spontaneous, and effortless. These are the "I just feel it in my gut" kinds of thoughts. In contrast, reflective thinking, the results of System 2 reasoning, feels effortful, like the result of thinking about and applying a set of rules or explicit strategies to solve a problem. Although intuitive reasoning is sometimes associated with heuristic processing, with errors in judgment or reasoning, and with emotion-based and with nonconscious processing, the two systems differ not in consciousness or accuracy but in speed, flexibility, and, it seems, in the neural networks involved (Kahneman, 2003; Lieberman, 2007).

Because reflexive processing seems to occur without intention or effort, it has been called *natural assessment* (Tversky & Kahneman, 1983). Natural assessments include assessment of physical properties (e.g., size, distance, loudness) as well as assessment of some abstract properties, including similarity, causal propensity, surprisingness, affective valence (e.g., whether something is good or bad), and mood (Kahneman & Frederick, 2002). These natural assessments are immediately available as bases for choice and action.

In contrast, in the reflective system, behavior is elicited as a consequence of a decision process. This decision process is often assumed to take on an expectancy–value framework (Feather, 1982). Thus, before acting, a person can bring to mind how much an outcome is valued and how likely action is to produce the outcome of choice. This formulation is consistent with a number of psychological theories about goal pursuit, including theories of reasoned action (Ajzen & Fishbein, 1977), theories of planned behavior (Ajzen, 1988), theories of goal pursuit (Gollwitzer, Fujita, & Oettingen, 2004; Gollwitzer & Kirchhof, 1998), self-efficacy theories (Bandura, 1977, 2001), and expectancy–value theories (Eccles et al., 1983) that describe how the self is involved in action. It is certainly likely that sometimes people effortfully consider who they are, what their goals are and, therefore, what they should do in the moment (reflective, System 2 processing). However, it also seems likely that people often go with the flow—the typically timid may suddenly agree to bungee jumping if the associative network firing of the moment include both "me" and "not like that old fogey" (reflexive, System 1 processing). Since System 1 is always working and System 2 takes effort, people under cognitive load often process only with System 1 unless they are motivated to do otherwise, perhaps if a particularly important self-goal comes to mind.

Dual-processing models make predictions for moment-to-moment processing of information. At any moment in time, both reflexive and reflective processing may be occurring. Intentions to act in accordance with one's identity are unlikely to be carried out unless they come to mind in the moment. While planned intentions to act are likely part of the reflective system, behavior can arise from either system. Generally, percepts (either external or internally imagined) effortlessly and automatically cue a cascade of spreading activation to percepts stored in memory and associatively linked to the current percept. What comes to mind is likely to depend on which associative links have been recently activated. For example, seeing a homeless woman can cue images of one's own mother, a feared future image of oneself without tenure, or fears of crime. Both the reflexive and reflective systems are involved in processing this information. While the self was initially predicted to be located only in neural systems involved in the reflective system, the neural evidence now suggests that the self is located in neural systems involved with both reflexive and reflective processing as dual-processing models would predict (Lieberman, 2007). Sometimes people effortfully consider whether an identity describes them—drawing content from memory and planning behavior that fits who they are and who they want to become. Other times, effortful processing does not occur or is beaten to the punch line by quicker associative processing. In these situations, an identity associatively cued through spreading activation will lead to a behavior that feels right in context.

Summary

Pragmatic, contextualized, and situated approaches make two critical points. First, cognitive processes are context-sensitive and, second, context sensitivity does not depend on conscious awareness. Thinking and action are influenced by what comes to mind and feels relevant in the moment. What comes to mind is a subset of all one's existent knowledge. This means that psychologically meaningful situations influence cognition: "Cognition emerges from moment-by-moment interaction with the environment rather than proceeding in an autonomous, invariant, context-free fashion" (Smith & Semin, 2004, p. 56). Thinking is influenced by the context in which it occurs, including physical and social features of the external context, as well as the experience of thinking itself. Human thinking is not invariant and context free; rather, people think flexibly and are responsive to the immediate environment. The context sensitivity highlighted by situated approaches does not depend on conscious awareness of the impact of psychologically meaningful features of situations on cognition. Not only do situational effects not require explicit justification, but also drawing attention to the potential influence of context can change the response (e.g., Fiske, 1992; Schwarz, 2007, 2010).

The pragmatic, contextualized, and situated nature of cognition and its reliance on dual processing has a number of important implications for self and identity. First, *what* people think about themselves is influenced by meaningful features of their immediate environment. Like other judgments, judgments about the self are formed in the moment. Features of the environment simultaneously cue associative and more systematic processes, both yielding clues as to who one is and why that matters in the moment. Second, the behavioral consequences of salient aspects of identity are influenced by what the situation seems to be about. Both the content and behavioral implications of an online identity are dynamically constructed in the moment. The implications of dynamic construction for how self-concept and identities matter are articulated in more detail in the next section.

Dynamic Construction

We began our chapter with a number of core precepts, noting that self and identity theories converge in asserting that the self, self-concept, and identity are mental construals, social products, and forces for action that feel stable yet are malleable. We outlined how the terms have been used, provided examples of the evidence marshaled for each, and called into question the field's ability to move forward if it does not better integrate with emerging understanding of how the mind works, as outlined in the previous section, "Thinking Is for Doing." In this section, we consider the possibility that self-concepts and identities are not only malleable but actually dynamically constructed with each use, and the implications of this possibility for the impact of self-concepts and identities on how people think and what they do. We summarize our thoughts using the identity-based motivation model as our organizing framework (Oyserman, 2007, 2009a, 2009b).

Identity-Based Motivation

People interpret situations in ways that are congruent with their currently active identities, prefer identity-congruent actions over identity-incongruent ones, and interpret any difficulties they encounter in light of identity congruence. When action feels identity congruent, experienced difficulty in engaging in relevant behaviors simply highlights that the behavior is important and meaningful. Conversely, when action feels identity incongruent, the same difficulty suggests that engaging in these behaviors is pointless and "not for people like me." These perceptions have important downstream effects on meaning making and behavior both in the moment and over time.

The identity-based motivation model has three core postulates that can be termed *dynamic construction, action and procedural readiness*, and *interpretation of ease and difficulty*. From the first postulate (dynamic construction) comes the prediction that which identities come to mind, what these identities are taken to mean, and therefore, which behaviors are congruent with them are dynamically constructed in context (even

though identities feel stable and separate from contexts). From the second postulate (action and procedural readiness) comes the prediction that identities cue readiness to act and to make sense of the world in terms of the norms, values, and behaviors relevant to the identity. Which actions are relevant and what sense to make of situations depends on identity content, which itself is dynamically constructed.

The third postulate, interpretation of ease and difficulty, involves two aspects. With regard to the metacognitive experience of ease, the prediction is that ease in bringing to mind an identity or in performing a behavior will be interpreted as affirming the centrality of the identity and the identity relevance of the behavior. "If it feels right, it must be the true me." Unfortunately, important identities are not always easy to bring to mind, and persistently engaging in identity-relevant behaviors is rarely simple. Thus, a straightforward prediction from the identity-based motivation model is that, all things being equal, people will often fail in their pursuit of self-change. Whichever identities come to mind in the moment and whichever behaviors are easily linked to them are the ones a person will pursue. However, the second aspect of metacognitive experience is the interpretation of experienced difficulty. An identity-based motivation model predicts that the consequence of experienced difficulty will depend on the questions an experience of difficulty is used to answer, as detailed next.

Dynamic Construction

The identity-based motivation model proposes that people are motivated to interpret situations and act in ways that feel congruent with their identities. But identities are dynamically constructed, so what an identity means depends on how it is comes to mind in the moment and what difficulties working on it are taken to mean. Consider racial/ethnic identity. On the one hand, identity content is associated with larger social structure. For example, a study of the relationship between neighborhood relative segregation and racial/ethnic identity among low-income African American and Latino youth in Detroit found that segregation is associated with content of racial/ethnic identity (Oyserman & Yoon, 2009). Living in a neighborhood with higher than city-average segregation was associated with less endorsement and living in a neighborhood with lower than city-average segregation was associated with more endorsement of the three components of racial/ethnic identity relevant to academic performance (connectedness, awareness of racism, and embedded achievement).

