

Identity-Specific Motivation: How Distinct Identities Direct Self-Regulation Across Distinct Situations

Alexander S. Browman, Mesmin Destin, and Daniel C. Molden
Northwestern University

Research on self-regulation has traditionally emphasized that people's thoughts and actions are guided by either (a) *domain-general motivations* that emerge from a cumulative history of life experiences, or (b) *situation-specific motivations* that emerge in immediate response to the incentives present in a particular context. However, more recent studies have illustrated the importance of understanding the interplay between such domain-general and situation-specific motivations across the types of contexts people regularly encounter. The present research, therefore, expands existing perspectives on self-regulation by investigating how people's *identities*—the internalized roles, relationships, and social group memberships that define who they are—systemically guide when and how different domain-general motivations are activated within specific types of situations. Using the motivational framework described by regulatory focus theory (Higgins, 1997), Studies 1 and 2 demonstrate that people indeed have distinct, *identity-specific motivations* that uniquely influence their current self-regulation when such identities are active. Studies 3–5 then begin to explore how identity-specific motivations are situated within people's larger self-concept. Studies 3a and 3b demonstrate that the less compatible people's specific identities, the more distinct are the motivations connected to those identities. Studies 4–5 then provide some initial, suggestive evidence that identity-specific motivations are not a separate, superordinate feature of people's identities that then alter how they pursue any subordinate, identity-relevant traits, but instead that such motivations emerge from the cumulative motivational significance of the subordinate traits to which the identities themselves become attached. Implications for understanding the role of the self-concept in self-regulation are discussed.

Keywords: self-concept, identity, regulatory focus, promotion motivation, prevention motivation

Supplemental materials: <http://dx.doi.org/10.1037/pspa0000095.supp>

People often regulate their thoughts and actions according to general motivations that they have internalized across their particular history of life experiences. For example, whereas

some individuals may have come to be predominantly motivated by desires for growth and advancement, others may have come to be more strongly motivated by desires for safety and security. When people encounter novel or uncertain situations, such internalized motivations are then likely to influence what behaviors these individuals choose (e.g., Bowlby, 1969; Higgins, 1997; Maslow, 1955). On the other hand, people's thoughts and actions can also be guided by the specific motivational demands of their immediate situations. For example, whereas some situations may immediately incentivize a focus on advancement and pursuing gains, others may immediately incentivize a focus on security and protecting against losses. In these types of situations, such immediate incentives are then likely to influence what cognitions and behaviors people experience and enact (e.g., Idson, Liberman, & Higgins, 2000; Molden, Lucas, Gardner, Dean, & Knowles, 2009; Shah & Higgins, 1997).

Given that people's self-regulation is guided both by broader motivational orientations that can operate across time and in different contexts and by more immediate motivational demands that arise in specific situations, this raises the question of how people systematically coordinate their internalized *domain-general motivations* with *situation-specific demands*.

Alexander S. Browman, Department of Psychology, Northwestern University; Mesmin Destin, Department of Psychology, School of Education and Social Policy, and the Institute for Policy Research, Northwestern University; Daniel C. Molden, Department of Psychology, Northwestern University.

Portions of this research were presented at the 2016 annual meetings of the Society for Personality and Social Psychology and the Society for the Study of Motivation. This research was supported in part by fellowships from the Social Sciences and Humanities Research Council of Canada and the Fonds de recherche du Québec—société et culture to ASB. The authors thank Mark Baldwin, Galen Bodenhausen, Eli Finkel, Wendi Gardner, John Lydon, Sylvia Perry, Jennifer Richeson, and members of Northwestern's Status, Cognition and Motivation Lab, Social Self Lab, and Social Cognition Lab for their helpful comments.

Correspondence concerning this article should be addressed to Alexander S. Browman, who is now at Department of Counseling, Developmental, & Educational Psychology, Lynch School of Education, Boston College, 140 Commonwealth Avenue, Chestnut Hill, MA 02467. E-mail: browman@bc.edu

Indeed, rather than just haphazardly shifting their current motivations based on the unique features of each new situation they encounter, people appear to develop a more limited set of distinct roles that helps them organize the different types of goals and behaviors that these varying situations require (for reviews, see McConnell, Shoda, & Skulborstad, 2012; Oyserman, Elmore, & Smith, 2012). For example, as vividly illustrated by James (1890), "Nothing is commoner than to hear people discriminate between their different [roles] of this sort: 'As a man I pity you, but as an official I must show you no mercy; as a politician I regard him as an ally, but as a moralist I loathe him.'" These types of observations suggest that people may indeed self-regulate by selectively accessing their general internalized motivations in ways that are responsive to the goal-pursuit requirements of specific situations.

However, relatively little research has directly explored exactly how people might accomplish this type of coordination between domain-general and situation-specific motivations during self-regulation. The present studies, therefore, investigate the extent to which people do indeed organize their internalized motivational concerns around idiosyncratic sets of *identities*—the roles, relationships, and social group memberships that encapsulate how they define themselves—that are related to the specific types of situations they deem psychologically important in their lives. That is, extending recently developed frameworks emphasizing the important role of identities in how people organize their thoughts and actions (see McConnell, 2011; Oyserman & Destin, 2010), we present six studies that directly test how the unique set of identities that define who people are guide self-regulation across the various situations they encounter in their daily lives.

Domain-General and Situation-Specific Self-Regulation

Many attempts have been made to identify the types of domain-general motivations that people typically possess and which thereby broadly guide their thoughts and behaviors (e.g., Bowlby, 1969; Deci & Ryan, 2000; Maslow, 1955; see Pittman & Zeigler, 2007). While debates continue regarding which might be most general or most important, there is a strong consensus that there are a variety of motivations that are pervasive and central to how people self-regulate across a wide range of specific situations. Furthermore, there is also a strong consensus that as a result of their individual socialization and history of repeated experiences, people develop differences in the priority they place on pursuing some types of motivations over others (Deci & Ryan, 2000; Higgins, 1997; Mikulincer & Shaver, 2007). For example, children whose parents repeatedly stress the importance of seeking out opportunities for personal growth during childhood may be generally predisposed, later in life, to approach many situations with a growth-oriented disposition (e.g., Manian, Strauman, & Denney, 1998; see Higgins, 1997). Overall, then, people are typically assumed to possess some type of domain-general motivations that are chronically active and habitually pursued across many types of situations.

At the same time, however, more recent research has emphasized that various types of motivational preferences can also be activated by specific cues in the oft-changing situations in which people find themselves (for reviews, see Bargh & Goll-

witzer, 1994; Carver & Scheier, 1998; Higgins, 1997; Kruglanski et al., 2002). In other words, despite the more chronic domain-general motivations that may typically guide people's thoughts and actions, other more situation-specific motivations can be temporarily activated and thereby direct people's responses in that specific moment. For example, a person with a generally growth-oriented disposition may adopt a mindset focused more on ensuring security if their own success in a particular situation depends on caution and vigilance over seeking opportunities for advancement (e.g., Idson et al., 2000; see Higgins, 1997). Moreover, studies have suggested that the temporary, situation-specific activation of such motivations has identical effects as when people chronically possess the same type of domain-general motivations (e.g., Shah & Higgins, 1997; see Bargh, Gollwitzer, & Oettingen, 2010).

Research to date on the influences of more chronic and domain-general motivations on self-regulation has proceeded largely in parallel to research on the influences of temporarily activated, situation-specific motivations. There has been some investigation of when and for how long the situation-specific motivations may override conflicting domain-general motivations (e.g., Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001; Lisjak, Molden, & Lee, 2012), but such research has tacitly assumed that people all passively react to the specific motivational cues present in such situations in the same way, often even without intention or conscious awareness. Furthermore, these studies have frequently relied on placing people in highly controlled experimental situations that may or may not reflect the types of situational cues people encounter or perceive in their own daily experiences (but see Fulmer et al., 2010).

As a result, there has been little examination of how people might play a more active role in managing and organizing the motivations that guide them as they navigate the various types of situations they frequently encounter in their daily lives. In other words, previous research on the interaction between chronic, domain-general and temporary, situation-specific self-regulation has not examined how people may themselves come to individually define which of their various internalized motivations are relevant for specific situations in their lives, and how they might mentally organize these situations in motivationally meaningful ways. The primary objective of the present research is, therefore, to explore this type of organization by assessing whether people develop their own separate categories of situation-specific motivations depending upon the idiosyncratic types of situations that they regularly encounter in their daily lives.

Identity as a Coordinator of Situation-Specific Experiences

To accomplish this objective, we build from recent research and theory on how people systematically represent the various situations that they frequently experience. As reviewed by McConnell (2011) and Oyserman and colleagues (2010, 2012), this research has demonstrated that people typically develop a relatively small set of distinct *identities* that help them distill and categorize the critical psychological features of such situations. These identities include the full range of roles (e.g., student, daughter), interpersonal relationships (e.g., girlfriend), and social group memberships

(e.g., religious group member, sorority sister) through which people define who they are.¹

People's identities are presumed to organize their experiences in ways that enable them to respond systematically and appropriately to the specific situations they encounter (see McConnell, 2011; McConnell et al., 2012; Oyserman & Destin, 2010; Oyserman et al., 2012). For example, individuals with identities that reflect two different cultural backgrounds (e.g., North American and Chinese) often encounter social contexts in which these backgrounds would produce conflicting standards of thinking and acting if both were salient at the same time (e.g., Benet-Martínez, Leu, Lee, & Morris, 2002). However, cues in these contexts that indicate the relevance of one of the distinct cultural identities over the other (e.g., being required to speak English or Chinese, respectively; Ross, Xun, & Wilson, 2002) can activate the most appropriate mode of responding whenever that situation arises. In other words, instead of being passively guided by the immediate motivational demands of a particular situation, by developing identities, people may impose idiosyncratic personal meanings on the situations they typically encounter, which thereby alters how they interpret and behave in these situations. In addition, individuals develop their own unique sets of identities and define for themselves what is most central within these identities (McConnell, 2011; McConnell et al., 2012; Oyserman & Destin, 2010). As a result, they can differ from others in the way that they respond to the demands of a specific situation based both on which of their unique identities are activated and which idiosyncratic responses those active identities might evoke.

Despite some recognition of the potential implications of an identity-based perspective for further understanding individual differences in self-regulation and goal pursuit (McConnell, 2011; McConnell et al., 2012; Oyserman & Destin, 2010), few studies have directly investigated how people's unique identities might influence such self-regulation. That is, few studies have tested whether people's distinct identities can indeed produce *identity-specific motivations*, or distinct motivational preferences that guide cognition and behavior in the specific situations that activate these identities. For example, people may possess some identities in which their primary motivations involve growth and advancement, but others in which their primary motivations involve safety and security. Whether someone's self-regulation is focused on growth or security in any particular situation would, therefore, depend not only on that person's overall domain-general motivations or the specific motivational demands of that situation, but also on which identity the situation activates for this particular individual. The present research was, therefore, designed to test this possibility.