On the other hand, what racial/ethnic identity is taken to mean is also actively constructed in the moment, as demonstrated in the following study. In this study, also involving low-income students, researchers randomly assigned children to attend their regular elective class or an alternative elective twice a week over the first weeks of the fall marking period (Oyserman, Bybee, & Terry, 2006). Children in the alternative elective participated in group activities designed to dynamically create a feeling that school-focused possible identities were congruent with other important identities and a means to attain desired and avoid undesired adult identities. As predicted, the school-focused possible identities and congruence of these identities with racial identity increased in intervention, not control youth, and these school-focused possible identities predicted change in behavior. Increased school-focused possible identities predicted more in-class participation, more time spent doing homework, and better grades and attendance.

Another set of studies, also involving low-income African American and Latino children, directly tested the impact of dynamically creating a sense that school-focused possible identities are a means of attaining desired possible selves (Destin & Oyserman, 2010, Studies 1 and 2). In a first study, low-income students were asked to consider themselves 10 years in the future. Responses were content-coded for whether they reported attaining their future self as dependent on or independent of school. Students who saw their future self as depending on school success worked harder in school and got better grades. In the second study, a new sample of low-income students was randomly assigned to receive either Census information showing the connection between educational at-

tainment and average earnings in their state or Census information on average earnings for top athletes and entertainers—the future selves described in Study 1 as independent of school success. As predicted, compared with children in the education-independent future self condition, children in the education-dependent future self condition not only said that they would spend more time on homework that night but they were also eight times more likely to actually hand in an extra-credit assignment.

Thus, which identities come to mind and what they mean in context is a function of both chronic and situational cues, with some situations more likely to cue particular identities or constellations of identities than others. People's interpretation of cued identities (or identity constellations) depends on the pragmatic meaning of these identities in the particular context.

The identity-based motivation model shares with social identity (Tajfel & Turner, 2004), self-categorization (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), and symbolic self-completion (Wicklund & Gollwitzer, 1981) theories the notion that people act to increase felt similarity to salient social identities, particularly when membership might feel threatened. Like many theories in cultural psychology (Triandis, 1989, 1995), the identity-based motivation model predicts that differences in identity expression reflect differences in the relative salience of organizing self-concept structures, including individual and collective self-concepts.

However, by arguing for dynamic construction, the identity-based motivation model moves beyond these prior formulations in a number of ways. It predicts that what an identity means and, therefore, what is congruent with it, is dynamically constructed in the moment and can motivate both positive and self-undermining or even self-destructive behaviors. It also predicts that when behavior feels identity congruent, the experience of difficulty in working on the behavior is likely to be interpreted as meaning that the behavior is an important part of the process, not an indication that the behavior is impossible or unnecessary.

Evidence for the first premise comes from a series of studies examining the shifting effect of identity on health (Oyserman, Fryberg, & Yoder, 2007). In a series of studies we (Oyserman et al., 2007, Studies 1 and 2) demonstrated that minority and majority groups held the same baseline beliefs about the efficacy of a healthy lifestyle in reducing health risks. Nevertheless, minority group members were more likely to identify unhealthy behaviors such as eating fried foods, drinking soda, and adding salt as ingroup behaviors and less likely to identify as ingroup-defining healthy behaviors such as flossing teeth or exercising as an adult. These differences were striking because participants were college students at an elite private university. More important, their perceptions of what is or is not an ingroup thing to do made their correct baseline beliefs about the efficacy of a healthy lifestyle vulnerable to identity-based motivational concerns.

In follow-up studies, we primed minority (e.g., Latino, African American, or American Indian) and low-income identities and found that when these identities were salient, participants' access to information about health and belief in the preventive capacity of health behaviors was undermined. Latino and African American children randomly assigned to consider their social identities reported higher fatalism about their future health as adults than children in the control group (Oyserman, Fryberg, et al., 2007, Study 3). They were also less successful in accessing their health knowledge, making more mistakes on a health knowledge quiz than children in the control group for whom social identities were not primed (Oyserman, Fryberg, et al., 2007, Study 4). Moreover, smoking, weight gain, and high sugar consumption were rated as less likely to negatively influence health among African American and Native American participants randomly assigned to a social identity–salient condition rather than a control condition (Oyserman, Fryberg, et al., 2007, Studies 5–7).

Action and Procedural Readiness

When an identity is cued, what comes to mind is not simply the content of the identity but also relevant actions and ways of thinking about the world. Consider research demonstrating that chronic or momentarily

primed relational ("us") self-concept results in assimilating others' characteristics as part of the self (Kemmelmeier & Oyserman, 2001a; Stapel & Koomen, 2001). More generally, priming people to consider themselves as separate and distinct influences how they process information generally. The idea is that what comes to mind when an identity is cued is not simply content but also a general way of making sense of the world. Recall that self-concepts can be structured to focus on "me" or "us," to focus on the actor's perspective "mind's eye" or the observer's perspective "eye of another." Identities take on these structural aspects.

Thus, identities are predicted to include not only content but also a mindset or way of making sense of the world. People asked to describe how they are separate and distinct from their family and friends or to circle singular "me" or plural "us" first-person pronouns in a paragraph do not just describe relevant personal or social relational self-traits and characteristics, they also apply the primed mindset or self-concept structure to other tasks (Oyserman et al., 2009). Those primed with a collectivistic mindset are better at tasks in which integrating helps—they remember where objects were located in space better than those primed with a individualistic mindset. Those primed with an individualistic mindset are better at tasks in which separating helps—they are quicker at Stroop tasks requiring that one ignore some perceptual cues while processing others (saying out loud the color in which the word *red* is printed requires ignoring the semantic meaning as irrelevant).

Of course, everyone has an array of identities; some personal "me" self-concepts and others social "us" self-concepts. At the same time, as discussed in previous sections, there is some evidence of chronic between-group differences in the propensity for "me" and "us" self-concepts to be well articulated. Markus and Oyserman (1989) reviewed and synthesized the extant literature on gender differences in mathematical and spatial abilities. Men and women, they found, differed in how they navigated and made sense of three-dimensional space. Men were more likely to report mental imagery separated from their own perspective, seeing the world as the crow flies rather than as they traversed it. These gender differences mapped onto differences in performance on tasks that involved rotation of objects in three-dimensional space.

Markus and Oyserman (1989) proposed that self-concept structure could predict these effects. Although both men and women can have social identities based in gender, men and women may differ in the propensity to use social and relational information in articulating identities and therefore in the likelihood of accessing "me" or "us" self-concepts. Men were predicted to be more likely to define the self as separated from contexts and relationships, and women were predicted to be more likely to define the self as embedded in contexts and relationships. Gender differences in self-concept structure should have implications for which cognitive procedures are accessible, and this in turn should predict differences in spatial tasks benefiting from different cognitive procedures. In particular, separate "me" self-structure should make separating cognitive procedures generally accessible, which should make context easier to ignore and therefore tasks involving three-dimensional rotation in space easier.

Whereas Markus and Oyserman's (1989) argument was based on a review of the gender literature on cognitive style, subsequent focus shifted to cross-national differences arguing for cultural differences in personal versus social focus of self-concept (Markus & Kitayama, 1991). At the same time, cross-national differences in judgment and decision making that were also emerging seemed to parallel the previously described gender differences in self-concept structure (for a review, see Oyserman, Coon, & Kemmelmeier, 2002). For example, European Americans seem to focus on the figure and ignore background in processing visual information generally, whereas Chinese (Nisbett, 2003) and Japanese (Kitayama, Duffy, Kawamura, & Larsen, 2003) people seem to focus on the relationship between figure and background, congruent with a social identity focus on the self as connected and related. While none of these models directly tested mediation, all implied an important role of self-concept structure.

Triandis and his colleagues (Trafimow et al., 1991; Triandis, 1989) provided an initial

demonstration that these effects may be due to dynamic construction of identity. They demonstrated that they could reliably predict whether people would use more personal or social identities to describe themselves by shifting participants' in-the-moment focus on themselves as similar to or different from friends and family. They also showed that once a personal or social identity focus was cued in one situation, it was likely to be used again in another situation. In the past 20 years, this basic finding has been replicated using a variety of situational cues, showing that people in the East and the West describe themselves using more or fewer social identities depending on which is cued in a given situation (for a review, see Oyserman & Lee, 2008a, 2008b).