Such an identity-based approach offers several important extensions to the existing literatures on domain-general and situation-specific self-regulation. First, if people's identities determine what broader motivations are activated in specific identity-relevant situations, then measuring the distinct identity-specific motivations that people possess should provide a more sensitive indicator of how individuals are likely to behave in these situations than either any existing domain-general measures or a simple consideration of the demands of that specific situation in isolation. Indeed, previous research on people's attitudes (Ajzen & Fishbein, 1977; Kraus, 1995) and their feelings of attachment to relationship partners (Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996; Pierce & Lydon, 2001) has shown that the more relevant assessments of an individual's attitudes and feelings are to how this person is expe-

riencing the present situation, the more superior these assessments are in predicting the behavioral consequences as compared to domain-general assessments. One potential extension addressed in the present research is, therefore, whether a focus on identity-specific motivations may similarly strengthen how well people's motivations and behaviors can be predicted within the situation they are currently facing (e.g., Boldero & Francis, 2000).

A second way in which studying identity-specific motivations could extend previous research is by further detailing the role of the self-concept in initiating and sustaining self-regulation. While researchers have long noted the importance of various types of self-representations in guiding how people set and pursue their goals (e.g., Carver & Scheier, 1982; Higgins, 1987; Markus & Nurius, 1986), this area of study has yet to incorporate the implications of the findings that people's broad identities serve a critical role in the organization and deployment of such representations, as reviewed above. Another focus of the present research is, therefore, to illuminate how identity-specific motivations are represented within the larger self-concept and to examine the implications of such representations for our understanding of how people manage their self-regulatory efforts across the various situations that they need to respond to in their daily lives. This objective is described in more detail in the context of the relevant studies below.

Identity-Specific Motivations for Promotion and Prevention

To conduct our investigation of identity-specific motivation, we utilized a prominent and well-defined motivational framework from the social-psychological literature: regulatory focus theory (Higgins, 1997). Regulatory focus theory distinguishes between two broad types of motivations that determine how people represent and pursue self-regulation: one focused on growth and advancement (i.e., *promotion*) and the other focused on safety and security (i.e., *prevention*; see also Bowlby, 1969; Maslow, 1955). When motivated by promotion, people view their goals as opportunities and *ideals* that involve attaining gains and avoiding unrealized opportunities (i.e., nongains). By contrast, when motivated by prevention, people view their goals as responsibilities and *oughts* that involve upholding important standards (i.e., ensuring nonlosses) and avoiding losses.

Motivations for promotion or prevention, therefore, produce distinct priorities during self-regulation. Because promotion motivations involve seeking advancement, people pursuing this mode of self-regulation selectively attend to information relevant for possible gains and adopt strategies of eagerly pursuing all possible opportunities for advancement. By contrast, because prevention motivations involve maintaining security, people pursuing this mode of self-regulation selectively attend to information relevant

¹ Researchers in these traditions have historically referred to these types of representations using many different names (e.g., identities, selves, and self-aspects), but have largely used similar definitions to the one we adopt here (see McConnell, 2011; Oyserman et al., 2012). We have chosen the term "identity" here because it has become the most commonly used term across various literatures for the types of self-representation examined in the present work—that is, the roles, interpersonal relationships, and social group memberships through which people define who they are (see Oyserman & Destin, 2010; Oyserman & James, 2011).

for possible losses and adopt strategies aimed at vigilantly doing what is necessary to maintain a sense of safety (see Higgins, 1997; Scholer & Higgins, 2012). To provide one example of these varying priorities, stronger promotion motivations lead people to confidently visualize success and to perform better when they can focus on making progress toward such success, whereas stronger prevention motivations lead people to adopt defensively pessimistic mindsets and to perform better when they can focus on guarding against the possibility for failure (e.g., Förster, Grant, Idson, & Higgins, 2001; Hazlett, Molden, & Sackett, 2011; Scholer, Ozaki, & Higgins, 2014; for a broader overview, see Molden, Lee, & Higgins, 2008).

Given the distinct self-regulatory priorities that are produced by promotion and prevention motivations, if (a) these distinct motivations are associated more prominently with some identities than others, and (b) the priorities that these motivations produce influence behavior more strongly when an associated identity is active than when an alternative identity is active, this would provide evidence for the both the existence of identity-specific motivations and their importance, as described above. There are, in fact, a few existing findings consistent with these ideas. First, Faddegon, Scheepers, and Ellemers (2008) have shown that activating an identity associated with a task-group that involved more promotion- or prevention-focused objectives had a greater influence on people's respective advancement- versus security-oriented strategies during the task than did their domain-general preferences for promotion or prevention. In addition, Boldero and Francis (2000) directly assessed university students' motivations for promotion or prevention with regard to both their identities as students and as family members. They found that these identity-specific motivations predicted distinct promotion- or prevention-focused emotional experiences in contexts that presumably activated one identity versus the other (i.e., in the university library versus in their family home, respectively). Together, these results provide initial support for the notion that motivations related to specific identities can differ from people's domain-general motivations, and that the former may be more powerful predictors of people's thoughts and actions when specific identities are made salient.

Overview of the Present Research

Building on this suggestive evidence from previous studies, in the present research, we undertook a systematic investigation of the existence and organization of identity-specific modes of self-regulation. Studies 1 and 2 addressed the primary questions of whether people's various idiosyncratic identities are indeed associated with and governed by distinct motivations for promotion and prevention, and whether these identity-specific measures predict situation-specific responses better than domain-general measures. Specifically, Study 1 both examined the overall correspondence between people's reported identity-specific and domain-general motivations for promotion or prevention and assessed whether identity-specific motivations were more strongly predictive of the reasons people endorsed for pursuing identity-relevant goals. Study 2 then experimentally tested whether directly activating specific identities also activates distinct motivations for promotion or prevention and better predicts people's subsequent responses to promotion- and prevention-relevant stimuli than the

motivations associated with nonactivated identities or domain-general motivations.

Studies 3–5 next tested additional questions, alluded to above, concerning how identity-specific motivations might be represented and organized within the self-concept. As detailed more extensively below, Studies 3a and 3b first examined whether divergences between a person's identity-specific motivations reflect how conflicting or integrated they judge those identities to be within their larger self-concept. Studies 4 and 5 then provided preliminary evidence regarding two possible models of the associative pathways that may exist between distinct identities and motivations within the broader self-concept. Specifically, Study 4 tested whether such motivations are directly linked to people's individual identities and thus can alter how they pursue particular traits associated with these identities. By contrast, Study 5 examined whether identity-specific motivations might instead arise more indirectly from the motivations associated with people's basic character traits and how these traits are then organized into different identities. We provide more background on Studies 3–5 after presenting Studies 1–2.

Together, the six studies presented here represent all of the data we have collected examining the existence and organization of identity-specific motivations for promotion and prevention.² Thus, the reported findings and effect sizes are not qualified by the omission of unreported results. In addition, no analyses were performed before data collection on the full sample reported in each study was complete. All materials, data, and analytic syntax relevant to present studies can be found either in the supplementary materials or at <https://github.com/abrowman/ism-jpsp2017>.

Study 1

Study 1 was designed as a preliminary test of whether (a) different identities can be associated with different motivations, and (b) these identity-specific motivations better predict identity-relevant goals than domain-general motivations. As such, participants first completed several newly created identity-specific measures of their motivations for promotion and prevention, as well as established domain-general measures, and then rated their reasons for engaging in goals relevant to only one of these identities. If the separate identity-specific measures were only weakly correlated and represented separate clusters of items, this would provide evidence for the first hypothesis regarding the distinctness of identity-related motivations. Furthermore, if the identity-specific measure was more strongly correlated with reasons for goal-pursuit related to that identity than domain-general measures, this would provide evidence for the second hypothesis regarding the increased predictiveness of identity-related motivations.

² One study was removed from the original manuscript based on reviewer feedback. Although the results were statistically significant and consistent with the other studies reported here, the consensus was that the operationalizations used for priming identities in this study did not permit an unambiguous and direct test of the central hypotheses of the article. Additional information about this study is available directly from the authors.

Method

Participants and procedures. The final sample in Study 1 consisted of 276 undergraduate students (120 male, 156 female; age: $M = 18.8$, $SD = 1.10$) from a private university in the Midwestern United States who took part in a mass-testing session for an introductory psychology course. Because of departmental protocols governing these mass-testing sessions, our questionnaires were presented on two different pages separated by a series of unrelated questionnaires. On one page (completed by 251 participants), participants completed a measure of their domain-general regulatory focus. On the other page (completed by 180 participants), participants completed three identity-specific regulatory focus measures, followed by a questionnaire about their academic goals. These completion rates provided a statistical power of .80 to detect effects of $|r| \geq .18$ and $|r| \geq .21$, respectively. The order in which the pages were presented was randomized. This final sample did not include data from two additional respondents because it was not possible to accurately match their separate questionnaire sheets.

Materials

Measure of domain-general motivations. Participants' domain-general motivations for promotion or prevention were assessed with the regulatory focus questionnaire (RFQ; Higgins et al., 2001). The RFQ is an 11-item questionnaire with a 6-item promotion subscale (e.g., "When it comes to achieving things that are important to me, I find that I don't perform as well as I ideally would like to do" [reverse scored]) and a 5-item prevention subscale (e.g., "Not being careful enough has gotten me into trouble at times" [reverse scored]). Participants responded using a 1 (*completely disagree*) to 5 (*completely agree*) scale. The RFQ was chosen as the domain-general measure because it is the best-validated and most widely used self-report measure of regulatory focus (see Haws, Dholakia, & Bearden, 2010; Molden & Winterheld, 2013).

Across all of our studies, we were primarily interested in assessing the relative (rather than the absolute) strength of participants' domain-general and identity-specific motivations for promotion or prevention. In other words, although people can independently vary in the strength of both their promotion and prevention motivations (Higgins, 1997), what determines which of these modes of self-regulation people adopt is the *predominant* strength of their promotion or prevention concerns (Molden & Winterheld, 2013). Because our primary goal in the present research was to assess whether people's specific identities were associated with distinct modes of self-regulation, these types of predominance measures, which have been widely used in similar circumstances in prior research (e.g., Cesario, Grant, & Higgins, 2004; Hazlett et al., 2011; Higgins et al., 2001; Molden et al., 2009), were most appropriate. For this and all other regulatory focus measures discussed herein, the promotion and prevention subscales were, therefore, averaged separately and a difference score was created by subtracting the prevention average from the promotion average.

Measures of identity-specific motivations. Because the items on the RFQ are not easily adapted to refer to specific identities, in this and all subsequent studies, identity-specific motivations for promotion or prevention were assessed using modified versions of a more recently developed Composite Regulatory Focus Scale (Haws et al., 2010).