How identity is cued matters for behavior. The answer to one of our opening questions—"How about offering a bribe to win that contract?"—has been demonstrated to vary depending on whether people considered the question after being primed with a "me" or an "us" self-concept (Mazar & Aggarwal, 2011, Study 2). People were randomly assigned to read a paragraph and circle "me" first-person singular or "us" first-person plural pronouns. They took on the role of a sales agent competing against other agents to win a contract and had to decide whether to offer or not to offer a bribe. Those in the "me" condition were less likely to do so. This replicated the authors' secondary analyses of large cross-national datasets showing that bribery is more common in collectivistic compared to individualistic countries (Mazar & Aggarwal, 2011, Study 1). Thus, shifts in identity focus shift readiness to act, even in ways people generally view as dishonest.

Interpretation of Difficulty

This formulation of identity as including both content (what one thinks about when one thinks about oneself) and interpretation of accompanying metacognitive process (reflection on how thinking feels) first appeared in the writing of William James (1890/1927). More recently, social cognition research has demonstrated the importance of considering both the content of thoughts and the meaning attributed to feelings of ease or difficulty associated with these thoughts (see Schwarz, 2002, 2004, 2010). Images of oneself having current and future identities are inextricably linked with feelings of ease or difficulty, and what these feelings mean depends on the question one asks oneself in regards to the feeling. If the question is "Is this important to me?" then experienced difficulty may be interpreted as meaning that the answer is "Yes, this is important to me. Otherwise, why am I working so hard?" Conversely, if the question is "Is this the real me?" then experienced difficulty may be interpreted as meaning that the answer is "no" because feelings of ease are commonly interpreted as truth and genuineness.

Common interpretations of felt difficulty are that if it is hard to think of or hard to do, then it is less likely to be true (Higgins, 1998; Schwarz & Clore, 1996). This would imply that the experience of metacognitive difficulty can easily be understood to mean "not true for me." However, a number of studies have documented that other interpretations are possible (Schwarz, 2004, 2010). Sports stories abound with reinterpretation of the meaning of experienced difficulty (e.g., "No pain, no gain") and the need to keep trying (e.g., "You miss 100% of the shots you don't take"). Similarly, when attempting to attain a school-focused identity, the metacognitive experience of difficulty is generally interpreted as "not the true me" but could be reinterpreted to mean other things. Difficulty can be viewed as a normative part of the process (e.g., "Success is 1% inspiration and 99% perspiration"). Difficulty can also provide evidence of progress (e.g., "The important things in life are the ones you really have to work for"). If difficulty and failures along the way are viewed as critical to eventual success, then difficulty is evidence of striving.

This means that interpretation of difficulty is critical if identities are actually to influence behavior over time. Consider the behaviors required to attain a "good student" identity or a "healthy person" identity. To be or become a good student, one would need not only to pay attention in class, bring home and do homework, take notes and study for exams, but also to forsake or at least limit activities that might interfere with these choices. What difficulty means depends on the questions the experience of difficulty is assumed to answer. Consider the "good stu-

dent" identity. A student experiencing difficulty in schoolwork might ask a number of questions. If the question is "Have I studied enough?" then difficulty could be taken to mean that one had not studied enough. In this case, difficulty should result in increased effort. But if the question is "Is this really the true me?" then difficulty could be taken to mean that one cannot become a good student. In this case, difficulty should result in reduced effort.

To test this notion, elementary school children in an afterschool program for children with difficulties in school were randomly assigned to one of two conditions (difficulty without interpretation, difficulty with interpretation), asked to describe their possible selves for the coming year, and given a novel math task (Novin & Oyserman, unpublished data). All children were reminded that they were participating in the afterschool program. In the no-interpretation condition, children were asked to give an example of a time that a school task was difficult for them. In the interpretation condition, children were asked to give an example of a time that a school task was difficult for them but they kept trying because school is important to them. As predicted, interpretation mattered. Children in the interpretation condition described more possible selves and were more persistent at the novel math task.

The common interpretation of difficulty as meaning low ability fits well with Americans' belief that intelligence and many other abilities are fixed rather than malleable (Dweck, 2002). For effort to matter, one must believe that ability is malleable and can be incrementally improved rather than believe it is a stable trait or entity (Dweck, 2002). Students holding incremental theories are more likely to persist over time, as do students convinced to hold an incremental theory (Dweck, 2002). The identity-based motivation model provides a framework within which to understand entity and incremental formulations as naive theories explaining what difficulty means. If effort matters (incremental theory of ability), then difficulty is likely to be interpreted as meaning that more effort is needed. However if effort does not matter (an entity theory of ability), then difficulty is likely to be interpreted as meaning that ability is lacking, so effort should be suspended.

Summary

Identity-based motivation is the readiness to engage in identity-congruent action (Oyserman, 2007; Oyserman, Bybee, et al., 2006; Oyserman, Fryberg, et al., 2007) and to use identity-congruent mindsets in making sense of the world (Oyserman et al., 2009). Although often experienced as stable, identity is highly malleable and situation-sensitive, so which aspect of identity comes to mind is a dynamic product of that which is chronically accessible and that which is situationally cued. Moreover, because what is cued is a general mindset rather than a specific content list, identity's impact on action and procedural readiness is likely to occur outside of conscious awareness and without systematic processing.

When situations cue an identity (e.g., female), what the cued identity carries with it is not a fixed list of traits (e.g., warm, energetic). Rather, the cued identity carries with it a general readiness to act and make sense of the world in identity-congruent terms, including the norms, values, strategies, and goals associated with that identity, as well as the cognitive procedures relevant to it. What exactly this readiness looks like is dependent on what the cued identity comes to mean in the *particular context* in which it is cued. Being female is likely to mean different things in different contexts—a job interview, a date, an appointment at a hair salon. This does not imply that identities do not predict behaviors over time but that the predictive power of an identity depends on the stability of the contexts in which it is cued. Because differing contexts cue different aspects of an identity and differing intersections with other identities, the identity–behavior link may be opaque. The effect of an identity will be stable over time to the extent that individuals repeatedly encounter psychologically isomorphic situations because in each instance the situation will engender readiness to take the same actions (for a related discussion of the stability of attitudes see Schwarz, 2007). Once a choice becomes identity linked, it is automatized. If it feels identity-syntonic, it feels right and does not require further reflection. On the other hand, if it feels nonsyntonic to identity, it feels wrong and this feeling also does not invite further reflection.

Wrapping Up and Looking Forward

We began this chapter with the proposition that self and identity feel stable though they are probably not really stable in the way people experience them. Rather, identities are dynamically constructed in context. We argued that both experienced stability and context-based dynamic construction are helpful. Experienced stability allows people to make predictions based on their sense that they know themselves and increases their willingness to invest in their own futures. At the same time context-based dynamic construction facilitates sensitive attunement of behavior to contextual affordances and constraints. We articulated how this might happen by using the identity-based motivation model.

We also summarized core terms, noting that while *self* and *identity* are often used interchangeably, some clarity can be attained by considering them as a series of nested constructs, with *self* as the most encompassing term, *self-concepts* being embedded within the self, and *identities* being embedded within self-concepts. The self has a reflexive capacity, the ability to consider oneself as an object and to become aware that one is doing so. Like other object categories (cats, tables), the self is a fuzzy construct. This means that people have a sense that they know what their self is, even though what exactly it refers to differs from situation to situation. Just as cats vary—some are softer and more friendly than others but they all share an essential "catness"—people do not always act the same but are in some essential way still the same. Though one may be disappointed in the antics of one's messy, rude, or disorganized self, or surprised at the abilities of one's self under fire and even say "I did not know I had it in me," one still refers to some essence of "me." Firmly separating oneself into truly different entities, having multiple personalities, is rare and is considered a form of mental illness.

The mental content included in the various "me" selves can be called *self-concept*. Self-concepts include content as well structure and evaluative judgment. These evaluative judgments about the self are typically termed *self-esteem* or *self-efficacy*. Self-esteem and self-efficacy research dominated American self-concept research for many years but the field has now broadened substantially. Self-concept structure has been studied in a number of ways, but two main lines of research focus on what we term *mindsets* and *hierarchy*. Hierarchy research starts with the assumption that diverse content about the self must be ordered in some hierarchy and focuses on factor analysis of evaluative judgments about the self in an array of content domains. The goal is to determine whether self-concepts are nested, overlapping, or basically orthogonal (independent of one another). Other research on structure examines structure of positive and negative self-concept content and complexity or number of self-perceived self-concept domains. While not uninteresting, we find hierarchy research currently less exciting than the second main branch of research on self-concept structure, which we term *mindset research*.

Mindset researchers assume that people have multiple self-concepts distinguished by differences in organizing frame, content, and downstream consequences for judgment, perception, and behavior. This research is dominated by the study of individualistic compared to collectivistic self-concepts, but also includes research on perspective taking (immersed, distal) and temporal focus (near, far). Research on mindsets is a particularly exciting new frontier for self researchers because it demonstrates that people have multiple self-concept structures available to them that can be easily cued but differ in their content and consequences. For example, an individualistic mindset entails not only using more abstract language to describe oneself and thinking of oneself as separate and distinct, but it also has consequences for perception and mental construal. Specifically, an individualistic mindset increases the likelihood that objects in the world will be perceived as separate rather than related, and that contextual information will be used as a standard of comparison or ignored completely rather than assimilated into self-judgments.

Moving to what is meant by identity, we suggested that *identities* include content and readiness to act and employ mindsets to make meaning. *Personal identities* are a person's traits, characteristics and attributes, goals and values, and ways of being.

Confusingly, these are often termed *selves* in the social science literature. *Social identities* are a person's roles, interpersonal relationships and group memberships, and the traits, characteristics, attributes, goals, and values congruent with these roles, relationships, and memberships.

To better understand where these identities come from and how they matter for judgment and behavior both in the moment and over time, we proposed a better integration of study of the self, self-concept, and identity with the study of mental processes. Three core predictions emerge from this integration, which we term dynamic construction, action and procedural readiness, and interpretation of ease and difficulty. As clarified by modern dual-processing models of cognition, thinking involves both reflexive and reflective processing. Reflexive, System 1, processing is rapid and effortless, the result of spreading activation of associative networks. This form of processing is posited always to be operating in the background, yielding quick responses that feel fluent. The other form of processing, reflective, or System 2, processing is slower and more effortful, the result of systematic consideration of content and application of rules. This form of processing operates when people have the time, motivation, and mental capacity to engage it.

Given that people have a large store of autobiographical knowledge in memory, almost any associative network is likely to eventually link to some aspect of autobiographical knowledge. This implies that reflexive processing is likely to yield an association with some aspect of self, so that an identity or aspect of identity will frequently come to mind as part of ongoing System 1 processing whether or not System 2 processing is engaged. However what that identity means in the moment depends in large part on what else also comes to mind in this moment of reflexive processing. Most information is assumed to be relevant and people assimilate whatever comes to mind into their online identity judgments, using this information as a standard to judge the self only under certain circumstances. That is, once an identity comes to mind through reflexive processing, what it means depends on the other information that comes to mind in context. This information is included in the identity unless there is reason to use it as a standard of comparison for the identity.

Returning to the Midas touch that makes self, self-concept, and identity feel interesting, we recommend three avenues for future research. First, self, self-concept, and identity are interesting because they seem to predict behavior over time. How does this actually happen? Second, self-concept and identity are interesting because whatever comes to mind feels real and stable yet, as we have demonstrated, self-concept and identity are highly malleable and can even be dynamically constructed in the moment, so stability often is more seeming than real. How do these two experiences coexist and under what circumstances does awareness of shifts, malleability, and dynamic construction improve well-being? Third, self-concept and identity are interesting because the self exists over time. People can and do imagine the self continuing over time and from childhood can imagine some desired and undesired future identities. Though people sometimes invest current effort to attain these future identities, often they underperform, failing to attain their aspirations perhaps because they misinterpret feelings of difficulty as meaning that goals are impossible or feelings of ease as meaning that they do not need to try. What predicts current investment in the future self, whether particular future identities or the well-being of the future self more generally (e.g., savings for retirement, practicing healthy lifestyles to reduce future risk) is thus a third important venue for future research.

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References

Abrams, D. (1994). Social self-regulation [Special issue: The self and the collective]. *Personality and Social Psychology Bulletin, 20*, 473–483.

Abrams, D. (1999). Social identity and social cognition. In D. Abrams & M. A. Hogg (Eds.), *Social identity and social cognition* (pp. 197–229). Malden, MA: Blackwell.

Ajzen, I. (1988), *Attitudes, personality, and behavior*. Chicago: Dorsey Press.

Ajzen, I., & Fishbein, M. (1977). Attitude–behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin, 84*, 888–918.

Aloise, P. A. (1993). Trait confirmation and disconfirmation: The development of attribution biases. *Journal of Experimental Child Psychology, 55*, 177–193.

Altschul, I., Oyserman, D., & Bybee, D. (2006). Racial–ethnic identity in mid-adolescence: Content and change as predictors of grades. *Child Development, 77*, 1155–1169.

Arkes, H. R., & Kajdasz, J. (2011). Intuitive theories of behavior. In B. Fischoff & C. Chauvin (Eds.), *Intelligence analysis: Behavioral and social scientific foundations* (pp. 143–168). Washington, DC: National Academies Press.

Arnett, D., German, S., & Hunt, S. (2003). The identity salience model of relationship marketing success. *Journal of Marketing, 67*, 89–105.

Banaji, M. R., & Prentice, D. A. (1994). The self in social contexts. *Annual Review of Psychology, 45*, 297–332.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191–215.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1–26.

Baumeister, R. F. (1998). The self. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., pp. 680–740). New York: McGraw-Hill.

Bengtsson, S. L., Dolan, R. J., & Passingham, R. E. (2011). Priming for self-esteem influences the monitoring of one's own performance. *Social Cognitive and Affective Neuroscience, 6*, 417–425.

Berger, J., & Rand, L. (2008). Shifting signals to help health: Using identity signaling to reduce risky health behaviors. *Journal of Consumer Research, 35*, 509–518.

Bernhardt, P. C., Dabbs, J. M., Fielden, J. A., & Lutter, C. D. (1998). Testosterone changes during vicarious experiences of winning and losing among fans at sporting events. *Physiology and Behavior, 65*, 59–62.

Blanton, H. (2001). Evaluating the self in the context of another: Assimilation and contrast effects in social comparison. In G. B. Moskowitz (Ed.), *Cognitive social psychology: The Princeton Symposium on the Legacy and Future of Social Cognition* (pp. 75–87). Mahwah, NJ Erlbaum.

Bless, H., & Schwarz, N. (2010). Mental construal and the emergence of assimilation and contrast effects: The inclusion/exclusion model *Advances in Experimental Social Psychology, 42*, 319–373.

Boen, F., Vanbeselaere, N., & Feys, J. (2002). Behavior consequences of fluctuation group success: An Internet study of soccer-team fans. *Journal of Social Psychology, 142*, 796–781.

Boen, F., Vanbeselaere, N., Pandelaere, M., Dewitte, S., Duriez, B., Snauwaert, B., et al. (2002). Politics and basking-in-reflected-glory: A field-study in Flanders. *Basic and Applied Social Psychology, 24*, 205–214.

Bosma, H., & Kunnen, E. S. (2001). Determinants and mechanisms in ego identity development: A review and synthesis. *Developmental Review, 21*, 39–66.

Botvinik, M., & Cohen, J. (1998). Rubber hands "feel" touch that eyes see. *Nature, 391*, 756.

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*, 475–482.

Brewer, M. B. (2001). Ingroup identification and intergroup conflict: When does ingroup love become outgroup hate? *Rutgers Series on Self and Social Identity, 3*, 17–41.

Brewer, M. B., & Gardner, W. (1996). Who is this "we"?: Levels of collective identity and self representations. *Journal of Personality and Social Psychology, 71*, 83–93.

Brewer, M. B., & Roccas, S. (2001). Individual values, social identity, and optimal distinctiveness. In C. Sedikides & M. Brewer (Eds.), *Individual self, relative self, collective self* (pp. 219–237). Philadelphia: Psychology Press.

Bronson, M. B. (2000). *Self-regulation in early childhood: Nature and nurture*. New York: Guilford Press.

Brown, J. (1998). *The self*. Boston: McGraw-Hill.

Callero, P. (2003). The sociology of the self. *Annual Review of Sociology, 29*, 115–133.

Carlston, D. E., & Skowronski, J. J. (1994). Savings in the relearning of trait information as evidence for spontaneous inference generation. *Journal of Personality and Social Psychology, 6*, 840–856.