Specifically, in Study 1, participants completed three separate scales designed to assess the motivations associated with their identity as a student, their identity with regards to health and fitness, and their identity as a close relationship partner. Prior research has found that these identities are primary components of college students' self-concepts (e.g., Marsh & Craven, 2006; Shavelson, Hubner, & Stanton, 1976). The items used on each 8-item scale were similarly worded with only small changes to focus on separate identities—for example, "I frequently imagine how I will achieve my academic hopes and aspirations" (promotion-focus) and "I have important academic standards that I focus on maintaining" (prevention-focus) in the student identity version; "I frequently imagine how I will achieve my hopes and aspirations for being healthy and fit" and "I have important standards of health and fitness that I focus on maintaining" in the physical identity version; and "I frequently imagine how I will achieve my relationship hopes and aspirations" and "I have important standards for my close relationships that I focus on maintaining" in the relational identity version. Participants responded using 1 (*strongly disagree*) to 7 (*strongly agree*) scales. See the supplementary materials for the complete scales. As with the RFQ, participants' predominant regulatory focus was calculated within each identity by separately averaging the promotion and prevention subscales and then subtracting the prevention score from the promotion score. The descriptive statistics for all four regulatory focus measures used in this study are presented in Table 1.

Measures of academic goals. To assess how well identity-specific motivations predict people's reasons for adopting identity-relevant goals, participants read a list of goals students might hope to accomplish by attending college (Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012), which presumably were more relevant to participants' academic identities than their physical or relational identities. The list contained five promotion-focused goals ("explore new interests," "expand my knowledge of the world," "learn more about my interests," "become an independent thinker," and "expand my understanding of the world") and five prevention-focused goals ("give back to my community," "support myself financially," "help my family out after I'm done with college," "bring honor to my family," and "be a role model for people in my community"). Participants rated how important each goal was to them personally using 1 (*not at all important*) to 7 (*extremely important*) scales. A pilot test on a separate sample of 100 participants who rated how strongly each of these goals was associated with "growth and advancement" (i.e., promotion) and with "safety and security" (i.e., prevention) confirmed that these sets of goals were associated with distinct promotion- versus prevention-focused academic motivations (see supplementary materials for details).

Results and Discussion

As shown in Table 1, the zero-order correlations among the domain general and separate identity-specific measures of predominant regulatory focus were indeed found to be small on the whole, even when correcting for their imperfect reliability (Cohen, 1988). Furthermore, a principal-axis factor analysis including the items from the three identity-specific measures with a varimax rotation

Table 1

Descriptive Statistics, and Pairwise and Disattenuated Correlations for the Four Measures of Predominant Regulatory Focus Used in Study 1

Regulatory focus (RF) measure	Descriptive statistics				Pairwise correlations			Disattenuated correlations		
	<i>n</i>	<i>M</i>	<i>SD</i>	α	(2)	(3)	(4)	(2)	(3)	(4)
(1) Student RF	173	.03	.72	—	.18*	.16*	.14	.22	.19	.17
Promotion subscale	174	5.50	.86	.71						
Prevention subscale	173	5.47	.96	.72						
(2) Physical RF	161	.15	.68	—	—	.16*	.00	—	.20	.00
Promotion subscale	165	4.70	1.19	.83						
Prevention subscale	164	4.51	1.08	.67						
(3) Relational RF	162	.18	.83	—	—	—	.21*	—	—	.27
Promotion subscale	165	5.14	1.00	.72						
Prevention subscale	162	4.96	1.02	.64						
(4) Domain-general RF	241	.50	.98	—	—	—	—	—	—	—
Promotion subscale	246	3.86	.61	.67						
Prevention subscale	242	3.36	.89	.79						

Note. RF = predominant regulatory focus, calculated by subtracting scores on the prevention motivations subscale from scores on the promotion motivations subscale.

* $p < .05$.

suggested three distinct factors: the first included seven of the eight health and fitness scale items, the second included all eight academic scale items, and the third included all eight relationship scale items. Additional details regarding these analyses are available in the supplementary materials. Together, these initial findings provide evidence that people possess distinct identity-specific motivations that are adequately captured by our newly created measures.

For the academic goals questionnaire, separate averages were calculated for participants' promotion-focused ($M = 5.82$, $SD = 1.07$, $\alpha = .85$) and prevention-focused ($M = 4.75$, $SD = 1.17$, $\alpha = .66$) goals while attending college. Correlations between participants' identity-specific or domain-general predominant regulatory focus and their ratings for the two types of academic goals illustrated the greater predictive validity of motivations associated with participants' academic identities. Specifically, a stronger academic promotion-focus was significantly associated with stronger endorsement of promotion-focused goals for attending college $r(166) = .18$ [.03, .32], $p = .020$, and marginally associated with weaker prevention-focused goals, $r(167) = -.14$ [-.28, .01], $p = .073$. By contrast, neither participants' fitness-related, relationship-related or domain-general regulatory focus significantly predicted their goals while attending college, $|r| < .11$, $ps > .174$.

To further assess whether academic regulatory focus was a relatively stronger predictor of reported college-related goals, promotion- and prevention-focused goals were each separately regressed on all three identity-specific measures of predominant regulatory focus simultaneously (all mean-centered). As shown in Table 2a, again, only academic regulatory focus predicted both promotion- and prevention-focused college-relevant goals. In addition, as shown in Table 2b, when participants' college-relevant goals were each separately regressed on academic regulatory focus and domain-general regulatory focus, once again, only academic regulatory focus predicted both of these motives.³

The results of Study 1 thus provide preliminary evidence that people possess identity-specific motivations that are relatively independent of one another and of broader domain-general orien-

tations. These results also provide preliminary evidence that motivations associated with a specific identity better predict aspects of goal pursuit relevant to that identity than do domain-general motivations or orientations associated with specific identities that are less relevant. One limitation of Study 1, however, is that domain-general measures of regulatory focus were presented in a different format and in a separate part of the testing session. These variations could themselves have suppressed the observed correlations of such measures to the identity-specific measures. As such, we conducted an additional study, which is reported in full in the supplementary materials, that addressed these limitations and produced the same results: when using a domain-general version of the exact same questionnaire used to construct the identity-specific measures and when administering all of the measures consecutively, the correlations between participants' identity-specific motivations for promotion or prevention and their domain-general regulatory focus remained small. Results also showed that the original RFQ was highly correlated with the domain-general version of the more recent Composite Regulatory Focus Scale, $r = .64$, $p < .001$. Because of the more established predictive validity of the RFQ noted above, we continued to use this measure to assess domain-general regulatory focus in all subsequent studies.

Study 2

Study 1 provided evidence that people's various identities can be associated with distinct motivations for promotion and prevention that are more predictive of their goals than their domain-

³ As noted earlier, because the RFQ and identity-specific motivation measures were completed on different pages that were separated by a series of unrelated questionnaires, not all participants who completed the RFQ also completed the identity-specific measures. To maximize our statistical power while being mindful of this limitation, we adopted the approach of controlling for the two other identity-specific measures in one analysis and the RFQ in another. The remaining studies that utilized mass-testing procedures (Studies 2, 3a, and 4) minimized this issue by ensuring that all relevant materials appeared on back-to-back pages.

Table 2

Separate Regressions Simultaneously Predicting Endorsement of Either Promotion-Focused or Prevention-Focused Academic Goals From (a) Identity-Specific and (b) Domain-General Measures of Predominant Regulatory Focus in Study 1

Regulatory focus (RF) measure	Promotion-focused academic goals					Prevention-focused academic goals					
	(a)	<i>b</i> [95% CIs]	<i>t</i>	<i>df</i>	<i>p</i>	<i>f</i> ²	<i>b</i> [95% CIs]	<i>t</i>	<i>df</i>	<i>p</i>	<i>f</i> ²
Student RF		.25 [−.01, .50]	1.91	148	.059	.025	−.31 [−.59, −.03]	−2.22	149	.028	.033
Fitness RF		.05 [−.21, .32]	.41	148	.680	−.003	−.12 [−.39, .15]	−.87	149	.388	.007
Relational RF		−.09 [−.30, .12]	−.79	148	.432	.005	.05 [−.17, .28]	.48	149	.631	−.004
(b)											
Student RF		.28 [.04, .51]	2.32	139	.022	.038	−.26 [−.54, .02]	−1.87	139	.064	.026
General RF		−.00 [−.18, .17]	−.03	139	.980	.006	.06 [−.14, .26]	.63	139	.533	.007

Note. RF = predominant regulatory focus, calculated by subtracting scores on the prevention motivations subscale from scores on the promotion motivations subscale. CIs = confidence intervals.

general motivations. To expand upon these findings, Study 2 examined the motivational consequences of experimentally activating one of a person's numerous identities. This was accomplished by adapting a paradigm used by McConnell, Rydell, and Brown (2009) to examine how priming specific identities activates distinct traits. Specifically, participants in Study 2 initially reported identity-specific motivations for two different identities and, at a later date, one of these premeasured identities was experimentally activated (i.e., made more accessible) before they completed a measure of their current regulatory focus. If the pre-measured regulatory focus associated with participants' active identity more strongly predicted their current motivation than the pre-measured regulatory focus associated with their nonactive identity, this would provide additional evidence for the distinctness of identity-specific motivations. Furthermore, if the pre-measured regulatory focus associated with participants' active identity more strongly predicted their current motivation than their domain-general regulatory focus, this would provide additional evidence for the greater predictive validity of identity-specific motivations.

Method

Participants. The final sample in Study 2 consisted of 88 undergraduate students (37 male, 48 female, 3 undisclosed; age: $M = 19.1$ years, $SD = 1.0$) enrolled at the same university as in Study 1. This sample provided a statistical power of .80 to detect effects of $f^2 \geq .091$. Students received partial course credit for participating.

Procedure. In a mass pretesting session and an online pretesting survey, participants' domain-general, student-specific, and best-friend-specific regulatory focus were assessed in a manner similar to Study 1. Upon arrival at the lab several weeks later, participants were randomly assigned to either the *student-identity* condition ($N = 46$) or the *best-friend identity* condition ($N = 42$) and completed an associated identity-activation task. Finally, participants completed a lexical-decision task that included stimuli related to promotion and prevention motivations to measure their current predominant regulatory focus.

Materials.

Pre-measure of domain-general motivations. The RFQ was again used to assess participants' domain-general motivations. Participants responded using a 1 (*completely disagree*) to 5 (*com-*

pletely agree) scale (promotion: $M = 3.81$, $SD = .63$, $\alpha = .69$; prevention: $M = 3.36$, $SD = .95$, $\alpha = .84$), and their predominant regulatory focus scores were calculated as in Study 1.

Pre-measures of identity-specific motivations. Student and best-friend versions of the regulatory focus scale were constructed in the same manner as the identity-specific measures described in Study 1. The exact items used and all descriptive statistics for the identity-specific motivation scales used in Studies 2–5 are reported in the supplementary materials. Predominant regulatory focus scores for each identity were calculated as in Study 1 by subtracting scores on the prevention subscale from scores on the promotion subscale. Replicating Study 1, the correlations among participants' student, best-friend, and domain general regulatory focus were relatively small, as they were in all of our remaining studies ($r_s = -.08-.37$; see supplementary materials).

Identity activation task. To activate either participants' student or best-friend identity, they were asked to respond in writing to five prompts—for example, "Write a few sentences describing the last time you enacted your role as a [student/best friend], and specifically what you were doing" (see supplementary materials for all prompts). Similar prompts have been used to activate specific identities in prior research (e.g., Hamilton, Vohs, Sellier, & Meyvis, 2011).

Lexical-decision task. To assess the motivational consequences of activating one of the participants' identities, immediately after that exercise, participants completed a lexical-decision task. Much prior research has demonstrated that the speed of responses in these tasks can measure how strong people's goals and broader motivations currently are (e.g., Fazio, 1995; Higgins, Shah, & Friedman, 1997; Kruglanski et al., 2002). Specifically, the faster participants are to respond to motivationally relevant stimuli, the stronger those motivations are currently presumed to be.

In this task, participants learned that they would see a series of letter-strings and that for each, they would need to indicate as quickly as possible whether or not it formed a word. Participants then completed 10 practice trials and 80 experimental trials. At the beginning of each trial, a fixation point (+) appeared in the center of the screen for 500 ms. Then, a letter-string appeared and remained on the screen until participants pressed one of the two response keys. Participants were instructed to press the "Y" key on the keyboard if the letter-string was a word and the "N" key if it

Table 3

Separate Regressions Simultaneously Predicting the Strength of Participants' Current Motivations for Promotion or Prevention From the Predominant Regulatory Focus of Activated and Nonactivated Identities and Their Domain-General Predominant Regulatory Focus in Study 2

Regulatory focus (RF) measure	Strength of current promotion motivation					Strength of current prevention motivation				
	<i>b</i> [95% CIs]	<i>t</i>	<i>df</i>	<i>p</i>	<i>f</i> ²	<i>b</i> [95% CIs]	<i>t</i>	<i>df</i>	<i>p</i>	<i>f</i> ²
Active identity RF	-.04 [-.06, -.02]	-4.01	80	<.001	.201	.05 [.03, .07]	4.57	80	<.001	.262
Nonactive identity RF	.00 [-.02, .02]	.33	80	.743	.046	-.00 [-.02, .02]	-.03	80	.974	.063
General RF	-.01 [-.03, .01]	-.75	80	.453	.007	.02 [-.00, .03]	1.79	80	.077	.040
Strength of alternate RF	.83 [.71, .94]	14.35	80	<.001		.87 [.75, .99]	14.35	80	<.001	

Note. RF = predominant regulatory focus, calculated by subtracting scores on the prevention motivations subscale from scores on the promotion motivations subscale. The strength of participants' current motivations was assessed in terms of their reaction times to promotion- or prevention-focused words in a lexical decision task. To control for participants' reactions to motivationally themed stimuli in general, all analyses also controlled for the strength of participants' alternate motivational focus. CIs = confidence intervals.

was a nonword. Reaction times were recorded for each trial. For the 10 practice trials, half of the stimuli were neutral words unrelated to promotion or prevention motivations, and the remaining half were nonwords. The 80 experimental trials were modeled after Lisjak et al. (2012) and consisted of 40 word-trials and 40 nonword-trials. Of the 40 word-trials, 10 were associated with promotion motivations (*eager, gain, advance, promote, success, nurture, dream, achievement, and enjoy, grow*), 10 were associated with prevention motivations (*vigilant, loss, safety, protect, failure, guard, security, commitment, careful, and maintain*), and the remaining 20 were motivationally neutral and matched for word-length and frequency of appearance in the English lexicon (e.g., *candle, tree*).

Results and Discussion

Random assignment was effective: no significant between-condition differences emerged with regard to student regulatory focus ($M_s = .17$ and $.01$, $SD_s = .62$ and $.87$), best-friend regulatory focus ($M_s = .42$ and $.33$, $SD_s = .69$ and $.89$), or domain-general regulatory focus ($M_s = .60$ and $.32$, $SD_s = 1.03$ and $.94$), $t_s < 1.34$, $p_s > .18$. As in prior research (Evans, Lambon Ralph, & Woollams, 2012; Lisjak et al., 2012), to reduce the positive skew inherent in reaction time (RT) data lexical-decision, trials on which participants provided incorrect responses (4.84% of trials) or took longer than 3,500 ms to respond (.06% of trials) were eliminated, as were trials with response times more than 3 SD_s from the mean (calculated after removing incorrect and extreme responses; 1.79% of trials). The remaining RTs were then log-transformed (Ratcliff, 1993).

To test whether the regulatory focus associated with participants' active identities predicted the strength of their current motivations better than the regulatory focus of their less active identities or their domain-general regulatory focus, new variables were created representing the regulatory focus of participants' active and nonactive identities. That is, for participants whose student identities were activated, their pre-measured student regulatory focus was coded as active while best-friend regulatory focus was coded as nonactive. The opposite was true for participants whose best-friend identities were activated. Participants' RTs for the promotion-focused words were then regressed on the pre-measured regulatory focus of their active identity, the pre-measured regulatory focus of their non-

active identity, and their pre-measured domain-general regulatory focus. To control for participants' general response-times to motivationally charged words, their RTs for the prevention-focused words were included as well (Lisjak et al., 2012). These analyses indicated that RTs were only significantly predicted by the regulatory focus of the active identity (see Table 3 and Figure 1a). Similarly, parallel analysis for RTs to the prevention-focused words (controlling for RTs to promotion-focused words) also showed that these RTs were only significantly predicted by the regulatory focus of participants' active identity (see Table 3 and Figure 1b). In this analysis, a weaker, marginal association of domain-general regulatory focus also emerged.⁴

In summary, Study 2 conceptually replicated and extended Study 1, finding that motivations associated with a specific identity that had been experimentally activated distinctly predicted the strength of participants' current motivations. In addition, the activated identity-specific motivations again predicted current motivations better than did domain general motivations, which showed only weak associations, if any.

Discussion of Studies 1 and 2 and Overview of Studies 3–5

The results of Studies 1 and 2 extend recent theoretical frameworks suggesting the central role of identities in guiding self-regulation across the various domains of people's lives (see McConnell, 2011; Oyserman & Destin, 2010). Specifically, Studies 1 and 2 demonstrate that (a) people can possess idiosyncratic identity-specific motivations that are largely distinct from each other, (b) these identity-specific motivations need not be strongly related to people's domain-general motivations, and (c) identity-

⁴ Another way to analyze these findings is to not transform student and best-friend regulatory focus into variables representing active or nonactive identities, but instead to retain the original measures and examine how these measures interact with the activation condition in predicting lexical decision responses. In these analyses, a greater influence of the activated identity would emerge as interaction effects, such that student regulatory focus would show significant associations in the activated student identity condition, but not in the activated best-friend identity condition, whereas best-friend regulatory focus would show the opposite pattern of associations. As detailed in the supplementary materials, that is indeed what such analyses show.

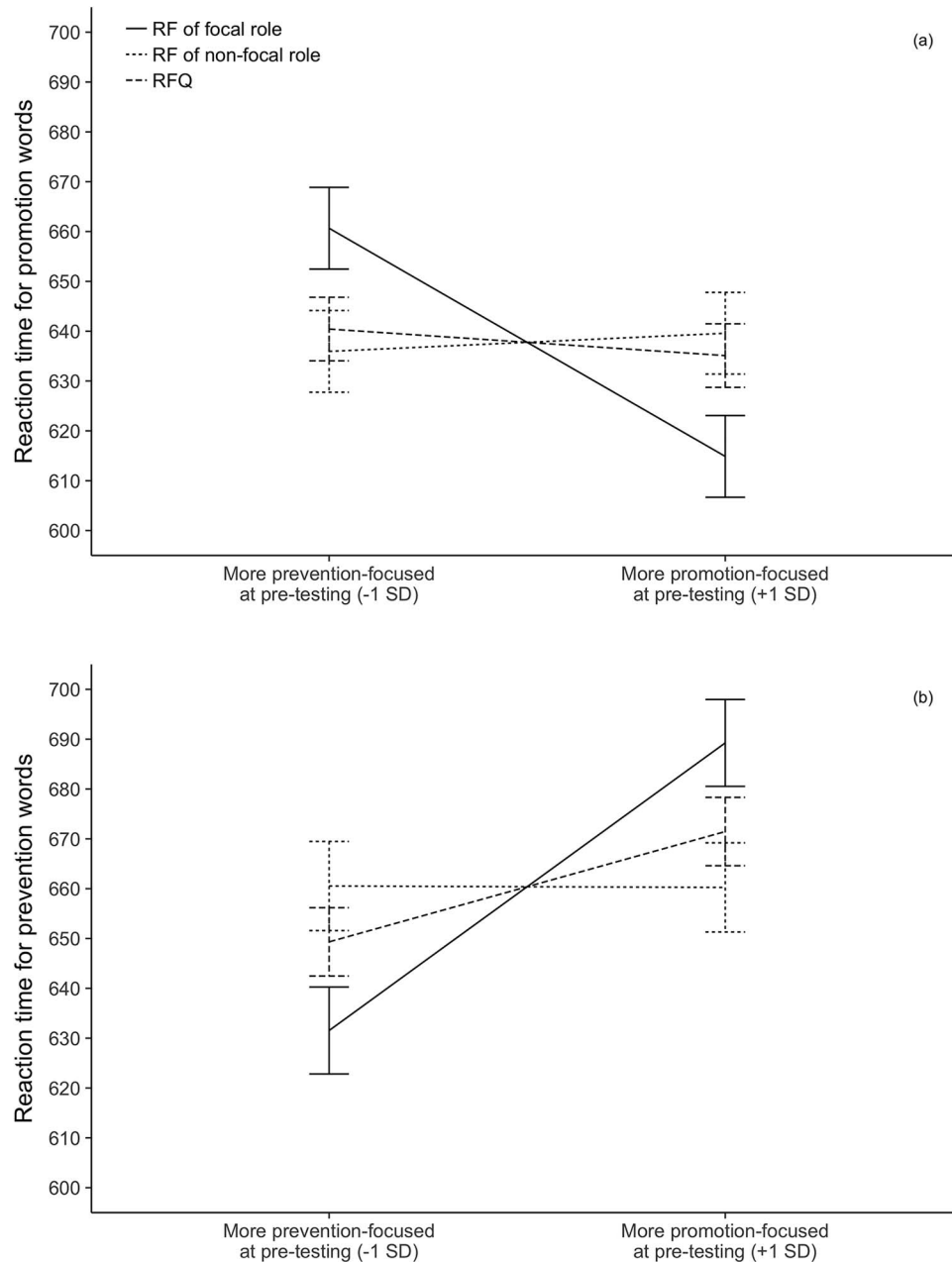


Figure 1. The association of the identity-specific regulatory focus of participants' active identity, their nonactive identity and their domain-general regulatory focus with the strength of participants' current motivations for (a) promotion or (b) prevention (Study 2). Error bars represent ± 1 SE of the mean RT for each regulatory focus index.

specific motivations can better predict both the types of goals people associate with that particular identity and, when recently activated, people's current motivations than do their domain-general motivations. These findings thereby provide preliminary evidence of the value of an identity-based approach for capturing how people self-regulate across the situations that they regularly and naturally experience in their own lives.