Carver, C., & Scheier, M. (1978). Self-focusing effects of dispositional self-consciousness, mirror presence, and audience presence. *Jour-*

nal of Personality and Social Psychology, 36, 324–332.

Carver, C., & Scheier, M. (1990). Principles of self-regulation: Action and emotion. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Vol. 2. Foundations of social behavior* (pp. 3–52). New York: Guilford Press.

Cesario, J., Grant, H., & Higgins, E. T. (2004). Regulatory fit and persuasion: Transfer from "feeling right." *Journal of Personality and Social Psychology, 86*, 388–404.

Chaiken, S., & Trope, Y. (Eds.). (1999). *Dual-process theories in social psychology.* New York: Guilford Press.

Chen, X., & Chen, H. (2010). Children's social functioning and adjustment in the changing Chinese society. In R. K. Silbereisen & X. Chen (Eds.), *Social change and human development: Concepts and results* (pp. 209–226). Thousand Oaks, CA: Sage.

Cialdini, R., Borden, R., Thorne, A., Walker, M., Freeman, S., & Sloan, R. (1976). Basking in reflected glory. *Journal of Personality and Social Psychology, 45*, 1232–1242.

Cohen, D., & Gunz, A. (2002). As seen by the other . . . : Perspectives on the self in the memories and emotional perceptions of Easterners and Westerners. *Psychological Science, 13*, 55–59.

Collins, R. L. (1996). For better or for worse: The impact of upward social comparison on self-evaluations. *Psychological Bulletin, 119*, 51–69.

Cooley, C. (1902). *Human nature and the social order.* New York: Scribner's.

Cousins, S. (1989). Culture and self-perception in Japan and the United States. *Journal of Personality and Social Psychology, 56*, 124–131.

Crocetti, E., Rubini, M., & Meeus, W. (2008). Capturing the dynamics of identity formation in various ethnic groups: Development and validation of a three-dimensional model. *Journal of Adolescence, 31*, 207–222.

Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin, 122*, 5–37.

Cross, W. E., Jr., Smith, L., & Payne, Y. (2002). Black identity: A repertoire of daily enactments. In P. B. Pedersen, J. G. Draguns, J. E. Lonner, & J. E. Trimble (Eds.), *Counseling across cultures* (5th ed., pp. 93–108). Thousand Oaks, CA: Sage.

Davies, P. G., Spencer, S. J., & Steele, C. M. (2005). Clearing the air: Identity safety moderates the effects of stereotype threat on women's leadership aspirations. *Journal of Personality and Social Psychology, 88*, 276–287.

Destin, M., & Oyserman, D. (2010). Incentivizing education: Seeing schoolwork as an investment, not a chore. *Journal of Experimental Social Psychology, 46*, 846–849.

Diesendruck, G., & Eldror, E. (2011). What children infer from social categories. *Cognitive Development, 26*, 118–126.

Dweck, C. (2002). The development of ability conceptions. In A. Wigfield & J. Eccles (Eds.), *Development of achievement motivation* (pp. 57–88). San Diego, CA: Academic Press.

Eccles, J., Adler, T., Futterman, R., Goff, S., Kaczala, C., Meece, J., et al. (1983). Expectancies, values and academic behaviors. In J. Spence (Ed.), *Achievement and achievement motives* (pp. 76–146). San Francisco: Freeman.

Elliot, A. (2001). *Concepts of the self.* Cambridge, UK: Polity Press.

Ellmers, N., Spears, R., & Doosje, B. (2002). Self and social identity. *Annual Review of Psychology, 53*, 161–186.

Elmore, K. C., & Oyserman, D. (in press). If "we" can succeed, so can "I": Identity-based motivation and gender in the classroom. *Contemporary Educational Psychology.*

English, T., & Chen, S. (2011). Self-concept consistency and culture: The differential impact of two forms of consistency. *Personality and Social Psychology Bulletin, 37*, 838–849.

Epstein, S. (1973). The self-concept revisited or a theory of a theory. *American Psychologist, 28*, 404–416.

Erikson, E. H. (1951). *Childhood and society.* New York: Norton.

Erikson, E. H. (1968). *Identity: Youth and crisis.* New York: Norton.

Feather, N. T. (1982). *Expectations and actions: Expectancy–value models in psychology.* Hillsdale, NJ: Erlbaum.

Felson, R. B. (1993). The (somewhat) social self: How others affect self-appraisals. In J. Suls (Ed.), *Psychological perspectives on the self* (Vol. 4, pp. 1–26). Hillsdale, NJ: Erlbaum.

Ferguson, M., & Bargh, J. (2004). Liking is for doing: The effects of goal pursuit on automatic evaluation. *Journal of Personality and Social Psychology, 87*, 557–572.

Fishbach, A., & Ferguson, M. J. (2007). The goal construct in social psychology. In A. W. Kruglanski & T. E. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2nd ed., pp. 490–515). New York: Guilford Press.

Fiske, S. T. (1992). Thinking is for doing: Portraits of social cognition from daguerreotype to laserphoto. *Journal of Personality and Social Psychology, 63*, 877–889.

Fivush, R. (2011). The development of autobiographical memory. *Annual Review of Psychology, 62*, 559–582.

Fivush, R., & Hammond, N. (1990). Autobiographical memory across the preschool years: Toward reconceptualizing childhood amnesia. In R. Fivush & J. Hudson (Eds.), *Knowing and remembering in young children: Emory Symposia in Cognition* (Vol. 3, pp. 223–248). New York: Cambridge University Press.

Forgas, J. P., & Williams, K. D. (Eds.). (2002). *The social self: Cognitive, interpersonal, and intergroup perspectives*. New York: Psychology Press.

Frable, D. (1997). Gender, racial, ethnic, sexual, and class identities. *Annual Review of Psychology, 48*, 139–162.

Gardner, W. L., Gabriel, S., & Lee, A. Y. (1999). "I" value freedom, but "we" value relationships: Self-construal priming mirrors cultural differences in judgment. *Psychological Science, 10*, 321–326.

Gecas, V. (1982). The self-concept. *Annual Review of Sociology, 8*, 1–33.

Gelman, S. (1999). The role of essentialism in children's concepts. *Advances in Child Development and Behavior, 27*, 55–98.

Gelman, S. A., & Diesendruck, G. (1999). What's in a concept?: Context, variability, and psychological essentialism. In I. E. Sigel (Ed.), *Development of mental representation: Theories and applications* (pp. 87–111). Mahwah, NJ: Erlbaum.

Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, NJ: Doubleday.

Gollwitzer, P., Fujita, K., & Oettingen, G. (2004). Planning and the implementation of goals. In R. F. Baumeister & K. D. Vohs (Eds.), *Handbook of self-regulation: Research, theory, and applications* (pp. 211–228). New York: Guilford Press.

Gollwitzer, P., & Kirchhof, O. (1998). The willful pursuit of identity. In J. Heckhausen & C. Dweck (Eds.), *Motivation and self-regulation across the lifespan* (pp. 389–423). New York: Cambridge University Press.

Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist, 35*, 603–618.

Greenwald, A. G., & Banaji, M. R. (1989). The self as a memory system: Powerful, but ordinary. *Journal of Personality and Social Psychology, 57*, 41–54.

Guendelman, M., Cheryan, S., & Monin, B. (2011). Fitting in but getting fat: Identity threat as an explanation for dietary decline among U.S. immigrant groups. *Psychological Science, 22*, 959–967.

Harmon-Jones, E., Simon, L., Greenberg, J., Pyszczynski, T., Solomon, S., & McGregor, H. (1997). Terror management theory and self-esteem: Evidence that increased self-esteem reduced mortality salience effects. *Journal of Personality and Social Psychology, 72*, 24–36.

Harter, S. (2003). The development of self-representations during childhood and adolescence. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 610–642). New York: Guilford Press.

Harter, S., Bresnick, S., Bouchey, H., & Whitesell, N. R. (1997). The development of multiple role-related selves in adolescence. *Development and Psychopathology, 9*, 835–854.

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*, 319–340.

Higgins, E. T. (1989). Self-discrepancy theory: What patterns of self-beliefs cause people to suffer? *Advances in Experimental Social Psychology, 22*, 93–136.

Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 30, pp. 1–46). New York: Academic Press.

Hogg, M. A. (2003). Social identity. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 462–479). New York: Guilford Press.

Hogg, M. A. (2006). Social identity theory. In P. J. Burke (Ed.), *Contemporary social psychological theories* (pp. 111–136). Stanford CA: Stanford University Press.

James, W. (1927). *The principles of psychology*. New York: Dover. (Original work published 1890)

Jiang, Y., Cho, A., & Adaval, R. (2009). The unique consequences of feeling lucky: Implications for consumer behavior. *Journal of Consumer Psychology, 19*, 171–184.

Jones, E. E., & Nisbett, R. (1972). The actor and the observer: Divergent perceptions of the causes of behavior. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), *Attribution: Perceiving*

the causes of behavior (pp. 79–94). Morristown, NJ: General Learning Press.

Kahneman, D. (2003). Maps of bounded rationality: Psychology for behavioral economics. *American Economic Review, 93*, 1449–1475.

Kahneman, D., & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases* (pp. 49–81). New York: Cambridge University Press.

Kalish, C. W. (2002). Children's predictions of consistency in people's actions. *Cognition, 84*, 237–265.

Kemmelmeier, M., & Oyserman, D. (2001a). Gendered influence of downward social comparison on current and possible selves. *Journal of Social Issues, 57*, 129–148.

Kemmelmeier, M., & Oyserman, D. (2001b). The ups and downs of thinking about a successful other: Self-construals and the consequences of social comparisons. *European Journal of Social Psychology, 31*, 311–320.

Kernis, M. H., Cornell, D. P., Sun, C. R., Berry, A. J., & Harlow, T. (1993). There's more to self-esteem than whether it is high or low: The importance of stability of self-esteem. *Journal of Personality and Social Psychology, 65*, 1190–1204.

Kernis, M. H., Paradise, A. W., Whitaker, D. J., Wheatman, S. R., & Goldman, B. N. (2000). Master of one's psychological domain: Not likely if one's self-esteem is unstable. *Personality and Social Psychology Bulletin, 26*, 1267–1305.

Kettle, K., & Häubl, G. (in press). The signature effect: How signing one's name influences consumption-related behavior. *Journal of Consumer Research*.

Kiang, L., & Fuligni, A. (2009). Ethnic identity in context: Variations in ethnic exploration and belonging within parent, same-ethnic peer, and different-ethnic peer relationships. *Journal of Youth and Adolescence, 38*, 732–743.

Kihlstrom, J. F., Beer, J. S., & Klein, S. B. (2003). Self and identity as memory. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 68–90). New York: Guilford Press.

Kihlstrom, J. F., & Cantor, N. (1984). Mental representations of the self. *Advances in Experimental Social Psychology, 17*, 1–47.

Kindermann, T. (1993). Natural peer groups as contexts for individual development: The case of children's motivation in school. *Developmental Psychology, 29*, 970–977.

Kitayama, S., Duffy, S., Kawamura, T., & Larsen, J. (2003). Perceiving an object and its context in different cultures. *Psychological Science, 14*, 201–206.

Kross, E. (2009), When the self becomes other. *Annals of the New York Academy of Sciences, 1167*, 35–40.

Kross, E., Ayduk, O., & Mischel, W. (2005). When asking "why" does not hurt: Distinguishing rumination from reflective processing of negative emotions. *Psychological Science, 16*, 709–715.

Kühnen, U., & Oyserman, D. (2002) Thinking about the self influences thinking in general: Cognitive consequences of salient self-concept. *Journal of Experimental Social Psychology, 38*, 492–499.

Lenggenhager, B., Tadi, T., Metzinger, T., & Blanke, O. (2007). *Video ergo sum*: Manipulating bodily self-consciousness. *Science, 317*, 1096–1099.

Lewis, M. (1990). Self-knowledge and social development in early life. In L. A. Pervin (Ed.), *Handbook of personality* (pp. 277–300). New York: Guilford Press.

Lewis, M., & Brooks-Gunn, J. (1979). *Social cognition and the acquisition of self*. New York: Plenum Press.

Lieb, K., Zanarini, M., Schmahl, C., Linehan, M., & Bohus, M. (2004). Borderline personality disorder. *Lancet, 364*, 453–461.

Lieberman, M. (2007). Social cognitive neuroscience: A review of core processes. *Annual Review of Psychology, 58*, 259–289.

Linville, P. W. (1987). Self-complexity as a cognitive buffer against stress-related illness and depression. *Journal of Personality and Social Psychology, 52*, 663–676.

Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology, 73*, 91–103.

Ma, Y., & Han, S. (2011). Neural representation of self-concept in sighted and congenitally blind adults. *Brain: A Journal of Neurology, 134*, 235–246.

Macrae, C. N., Moran, J. M., Heatherton, T. F., Banfield, J. F., & Kelley, W. M. (2004). Medial prefrontal activity predicts memory for self. *Cerebral Cortex, 14*, 647–654.

Markel, P. (2009). *If it's to be, it starts with me!: The bidirectional relation between goals and the self*. Doctoral dissertation, University of

Wurzburg, Germany. Retrieved July 7, 2011, from *opus.bibliothek.uni-wuerzburg.de/volltexte/2009/4297/pdf/petramarkeldissertation.pdf.*

Markus, H. (1977). Self-schemas and social processing information about the self. *Journal of Personality and Psychology, 35*, 63–78.

Markus, H., Crane, M., Bernstein, S., & Siladi, M. (1982). Self-schemas and gender. *Journal of Personality and Social Psychology, 42*, 38–50.

Markus, H., & Cross, S. (1990). The interpersonal self. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 576–608). New York: Guilford Press.

Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 20*, 568–579.

Markus, H., & Kunda, Z. (1986). Stability and malleability of the self-concept. *Journal of Personality and Social Psychology, 51*, 858–866.

Markus, H., & Oyserman, D. (1989). Gender and thought: The role of the self-concept. In M. Crawford & M. Gentry (Eds.), *Gender and thought: Psychological perspectives* (pp. 100–127). New York: Springer-Verlag.

Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology, 38*, 299–337.

Marsh, H. W. (1989). Age and sex effects in multiple dimensions of self-concept: Preadolescence to early adulthood. *Journal of Educational Psychology, 81*, 417–430.

Marsh, H. W. (1990). A multidimensional, hierarchical model of self-concept: Theoretical and empirical justification. *Educational Psychology Review, 2*, 77–172.

Marsh, H., Barnes, J. Cairns, L., & Tidman, M. (1984). Self-Description Questionnaire: Age and sex effects in the structure and level of self-concept for preadolescent children. *Journal of Educational Psychology, 76*, 940–956.

Marsh, H. W., Craven, R., & Debus, R. (1998). Structure, stability, and development of young children's self-concepts: A multicohort–multioccasion study. *Child Development, 69*, 1030–1053.

Matsunaga, M., Hecht, M. L., Elek, E., & Ndiaye, K. (2010). Ethnic identity development and acculturation: A longitudinal analysis of Mexican-heritage youth in the Southwest United States. *Journal of Cross-Cultural Psychology, 41*, 410–427.

Mazar, N., & Aggarwal, P. (2011). Greasing the palm: Can collectivism promote bribery? *Psychological Science, 22*, 843–848.

McConnell, A. R. (2011). The multiple self-aspects framework: Self-concept representation and its implications. *Personality and Social Psychology Review, 15*, 3–27.

McGuire, W., & McGuire, C. (1988). Content and process in the experience of self. *Advances in Experimental Social Psychology, 21*, 97–144.

Mead, G. (1934). *Mind, self, and society.* Chicago: University of Chicago Press.

Medin, D. L., & Ortony, A. (1989). Psychological essentialism. In S. Vosniadou & A. Ortony (Eds.), *Similarity and analogical reasoning* (pp. 179–196). New York: Cambridge University Press.

Mita, T. H., Dermer, M., & Knight, J. (1977). Reversed facial images and the mere-exposure hypothesis. *Journal of Personality and Social Psychology, 35*, 597–601.

Mussweiler, T., Rüter, K., & Epstude, K. (2004). The ups and downs of social comparison: Mechanisms of assimilation and contrast. *Journal of Personality and Social Psychology, 87*, 832–844.

Neisser, U. (1993). *The perceived self: Ecological and interpersonal sources of self knowledge.* New York: Cambridge University Press.