While these studies provide evidence that people's numerous, distinct identities can be associated with different motivations,

questions remain as to how such identity-specific motivations are organized within people's general self-concepts, and the implications of this organization for the activation of these motivations. Indeed, classic perspectives regarding the influence of people's various self-representations on how they set and pursue their goals have not fully specified how such self-representations are organized within the broader self-concept (e.g., Carver & Scheier, 1982; Higgins, 1987; Markus & Nurius, 1986). Although these representations have generally been characterized as knowledge

structures within a hierarchical associative network (Carver & Scheier, 1982; Higgins & Bargh, 1987; Kihlstrom & Cantor, 1984), the actual nature of this hierarchy or of the relationships between these various knowledge structures has seldom received direct empirical investigation (but see Marsh, 1990).

To begin to address these questions, in Studies 3–5, we more directly utilized the recently developed identity-based theoretical frameworks to test how people's different identities guide their thoughts and actions. McConnell, 2011; McConnell et al. 2012; and Oyserman et al. (2010, 2012) have proposed that identities should be particularly effective in organizing people's responses to the situations and environments they encounter because of how these unique identities are integrated into the structure of people's individual self-concepts. To adapt an example from McConnell (2011), imagine a hypothetical person named Rachel whose self-concept is depicted in Figure 2. As discussed, Rachel's identities (indicated by the ovals in Figure 2) represent the full range of roles (e.g., student, daughter), interpersonal relationships (e.g., girlfriend), and social group memberships (e.g., religious group member, sorority sister) that reflect how she, herself, defines who she is. These identities are presumed to function as the nodes in an associative network that hierarchically organize the more specific *traits* (e.g., shy, attractive, proud, and philanthropic) that further make up Rachel's individual self-concept. Furthermore, the connections between particular traits (indicated by the rectangles in Figure 2) and identities are proposed to arise because these traits have proven especially helpful for effective goal pursuit in contexts where the related identity was activated in the past (see McConnell et al., 2012; Oyserman & Destin, 2010; Oyserman et al., 2012). For example, the traits *serious* and *intelligent* have presumably become connected to Rachel's *student* identity because those traits have historically contributed to her success in academic contexts. Thus, overall, these proposed frameworks suggest that a person's self-concept is largely structured around their identities to enable them to engage in effective goal-focused thought and action in the situations that are central aspects of their life.

Previous research has provided support for this role of identities in organizing the self-concept by demonstrating how people's active identities determine the specific set of traits they use to define themselves from moment to moment. For example, in one study (McConnell et al., 2009), participants' identities and associated traits were preassessed before one of those identities was activated. In a subsequent RT task, participants were quicker to identify trait words that had been associated with the active identity in pretesting as compared with trait words that had been associated with nonactive identities. In other words, activating an identity rendered its specific associated traits more accessible in memory than the traits associated with nonprimed identities (see also Brown & McConnell, 2009; Hugenberg & Bodenhausen, 2004). However, the underlying motivational foundations of how identities function within the self-concept have yet to be directly tested. That is, the way that the types of identity-specific motivations identified in Studies 1 and 2 might be integrated and function within the hierarchical structure of the self-concept illustrated by Figure 2 is still an open question.

Given the importance of such questions for ultimately understanding how people's identity-specific motivations develop,

are activated, and come to affect self-regulation across the distinct domains of their lives, the primary objective of Studies 3–5 was to begin to investigate how these motivations are situated within the self-concept. Studies 3a and 3b began by examining whether the observed distinctions between identity-specific motivations for promotion or prevention in Studies 1 and 2 reflect distinctions in how conflicting or integrated people's representations of these identities are within the self-concept as a whole. Studies 4 and 5 then provided preliminary tests of two possible models regarding how identity-specific motivations fit within the hierarchy of the self-concept shown in Figure 2, which we detail following Studies 3a and 3b.

Studies 3a and 3b

The primary purpose of Studies 3a and 3b was to test whether the differences between identity-specific motivations observed in Studies 1 and 2 directly reflect how these identities are organized within people's broader self-concepts. If this is the case, then because identities are presumed to develop to enable people to respond appropriately to the specific situations they encounter (see McConnell, 2011; McConnell et al., 2012; Oyserman & Destin, 2010; Oyserman et al., 2012), identities that are more motivationally distinct should also generally share fewer central features overall and should be generally perceived as less compatible. Therefore, in these studies, participants first reported two different identities that they possessed and completed measures of the motivations associated with each one. In Study 3a, participants also reported a trait that was associated with both of these identities and rated how central the trait was to each one. Based on previous research, the level of dissimilarity in these centrality ratings was used as an index of identity incompatibility (e.g., Hodges & Park, 2013; Hugenberg & Bodenhausen, 2004; Stirratt, Meyer, Ouellette, & Gara, 2008; see McConnell, 2011; Roccas & Brewer, 2002). Alternatively, in Study 3b, participants provided a more general rating of how conflicting or integrated they felt the identities they nominated were (e.g., Benet-Martínez et al., 2002; Schmid, Hewstone, & Al Ramiah, 2013). In each study, we examined how the primary index of incompatibility or integration between the reported identities predicted the observed differences in identity-specific motivation.

Method—Study 3a

Participants. The final sample in Study 3a consisted of 541 undergraduate students (226 male, 310 female, 5 undisclosed; age: $M = 19.34$ years, $SD = 1.89$) enrolled at the same private university as in Studies 1 and 2 who took part in this study as part of a mass-testing session for an introductory psychology course or in an online pretesting survey. This provided a statistical power of .80 to detect effects of $f^2 \geq .015$. This final sample did not include data from an additional 284 respondents either because they did not complete the study, they completed the study more than once, or it was not possible to accurately match their separate survey sheets.

Materials and procedures.

Identity and trait nomination task. Participants first listed one trait that they felt was central and important to their sense

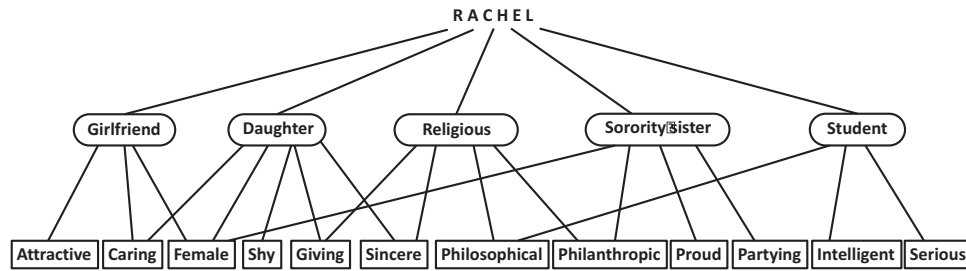


Figure 2. A hypothetical self-concept for a person named Rachel, including five broader identities (ovals) and the specific traits associated with each identity (rectangles). Figure adapted from work by McConnell (2011).

of who they are. Then, they nominated two distinct identities (“life roles . . . where the way you feel and act in one role is different from how you feel and act in the other”) in which they often expressed or enacted the previously listed trait. Participants wrote their nominated identities next to labels marking them as “life role #1” and “life role #2.”

Measures of identity-specific motivations. Participants completed two measures of identity-specific motivations for promotion or prevention similar to those used in Studies 1 and 2, except that the two identities they nominated were referred to in the items using the labels “life role #1” and “life role #2”—for example, “I frequently imagine how I will achieve my hopes and aspirations in life role #1.” Responses were made using 1 (*strongly disagree*) to 7 (*strongly agree*) scales. Predominant identity-specific regulatory focus was calculated as in previous studies by subtracting scores on the prevention subscale from scores on the promotion subscale.⁵

Identity incompatibility measure. To assess the level of incompatibility between the two identities that participants nominated for themselves, participants then rated the extent to which, “the trait I listed above is very central to who I am in [life role #1/#2].” That is, having nominating two identities—both of which were connected to a trait that they had nominated as centrally important to their self-concept as a whole—they then rated how central they felt that trait was to each of those identities. Responses were made using a 1 (*strongly disagree*) to 7 (*strongly agree*) scale ($M_{self-aspect-1} = 6.08$, $SD = 1.16$; $M_{self-aspect-2} = 5.60$, $SD = 1.39$), and the incompatibility between participants’ nominated identities was calculated by taking the absolute value of the difference between the two identity-centrality ratings they made (difference in trait centrality; $M = 1.18$, $SD = 1.28$), with higher scores indicating greater incompatibility. In other words, participants’ identities were presumed to be more incompatible the less they were both associated with the same central trait.

Results—Study 3a

To the extent that the distinctness of the motivations associated with people’s identities is associated with distinctions in how these identities are organized within the self-concept, the correspondence between participants’ identity-specific motivations should be weaker for individuals who reported greater incompatibility between those two identities. To test this correspondence, the identity-specific regulatory focus of the first identity reported was regressed on mean-centered indexes of the regulatory focus of the

second identity reported and the absolute difference in trait centrality in a first step, and the interaction of these variables was then added in a second step. As displayed in Figure 3a and Table 4a, a significant interaction emerged, such that the correspondence between participants’ identity-specific motivations was significantly weaker among individuals for whom the difference in centrality of the trait shared between the two identities was larger (1 *SD*) versus smaller (−1 *SD*). As also shown in Table 4a, essentially the same results emerged when the analyses were performed with the regulatory focus of the first identity reported as a predictor and the regulatory focus of the second identity reported as the outcome variable. Thus, overall, these results indicate that the differences between participants’ identity-specific motivations were larger the more incompatible the identities in question were.

Method—Study 3b

Participants. The final sample in Study 3b consisted of 196 online workers (101 male, 95 female; age: $M = 31.93$ years, $SD = 11.41$) who were recruited on Amazon’s Mechanical Turk website (www.mturk.com) and completed our study in exchange for \$0.25 US. This final sample provided a statistical power of .80 to detect effects of $f^2 \geq .040$. The final sample did not include data from an additional 79 respondents either because they did not complete the study, they completed the study more than once, or they nominated inappropriate or nongoal-relevant identities (e.g., “evil,” “sentient bag of meat”) or two identities that were very similar to each other (e.g., “Caucasian American” and “White American”).

Materials and procedures.