Nielsen, M., Suddendorf, T., & Slaughter, V. (2006). Mirror self-recognition beyond the face. *Child Development, 77*, 176–185.

Nigro, G., & Neisser, U. (1983). Point of view in personal memories. *Cognitive Psychology, 15*, 467–482.

Nisbett, R. (2003). *The geography of thought: How Asians and Westerners think differently . . . and why.* New York: Free Press.

Ong, A. D., Fuller-Rowell, T., & Phinney, J. S. (2010). Measurement of ethnic identity: Recurrent and emergent issues. *Identity, 10*, 39–49.

Onorato, R., & Turner, J. (2002). Challenging the primacy of the personal self: The case for depersonalized self-conception. In Y. Kashima, M. Foddy, & M. Platow (Eds.), *Self and identity: Personal, social, and symbolic* (pp. 145–178). Mahwah, NJ: Erlbaum.

Owens, T. J., Robinson, D. T., & Smith-Lovin, L. (2010). Three faces of identity. *Annual Review of Sociology, 36*, 477–499.

Oyserman, D. (1993). The lens of personhood: Viewing the self, others, and conflict in a multicultural society. *Journal of Personality and Social Psychology, 65*, 993–1009.

Oyserman, D. (2001). Self-concept and identity. In A. Tesser & N. Schwarz (Eds.), *Blackwell handbook of social psychology* (pp. 499–517). Malden, MA: Blackwell.

Oyserman, D. (2007). Social identity and self-regulation. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2nd ed., pp. 432–453). New York: Guilford Press.

Oyserman, D. (2008). Racial-ethnic self-schemas: Multi-dimensional identity-based motivation. *Journal of Research on Personality, 42*, 1186–1198.

Oyserman, D. (2009a). Identity-based motivation: Implications for action-readiness, procedural-readiness, and consumer behavior. *Journal of Consumer Psychology, 19*, 250–260.

Oyserman, D. (2009b). Identity-based motivation and consumer behavior: Response to commentary. *Journal of Consumer Psychology, 19*, 276–279.

Oyserman, D. (in press). Culture as situated cognition: Cultural mindsets, cultural fluency and meaning-making. *European Review of Social Psychology*.

Oyserman, D., Brickman, D., Bybee, D., & Celious, A. (2006). Fitting in matters: Markers of in-group belonging and academic outcomes. *Psychological Science, 17*, 854–861.

Oyserman, D., Brickman, D., & Rhodes, M. (2007). Racial-ethnic identity in adolescence: Content and consequences for African American and Latino and Latina youth. In A. Fuligni (Ed.), *Contesting stereotypes and creating identities: Social categories, identities and educational participation* (pp. 91–114). New York: Russell Sage Foundation.

Oyserman, D., Bybee, D., & Terry, K. (2006). Possible selves and academic outcomes: How and when possible selves impel action. *Journal of Personality and Social Psychology, 91*, 188–204.

Oyserman, D., Bybee, D., Terry, K., & Hart-Johnson, T. (2004). Possible selves as roadmaps. *Journal of Research in Personality, 38*, 130–149.

Oyserman, D., Coon, H., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*, 3–72.

Oyserman, D., & Destin, M. (2010) Identity-based motivation: Implications for intervention. *Counseling Psychologist, 38*, 1001–1043.

Oyserman, D., & Fryberg, S. A. (2006). The possible selves of diverse adolescents: Content and function across gender, race and national origin. In J. Kerpelman & C. Dunkel (Eds.), *Possible selves: Theory, research, and applications* (pp. 17–39). Huntington, NY: Nova.

Oyserman, D., Fryberg, S., & Yoder, N. (2007). Identity-based motivation and health. *Journal of Personality and Social Psychology, 93*, 1011–1027.

Oyserman, D., Gant, L., & Ager, J. (1995). A socially contextualized model of African American identity: Possible selves and school persistence. *Journal of Personality and Social Psychology, 69*, 1216–1232.

Oyserman, D., Harrison, K., & Bybee, D. (2001). Can racial identity be promotive of academic efficacy? *International Journal of Behavioral Development, 25*, 379–385.

Oyserman, D., Kemmelmeier, M., Fryberg, S., Brosh, H., & Hart-Johnson, T. (2003). Racial-ethnic self-schemas. *Social Psychology Quarterly, 66*, 333–347.

Oyserman, D., & Lee, S. W.-S. (2007). Priming "culture": Culture as situated cognition. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 255–279). New York: Guilford Press.

Oyserman, D., & Lee, S. W. S. (2008a). Does culture influence what and how we think?: Effects of priming individualism and collectivism. *Psychological Bulletin, 134*, 311–342.

Oyserman, D., & Lee, S. W. S. (2008b). A situated cognition perspective on culture: Effects of priming cultural syndromes on cognition and motivation. In R. M. Sorrentino & S. Yamaguchi (Eds.), *Handbook of motivation and cognition across cultures* (pp. 237–265). New York: Elsevier.

Oyserman, D., & Markus, H. (1993). The sociocultural self. In J. Suls & A. Greenwald (Eds.), *Psychological perspectives on the self* (Vol. 4, pp. 187–220). Hillsdale, NJ: Erlbaum.

Oyserman, D., & Markus, H. R. (1998). Self as social representation. In S. U. Flick (Ed.), *The psychology of the social* (pp. 107–125). New York: Cambridge University Press.

Oyserman, D., & Packer, M. (1996). Social cognition and self-concept: A socially contextualized model of identity. In J. Nye & A. Brower (Eds.), *What's social about social cognition?: Research on socially shared cognition in small groups* (pp. 175–201). Thousand Oaks, CA: Sage.

Oyserman, D., & Sorensen, N. (2009). Understanding cultural syndrome effects on what

and how we think: A situated cognition model. In R. Wyer, Y.-Y. Hong, & C.-Y. Chiu (Eds.), *Understanding culture: Theory, research and application* (pp. 25–52). New York: Psychology Press.

Oyserman, D., Sorensen, N., Reber, R., & Chen, S. X. (2009). Connecting and separating mindsets: Culture as situated cognition. *Journal of Personality and Social Psychology, 97*, 217–235.

Oyserman, D., & Uskul, A. K. (2008). Individualism and collectivism: Societal-level processes with implications for individual-level and society-level outcomes. In F. van de Vijver, D. van Hemert, & Y. Poortinga (Eds.), *Multilevel analysis of individuals and cultures* (pp. 145–173). Mahwah, NJ: Erlbaum.

Oyserman, D., & Yoon, K.-I. (2009). Neighborhood effects on racial–ethnic identity: The undermining role of segregation. *Race and Social Problems, 1*, 67–76.

Pelham, B., & Wachsmuth, J. (1995). The waxing and waning of the social self. *Journal of Personality and Social Psychology, 69*, 825–838.

Pronin, E., Olivola, C., & Kennedy, K. (2008). Doing unto future selves as you would do unto others: Psychological distance and decision making. *Personality and Social Psychology Bulletin, 34*, 224–236.

Rholes, W. S., & Ruble, D. N. (1984). Children's understanding of dispositional characteristics of others. *Child Development, 55*, 550–560.

Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.

Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. *Advances in Experimental Social Psychology, 10*, 173–280.

Schwarz, N. (2002). Situated cognition and the wisdom of feelings: Cognitive tuning. In L. Feldman Barrett & P. Salovey (Eds.), *The wisdom in feeling: Psychological processes in emotional intelligence* (pp. 144–166). New York: Guilford Press.

Schwarz, N. (2004). Metacognitive experiences in consumer judgment and decision making. *Journal of Consumer Psychology, 14*, 332–348.

Schwarz, N. (2007). Attitude construction: Evaluation in context. *Social Cognition, 25*, 638–656.

Schwarz, N. (2009). Mental construal in social judgment. In F. Strack & J. Förster (Eds.), *Social cognition: The basis of human interaction* (pp. 121–138). Philadelphia: Psychology Press.

Schwarz, N. (2010). Meaning in context: Metacognitive experiences. In B. Mesquita, L. Feldman Barrett, & E. R. Smith (Eds.), *The mind in context* (pp. 105–125). New York: Guilford Press.

Schwarz, N., Bless, H., Wänke, M., & Winkielman, P. (2003). Accessibility revisited. In G. Baudenhausen & A. Lambert (Eds.), *Foundations of social cognition* (pp. 51–77). Mahwah, NJ: Erlbaum.