Identity nomination task and measures of identity-specific motivations. Participants first nominated two identities that they felt they possessed, and completed two measures of their identity-specific motivations for promotion or prevention (similar to those used in Studies 1–3a) in which the two identities they nominated were directly piped into the scale items. Responses were made using 1 (*strongly disagree*) to 7 (*strongly agree*) scales. Predominant identity-specific regulatory focus scores were calculated as in

⁵ In Studies 3–5, participants also completed the RFQ as a domain-general measure of regulatory focus. While this measure was not relevant for testing differences or similarities between identity-specific motivations or the various ways in which identity-specific motivations might be represented within the self-concept, it is worth noting that, as in Studies 1 and 2, the correlations between the RFQ and the identity-specific measures were small, $r_s = -.08$ – $.16$. These analyses are detailed in the supplementary materials.

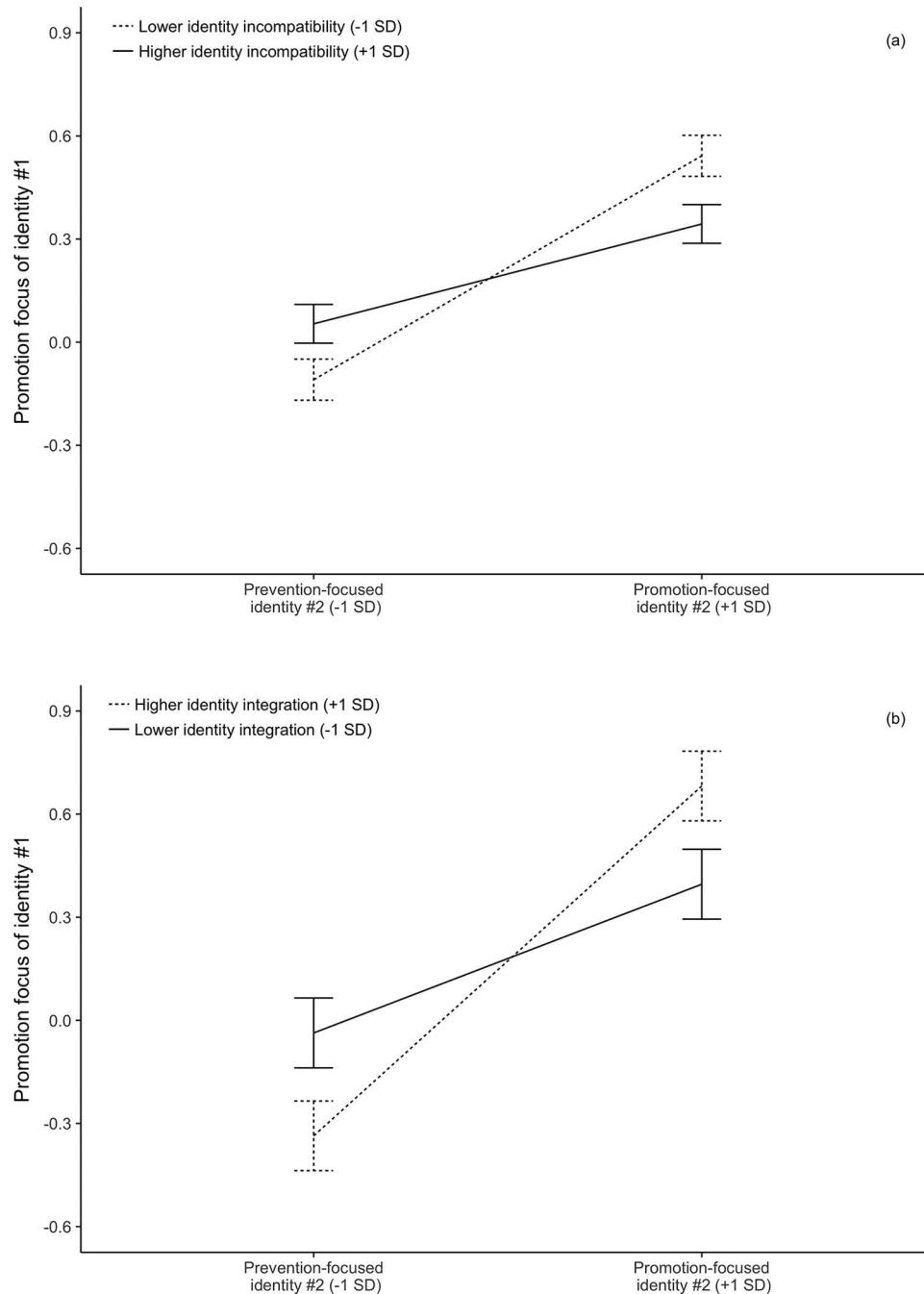


Figure 3. Associations between the identity-specific regulatory focus of two separate identities when these identities are more or less (a) incompatible (Study 3a) or (b) integrated (Study 3b). Error bars represent ± 1 SE of the mean regulatory focus of identity #1 at the respective value of identity incompatibility or integration.

previous studies by subtracting scores on the prevention subscale from scores on the promotion subscale.

Identity integration measure. Participants directly indicated how integrated they felt the two identities that they nominated were (Schmid et al., 2013). Responses were made using a 1 (*strongly conflicting*) to 6 (*strongly integrated*) scale ($M = 4.51$, $SD = 1.21$).

Results—Study 3b

Similar to Study 3a, to the extent that distinctness of the motivations associated with people's identities is associated with distinctions in how these identities are organized within the self-concept, the correspondence between participants' reported identity-specific motivations should be weaker for individuals who

Table 4
Moderation of the Association Between the Predominant Regulatory Focus of Two Self-Nominated Identities by (a) Identity Incompatibility in Study 3a, and (b) Identity Integration in Study 3b

Predictor	Regulatory focus of identity #1						Regulatory focus of identity #2					
	Step 1			Step 2			Step 1			Step 2		
	<i>b</i> [95% CIs]	<i>t</i>	<i>df</i>	<i>p</i>	<i>b</i> [95% CIs]	<i>t</i>	<i>b</i> [95% CIs]	<i>t</i>	<i>df</i>	<i>b</i> [95% CIs]	<i>t</i>	<i>df</i>
(a) Study 3a												
Regulatory focus of alternate identity	.25 [.16, .33]	5.52	464	<.001	.25 [.16, .34]	5.65	.25 [.16, .34]	5.52	464	.25 [.16, .34]	5.55	463
Identity incompatibility	-.02 [-.08, .05]	-.44	464	.663	-.01 [-.07, .06]	-.21	-.06 [-.13, .00]	-1.85	464	-.06 [-.12, .01]	-1.68	463
Identity RF × Centrality	—	—	—	—	-.08 [-.14, -.02]	-2.60	.010	—	—	-.09 [-.16, -.02]	-2.59	463
					$f^2 = .015$					$f^2 = .014$		
Simple effects of identity-specific RFs among those with high identity incompatibility (+1 SD)	—	—	—	—	.16 [.05, .27]	2.78	.006	—	—	.14 [.02, .26]	2.34	463
Simple effects of identity-specific RFs among those with low identity incompatibility (-1 SD)	—	—	—	—	.35 [.23, .47]	5.87	<.001	—	—	.36 [.24, .49]	5.80	463
(b) Study 3b												
Regulatory focus of alternate identity	.37 [.23, .51]	5.22	173	<.001	.37 [.23, .51]	5.19	.36 [.23, .50]	5.22	173	.36 [.22, .49]	5.10	172
Identity integration	-.01 [-.13, .10]	-.22	173	.822	-.00 [-.12, .11]	-.08	.12 [.01, .23]	2.13	173	.12 [.01, .23]	2.18	172
Identity RF × Integration	—	—	—	—	.12 [.01, .24]	2.07	.040	—	—	.09 [-.02, .21]	1.68	172
					$f^2 = .025$					$f^2 = .016$		
Simple effects of identity-specific RFs among those with low identity integration (-1 SD)	—	—	—	—	.22 [.02, .42]	2.19	.030	—	—	.25 [.05, .44]	2.48	172
Simple effects of identity-specific RFs among those with high identity integration (+1 SD)	—	—	—	—	.52 [.32, .72]	5.16	<.001	—	—	.47 [.29, .66]	4.98	172

Note. RF = predominant regulatory focus, calculated by subtracting scores on the prevention motivations subscale from scores on the promotion motivations subscale. Follow-up simple associations between identity-specific RF evaluated at different levels of reported identity incompatibility and identity integration are reported below the primary moderation analysis for each study. CIs = confidence intervals.

reported lower integration between those two identities. As before, this correspondence was tested by regressing the identity-specific regulatory focus of the first identity reported on mean-centered indexes of the regulatory focus of the second identity reported and integration scores in a first step, and then adding the interaction of these variables in a second step. As displayed in Figure 3b and Table 4b, a significant interaction emerged, such that the correspondence between participants' two identity-specific motivations was weaker among individuals who reported lower identity integration (-1 SD) than among those who reported higher identity integration (1 SD). As also shown in Table 4b, a similar pattern of results emerged when the analyses were performed with the regulatory focus of the first identity reported as a predictor and the regulatory focus of the second identity reported as the outcome variable, though the interaction was marginally significant. Thus, in line with the results of Study 3a, the difference between participants' identity-specific motivations were larger the less integrated the identities in question were perceived to be.

Discussion

Extending the initial findings that different identities can be associated with distinct motivations (Studies 1 and 2), Studies 3a and 3b illustrate that these distinct identity-specific motivations also reflect how the identities themselves are organized within the self-concept. Specifically, the identities that participants reported as being the most motivationally distinct were those that were least perceived as sharing a common central trait and as being compatible overall. These findings thus provide preliminary evidence consistent with the proposal

that identities arise in the service of various motivational functions (McConnell, 2011; McConnell et al., 2012), in that differences in identity-specific motivations were an important predictor of the perceived compatibility of the identities themselves.

However, the results of Studies 3a and 3b still do not yet provide much insight on precisely how identity-specific motivations are connected to other components of the self-concept or what implications this might have for how such motivations are activated. That is, if, as in Figure 2, Rachel's overall self-concept consists of multiple basic-level identities (e.g., *daughter* and *religious*) that are associated with multiple subordinate traits (McConnell, 2011; McConnell et al., 2012), at what level might these identity-specific motivations be situated and, more importantly, how might this affect the implications of their activation? The primary focus of Studies 4 and 5 was to provide preliminary tests of two competing models regarding how identity-specific motivations might be represented within the self-concept.

The first, *top-down model* (depicted in Figure 4a) posits that these motivations are directly connected to people's various identities. Just as specific traits may become associated with specific identities because those traits have a perceived history of facilitating successful goal pursuit in contexts where those identities are active (see McConnell et al., 2012; McConnell & Strain, 2007), different types of motivations may also become directly attached to particular identities if they too have a perceived history of contributing to such success. For example, if Rachel perceives that she has generally achieved success in her endeavors as a religious person by acting in a largely eager, promotion-focused way (e.g., readily taking on extra tasks in

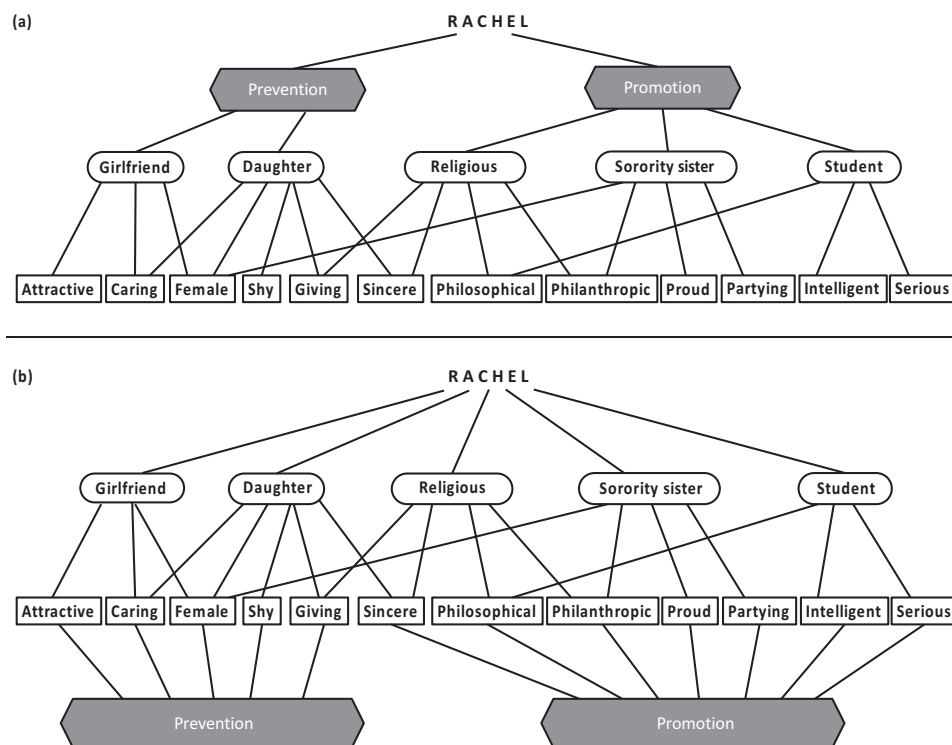


Figure 4. Potential models of the associative pathways between identities, motivation, and traits, where (a) each specific identity is directly connected to its own unique motivation (*top-down model*), or (b) motivations develop independently of identities but share connections to various traits (*bottom-up model*).

her congregation), then being promotion-focused might more generally become a central part of her religious identity itself. Similarly, if she perceives that she has achieved success in her endeavors as a daughter by acting in a vigilant, prevention-focused way (e.g., carefully ensuring that she calls her parents regularly), then being prevention-focused might become a central part of her daughter identity (cf. Higgins et al., 2001). In this way, people may come to specifically connect and experience their individual identities as related to distinct types of motivational concerns.

One primary implication of a model in which identity-specific motivations are directly connected to the identities themselves (the ovals in Figure 4a) and operate in a top-down manner is that how people evaluate and pursue their identity-associated traits (the rectangles in Figure 4a) should then change depending on the motivations associated with the currently active identity. For example, as depicted in Figure 4a, Rachel has a promotion-focused religious identity and a prevention-focused daughter identity, both of which are associated her trait of being a giving person. According to a top-down model, she would act in a growth-oriented way when being giving at her congregation (e.g., eagerly trying to raise as much money as possible), but in a more security-focused way when being giving around her parents (e.g., carefully ensuring they each receive an acceptable birthday gift). This possibility is tested in Study 4.

By contrast, a second, *bottom-up model* of how identity-specific motivations might be represented within the self-concept is depicted in Figure 4b. This model builds upon the established idea that people's traits can become infused with distinct motivational orientations based on how they think about developing or upholding these traits (Higgins, 1987, 1997; Markus & Nurius, 1986). For example, if Rachel views the trait of being giving as something it is her duty and obligation to uphold (i.e., as an ought), then situations that enhance the salience and activation of this trait should evoke prevention motivations. At the same time, if she views the trait of being sincere as something she hopes and aspires to achieve (i.e., as an ideal), then situations that enhance the salience and activation of the trait should evoke promotion motivations. Indeed, many previous studies have shown that making people focus on traits that they personally consider to be ideals or oughts can activate promotion and prevention motivations, respectively (e.g., Higgins et al., 1997; for review, see Molden & Winterheld, 2013). As a result, if individual traits are themselves directly associated with specific types of motivations for promotion and prevention, the overall motivations associated with a particular identity—that is, the identity-specific motivations that we have been assessing in Studies 1–4—should be a cumulative function of the motivational character of the all the traits that are connected to that identity. In other words, the more that a particular identity come to be attached to a set of motivationally similar traits (i.e., more ideals versus more oughts), the more the overall motivation associated with that identity should come to reflect the motivations defined by that type of trait (i.e., promotion vs. prevention, respectively).

As illustrated in Figure 4b, according this bottom-up model, Rachel's view of the trait of being giving as an ought would transfer some level of prevention motivations to both her *daughter* and *religious* identities. Coupled with the cumulative preponderance of other ought-traits also associated with the *daughter* identity, we would expect that prevention-focused motivations would become associated with this identity overall. By contrast, the preponderance of ideal-traits connected to the *religious* identity would result in promotion-focused motivations becoming connected to this identity overall.

Thus, activating a particular identity would not alter the motivations associated with a particular trait (as a top-down model would predict). Rather, people's identity-specific motivations should reflect the motivations assigned to the traits with which they are associated. This possibility is tested in Study 5.

Study 4

As noted above, to conduct a preliminary test of a top-down model regarding how the distinct motivations associated with people's various identities are represented within the larger self-concept (Figure 4a), Study 4 directly assessed whether activating an identity alters the motivations with which the traits connected to the identity are pursued. Participants first nominated one trait that was central to their overall self-concept, and then reported two separate identities to which that trait was connected. At a subsequent lab session, we then experimentally activated one of these pre-nominated identities and examined participants' motivational priorities when enacting that shared trait. If identity-specific motivations are directly connected to the identities themselves, then analogous to the findings of Study 2, activating different identities should alter the motivation guiding the shared trait.

Method

Participants. The final sample in Study 4 consisted of 95 undergraduate students (42 male, 52 female, 1 undisclosed; age: $M = 19.14$ years, $SD = 1.05$) selected from the larger sample of those who completed Study 3a. This sample provided a statistical power of .80 to detect effects of $f^2 \geq .084$, comparable to Study 2 that featured a similar experimental design.

Materials and procedures. This study was completed in two separate sessions. In a first pretesting session, participants completed the trait and identity nomination tasks and identity-specific regulatory focus measures described in Study 3a. Predominant regulatory focus for each identity was again calculated by subtracting scores on the prevention subscale from scores on the promotion subscale. We aimed to preselect individuals who reported the largest difference between the regulatory focus associated with each identity to ensure that we could adequately test the dynamics that arise when one trait is associated with two motivationally distinct identities. Upon arrival at the lab several weeks after pretesting, one of the two identities reported earlier was activated and participants reported their current motivation with regard to enacting the identity-associated trait that they nominated at pretesting. In other words, for all the dependent measures completed in this study, participants were asked to report how they typically thought and acted when it came to "being [trait] in your role as [identity]," with the trait they provided and the activated identity piped into the questions.

Assessing the influence of active identities on trait-relevant motivations. Based on prior work assessing the influences on motivations for promotion or prevention (for reviews, see Molden et al., 2008; Molden & Winterheld, 2013), four sets of measures were used to assess the extent to which participants, in the context of the activated identity, were motivated to pursue the trait they nominated in a promotion- versus prevention-focused manner. The first set included face-valid scales in which participants directly reported how promotion- or prevention-focused they were with

regard to the thought of pursuing that trait under the influence of the activated identity. The second set included questions about the extent to which they commonly used promotion- or prevention-focused strategies when pursuing the trait they nominated within the activated identity. The third set assessed the extent to which participants' experienced promotion- and prevention-focused emotions when reliving an instance when they failed to uphold the nominated trait in the context of the activated identity. Finally, the fourth set assessed the extent to which participants engaged in promotion- and prevention-focused reasoning in response to the failure experience they had relived. Complete details on all of these measures and the specific questions used are reported in the supplemental materials.

Results and Discussion

Random assignment was effective: the regulatory focus associated with both the first and second identities participants listed did not significantly vary between those for whom the first identity was selected as the active identity and those for whom the second identity was selected, $t_{\text{test}} < .92$, all p s $> .357$. As noted, if different motivations are directly connected to distinct identities that share a particular trait, then activating one such identity versus the other should activate different motivations for enacting that common trait (see Figure 4a). In other words, the stronger the promotion-focus associated with the primed identity, the more promotion-focused participants should report being with regard to how they would enact and pursue the shared trait, and the more they should report experiencing promotion-focused thoughts and emotions when failing to uphold the trait.

To test these possibilities, we separately regressed each of the dependent measures on the mean-centered main effects of condition (i.e., which identity was activated) and the two identity-specific regulatory focus scores in a first step, with the interactions of condition and each motivation measure added in a second step. As shown in Table 5, no significant interactions emerged. In other words, across multiple measures of the motivations associated with a particular trait when one of its associated identities was activated, we found no evidence that the motivations connected to the active identities influenced these measures.

The results of Study 4 are, therefore, inconsistent with a top-down model, in which the distinct motivations that emerge when activating specific identities are directly connected to those identities within the structure of the self-concept. That is, activating a particular identity did not subsequently influence the motivations with which participants pursued the traits connected to that identity. Moreover, another aspect of the data worth further attention is that, as described above, we attempted to preselect participants for this study so as to maximize the size of the discrepancies in the motivations associated with the two identities that they nominated. However, even out of the large initial sample drawn from Study 3a ($N = 541$), large differences in identity-specific motivations were uncommon ($M_{\text{difference}} = .83$, $SD = .78$) and it was, therefore, difficult to recruit a sample with large differences (Study 4 sample: $M_{\text{difference}} = .97$; $SD = .85$). This suggests that it is generally not common for identities linked to the same trait to differ greatly in their associated motivations, perhaps providing further evidence against a top-down model.