Schwarz, N., & Clore, G. L. (1996). Feelings and phenomenal experiences. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 433–465). New York: Guilford Press.

Schwarz, N., Oyserman, D., & Peytcheva, E. (2010). Cognition, communication, and culture: Implications for the survey response process. In J. A. Harkness, M. Braun, B. Edwards, T. P. Johnson, L. Lyberg, P. P. Mohler, et al. (Eds.), *Survey methods in multinational, multiregional and multicultural contexts* (pp. 177–190). New York: Wiley.

Schwarz, N., Sanna, L. J., Skurnik, I., & Yoon, C. (2007). Metacognitive experiences and the intricacies of setting people straight: Implications for debiasing and public information campaigns. *Advances in Experimental Social Psychology, 39*, 127–161.

Schwinghammer, S. A., Stapel, D. A., & Blanton, H. (2006). Different selves have different effects: Self-activation and defensive social comparison. *Personality and Social Psychology Bulletin, 32*, 27–39.

Sedikides, C., & Brewer, M. B. (2001). *Individual self, relational self, collective self*. Philadelphia: Psychology Press.

Semin, G. (2009). Language, culture, cognition: How do they intersect? In R. Wyer, C.-Y. Chiu, & Y.-Y. Hong (Eds.), *Understanding culture: Theory, research, and application* (pp. 259–270). New York: Psychology Press.

Serpe, R. (1987). Stability and change in self: A structural symbolic interactionist explanation. *Social Psychology Quarterly, 50*, 44–55.

Showers, C. J., Abramson, L. Y., & Hogan, M. E. (1998). The dynamic self: How the content and structure of the self-concept change with mood. *Journal of Personality and Social Psychology, 75*, 478–493.

Shrauger, J. S., & Schoeneman, T. J. (1979). Symbolic interactionist view of self-concept:

Through the glass darkly. *Psychological Bulletin, 86*, 549–573.

Smeesters, D., Wheeler, S. C., & Kay, A. C. (2010). Indirect prime-to-behavior effects: The role of perceptions of the self, others, and situations in connecting primed constructs to social behavior. *Advances in Experimental Social Psychology, 42*, 259–317.

Smith, E. R., & Collins, E. C. (2010). Situated cognition. In L. Feldman Barrett, B. Mesquita, & E. R. Smith (Eds.), *The mind in context* (pp. 126–145). New York: Guilford Press.

Smith, E. R., & Conrey, F. R. (2010). Mental representations are states, not things: Implications for implicit and explicit measurement. In B. Wittenbrink & N. Schwarz (Eds.), *Implicit measures of attitudes* (pp. 247–264). New York: Guilford Press.

Smith, E., & Semin, G. (2004). Socially situated cognition: Cognition in its social context. *Advances in Experimental Social Psychology, 36*, 53–117.

Smith, E., & Semin, G. (2007). Situated Social Cognition. *Current Directions in Psychological Science, 16*, 132–135.

Smith, G. C., & Oyserman, D. (2011). *Yes we can!: Cuing effort with Obama.* Manuscript under review.

Song, H., & Schwarz, N. (2008a). Fluency and the detection of misleading questions: Low processing fluency attenuates the Moses illusion. *Social Cognition, 26*, 791–799.

Song, H., & Schwarz, N. (2008b). If it's hard to read, it's hard to do: Processing fluency affects effort prediction and motivation. *Psychological Science, 19*, 986–988.

Spears, R., Gordijn, E., Dijksterhuis, A., & Stapel, D. (2004). Reaction in action: Intergroup contrast in automatic behavior. *Personality and Social Psychology Bulletin, 30*, 605–616.

Stanovich, K., & West, R. (2000). Individual differences in reasoning: Implications for the rationality debate? *Behavioral and Brain Sciences, 23*, 645–665.

Stapel, D. A., & Koomen, W. (2001). I, we, and the effects of others on me: How self-construal level moderates social comparison effects. *Journal of Personality and Social Psychology, 80*, 766–781.

Steele, C., Spencer, S., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Advances in Experimental Social Psychology, 34*, 379–440.

Stets, J. E., & Burke, P. J. (2003). A sociological approach to self and identity. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 128–152). New York: Guilford Press.

Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review, 8*, 220–247.

Strauss, L. C., & Cross, W. E., Jr. (2005). Transacting black identity: A two-week daily diary study. In G. Downey, J. S. Eccles, & C. M. Chatman (Eds.), *Navigating the future: Social identity, coping, and life tasks* (pp. 67–95). New York: Russell Sage Foundation.

Stryker, S. (1980). *Symbolic interactionism: A social structural version.* Menlo Park, CA: Benjamin Cummings.

Stryker, S., & Burke, P. (2000). The past, present, and future of identity theory. *Social Psychology Quarterly, 63*, 284–297.

Sui, J., & Han, S. (2007). Self-construal priming modulates neural substrates of self-awareness. *Psychological Science, 18*, 861–866.

Swann, W. B. (1983). Self-verification: Bringing social reality into harmony with the self. In J. Suls & A. G. Greenwald (Eds.), *Social psychological perspectives on the self* (Vol. 2, pp. 33–66). Hillsdale, NJ: Erlbaum.

Swann, W. B., Jr. (1985). The self as architect of social reality. In B. Schlenker (Ed.), *The self and social life* (pp. 100–125). New York: McGraw-Hill.

Swann, W. B., & Bosson, J. (2010). Self and identity. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (pp. 589–628). Hoboken, NJ: Wiley.

Tajfel, H. (1981). *Human groups and social identity.* Cambridge, UK: Cambridge University Press.

Tajfel, H., & Turner, J. (2004). The social identity theory of intergroup behavior. In J. Jost & J. Sidanius (Eds.), *Political psychology: Key readings* (pp. 276–293). New York: Psychology Press.

Tarrant, M., & Butler, K. (2011). Effects of self-categorization on orientation towards health. *British Journal of Social Psychology, 50*, 121–139.

Taylor, S., & Lobel, M. (1989). Social comparison activity under threat: Downward evaluation and upward contacts. *Psychological Review, 96*, 569–575.

Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. *Advances*

in Experimental Social Psychology, 21, 181–227.

Tesser, A., & Campbell, J. (1983). Self-definition and self-evaluation maintenance. In J. Suls & A. Greenwald (Eds.), *Social psychological perspectives on the self* (Vol. 2, pp. 1–31). Hillsdale, NJ: Erlbaum.

Tesser, A., & Collins, J. F. (1988). Emotion in social reflection and comparison situations: Intuitive, systematic, and exploratory approaches. *Journal of Personality and Social Psychology, 55*, 695–709.

Tesser, A., Martin, L. L., & Cornell, D. P. (1996). On the substitutability of self-protective mechanisms. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 48–68). New York: Guilford Press.

Trafimow, D., Triandis, H., & Goto, S. (1991). Some tests of the distinction between the private self and the collective self. *Journal of Personality and Social Psychology, 60*, 649–655.

Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review, 96*, 506–520.

Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, UK: Blackwell.

Turner, R. H. (1956). Role-taking, role standpoint, and reference group behavior. *American Journal of Sociology, 61*, 316–328.

Tversky, A., & Kahneman, D. (1983). Extensional versus intuitive reasoning: The conjunction fallacy in probability judgment. *Psychological Review, 90*, 293–315.

Wakslak, C., Nussbaum, S., Liberman, N., & Trope, Y. (2008). Representations of the self in the near and distant future. *Journal of Personality and Social Psychology, 95*, 757–773.

Waterman, A. S. (1999). Identity, the identity statuses, and identity status development: A contemporary statement. *Developmental Review, 19*, 591–621.

Wheeler, S. C., & DeMarree, K. G. (2009). Multiple mechanisms of prime-to-behavior effects. *Social and Personality Psychology Compass, 3*, 566–581.

Wheeler, S. C., DeMarree, K., & Petty, R. (2007). Understanding the role of the self in prime-to-behavior effects: The active-self account. *Personality and Social Psychology Review, 11*, 234–261.

Wicklund, R. A., & Gollwitzer, P. M. (1981). Symbolic self-completion, attempted influence, and self-deprecation. *Basic and Applied Social Psychology, 2*, 89–114.

Wyer, R., & Srull, T. (1989). *Memory and cognition in its social context*. Hillsdale, NJ: Erlbaum.