Study 5

Given that Study 4 did not support a top-down model of the connections between specific identities and different motivations, Study 5 provided a preliminary test of an alternative, bottom-up model of how identity-specific motivations are represented within the self-concept. As noted, this model proposes that the promotion or prevention motivations associated with specific identities should depend on whether those identities are predominantly connected to traits that are themselves infused with these motivations. In other words, identities with greater cumulative connections to traits that a person views as ideals should ultimately be associated with stronger promotion motivations, whereas identities with greater cumulative connections to traits that person views as oughts should ultimately be associated with stronger prevention motivations (cf. Higgins, 1997). To test this possibility, participants in Study 5 first nominated one trait that they considered an ideal to which they aspired and one trait that was an ought that they felt responsible to uphold. They then listed all of the identities associated with either the ideal trait or ought trait and completed measures to assess the primary motivation associated with each of these identities. If identity-specific motivations arise from the cumulative motivational character of the traits to which an identity is connected, then the identities connected to the ideal trait should be associated with stronger promotion motivations than the identities connected to the ought trait.

Method

Participants. The final sample in Study 5 consisted of 199 online workers on MTurk (101 male, 98 female; age: $M = 34.66$ years, $SD = 10.85$) who completed the study in exchange for \$1.60 US. This final sample provided a statistical power of .80 to detect effects of Cohen's $d \geq .20$ in a within-subjects design. This final sample did not include the following additional responses: 40 responses that included at least one failed attention check (described in the supplementary materials), 43 responses in which respondents did not complete the dependent measures, and 98 responses in which respondents did not have current motivations for upholding the traits trait they listed (see below), which are necessary given the focus of this study (see Higgins, 1987).

Procedure. This within-subjects design consisted of two sections. In one section, participants (a) nominated their most important ideal trait and indicated the extent to which they were currently motivated to uphold this trait, (b) listed all the identities they possessed for which that ideal trait was relevant, and (c) completed a measure of identity-specific regulatory focus for each of the identities they listed. In the other section, participants completed the same three procedures for their most important ought trait. The order in which participants completed these two sections was counterbalanced.

Materials.

Trait nomination. Each participants' ideal and ought traits were first identified using prompts adapted from much prior research on these motivations (e.g., Higgins et al., 1994, 1997; see Higgins, 1987, 1997). In separate ideal and ought trait nomination sections, participants were asked to "write in the trait that best describes the type of person you [would ideally like to be / feel you ought to be] at this point in your life." As also adapted from prior research, participants reported the self-discrepancy associated with

Table 5
Results of Regressing the Four Trait-Relevant Motivation Measures on Condition, Identity-Specific Motivation Scores for Participants' Two Self-Nominated Identities, and the Relevant Two-Way Interactions in Study 4

Outcomes and predictors	Promotion measures					Prevention measures						
	Step 1			Step 2			Step 1			Step 2		
	b [95% CIs]	t	df	p	b [95% CIs]	t	df	p	b [95% CIs]	t	df	p
Explicit motives												
Condition	-.16 [- .45, .14]	-1.06	84	.290	-.16 [- .46, .14]	-1.08	82	.285	-.32 [- .56, -.07]	-2.56	83	.012
Identity #1 RF	.01 [- .14, .16]	.13	84	.899	.02 [- .13, .18]	.27	82	.785	.02 [- .10, .15]	.39	83	.696
Condition × Identity #1 RF	—	—	—	—	-.08 [- .39, .24]	-.47	82	.637	—	—	—	—
					$f^2 = .003$				$f^2 = .017$			
Identity #2 RF	.09 [- .07, .24]	1.12	84	.265	.07 [- .09, .22]	.86	82	.390	.06 [- .07, .18]	.88	83	.382
Condition × Identity #2 RF	—	—	—	—	.18 [- .13, .05]	1.14	82	.256	—	—	—	—
					$f^2 = .016$				$f^2 = .011$			
Preferred strategies												
Condition	-.06 [- .40, .27]	-.38	84	.703	-.07 [- .40, .26]	-.40	82	.687	-.31 [- .69, .07]	-1.63	84	.108
Identity #1 RF	.02 [- .15, .18]	.19	84	.852	.03 [- .14, .21]	.38	82	.702	-.08 [- .27, .12]	-.79	84	.434
Condition × Identity #1 RF	—	—	—	—	-.11 [- .46, .24]	-.63	82	.530	—	—	—	—
					$f^2 = .005$				$f^2 = .007$			
Identity #2 RF	.09 [- .09, .26]	1.01	84	.317	.06 [- .12, .23]	.66	82	.508	.06 [- .14, .26]	.58	84	.561
Condition × Identity #2 RF	—	—	—	—	.29 [- .06, .65]	1.63	82	.107	—	—	—	—
					$f^2 = .032$				$f^2 = .001$			
Abstractness of preferred strategies												
Condition	.11 [- .44, .66]	.40	84	.688	.13 [- .42, .68]	.46	82	.648	—	—	—	—
Identity #1 RF	-.04 [- .32, .23]	-.33	84	.743	-.10 [- .38, .19]	-.66	82	.513	—	—	—	—
Condition × Identity #1 RF	—	—	—	—	.36 [- .22, .94]	1.24	82	.219	—	—	—	—
					$f^2 = .019$							
Identity #2 RF	.02 [- .26, .31]	.15	84	.881	.01 [- .28, .30]	.09	82	.932	—	—	—	—
Condition × Identity #2 RF	—	—	—	—	.16 [- .43, .75]	.54	82	.589	—	—	—	—
					$f^2 = .004$							
Emotional responses												
Condition	-.73 [- 1.39, -.07]	-2.20	84	.030	-.74 [- 1.40, -.08]	-2.22	82	.029	-.46 [- 1.20, .29]	-1.22	84	.224
Identity #1 RF	.00 [- .33, .33]	.01	84	.990	.04 [- .31, .38]	.21	82	.835	-.23 [- .6, .14]	-1.22	84	.227
Condition × Identity #1 RF	—	—	—	—	-.22 [- .93, .48]	-.64	82	.527	—	—	—	—
					$f^2 = .005$				$f^2 = .032$			
Identity #2 RF	.38 [.04, .73]	2.22	84	.029	.34 [- .01, .69]	1.94	82	.056	.43 [.04, .81]	2.20	84	.031
Condition × Identity #2 RF	—	—	—	—	.41 [- .30, 1.12]	1.14	82	.258	—	—	—	—
					$f^2 = -.064$				$f^2 = .0009$			
Counterfactual thinking												
Condition	11.25 [- 3.33, 25.83]	1.53	84	.129	11.49 [- 3.23, 26.21]	1.55	82	.124	—	—	—	—
Identity #1 RF	.56 [- 6.73, 7.86]	.15	84	.878	-.28 [- 7.97, 7.40]	-.07	82	.942	—	—	—	—
Condition × Identity #1 RF	—	—	—	—	6.06 [- 9.56, 21.68]	.77	82	.443	—	—	—	—
					$f^2 = .007$							
Identity #2 RF	6.31 [- 1.28, 13.90]	1.65	84	.102	6.48 [- 1.33, 14.29]	1.65	82	.103	—	—	—	—
Condition × Identity #2 RF	—	—	—	—	-.76 [- 16.56, 15.04]	-.10	82	.924	—	—	—	—
					$f^2 = .0001$							

Note. RF = predominant regulatory focus, calculated by subtracting scores on the prevention motivations subscale from scores on the promotion motivations subscale; CIs = confidence intervals.

each trait by indicating the extent to which they were currently motivated to uphold this trait in terms of either how much they would ideally have liked to or how much they believed they ought to possess the relevant trait, as well as how much they believed they actually (currently) possessed both of those traits, all on 1 (*not at all*) to 4 (*very much*) scales. The strength of participants' current motivations to uphold the listed traits was calculated by subtracting actual scores from ideal scores or actual scores from ought scores as appropriate. As described, those who did not have current motivations for upholding the traits they listed (i.e., had scores of 0 or less) were excluded.

Identity nomination and identity-specific motivations measures. In separate sections, participants listed up to 10 "identities you have in which [it is your hope, wish, or aspiration/you feel it is your duty, obligation, or responsibility]" to have the ideal and ought traits they had previously nominated (ideal-related identities nominated: $M = 2.44$, $SD = 1.64$; ought-related identities nominated: $M = 2.53$, $SD = 1.55$). Participants then completed one full identity-specific regulatory focus scale for each of the identities they nominated as being related to either trait, using 1 (*strongly disagree*) to 7 (*strongly agree*) scales. Predominant identity-specific regulatory focus for each identity was calculated as in previous studies by subtracting scores on the prevention subscale from scores on the promotion subscale.

Results and Discussion

As noted, if identity-specific motivations arise primarily from the cumulative motivational character of the traits connected to these identities, then the identities participants listed as connected to ideal traits should be more strongly promotion-focused than the identities connected to ought traits. To test this, the identity-specific regulatory focus scores from all of the identities participants listed as connected to the ideal trait were averaged into one index and the identity-specific regulatory focus scores from all of the identities participants listed as connected to the ought trait were averaged into another index. These separate indexes were then subjected to a paired samples t test, which confirmed that identities connected to ideal traits were significantly more promotion-focused ($M = .05$, $SD = .98$) than identities connected to ought traits ($M = -.10$, $SD = 1.02$), $t(198) = 2.45$, $p = .015$, Cohen's $d = .17$.

To further test whether these results were influenced by the number of identities that participants reported or by the strength of their current motivations to uphold the listed traits, we also conducted multilevel regressions with the type of trait (ideal vs. ought) nested within participant. The average identity-specific regulatory focus score was then regressed on trait type, the number of identities participants reported as connected to those traits, and the average strength of their current motivations for those traits in a first step, with the addition of terms representing the Trait Type (ideal coded as 0, ought coded as 1) \times Number of Identities and Trait Type \times Motivation Strength interactions in additional steps. The results of the Step 1 analyses again showed that ideal versus ought traits predicted differences in the regulatory focus of the connected identities, $b = -.20$ [$-.33, -.08$], $t(196) = -3.19$, $p = .002$. In addition, the results of the additional steps indicated that neither the number of identities connected to these traits nor the average strength of participants' current motivations moderated

this effect, $|b| < .62$, $ps > .537$. See the supplementary materials for complete details regarding these multilevel analyses.

In summary, the results of Study 5 provide evidence consistent with a bottom-up model of the connections between specific identities and different motivations. Specifically, identities connected to ideal traits were more predominantly associated with promotion motivations than identities connected to ought traits. This stands in contrast to the lack of evidence for a top-down model in Study 4, where no effects were observed of activating different identities on the motivations associated with traits to which multiple identities were connected. The present findings provide better support for a mechanism in which identity-specific motivations emerge as a result of their cumulative connections to motivationally infused traits (Figure 4b), rather than one in which motivations are directly connected to specific identities and thereby influence how people uphold and pursue associated traits when those identities are active (Figure 4a).

Although the findings of Studies 4 and 5 clearly support bottom-up over top-down models of the representation and influence of different motivations within the self-concept, the evidence from these studies should be still be considered preliminary. Such findings do evaluate some central implications of these two types of models and provide some additional insights about the potential motivational consequences of contexts that broadly activate particular identities versus particular traits. However, they do not precisely outline the specific nature of people's motivational representations within the self-concept or directly evaluate the connections of these representations to other components of the self-concept. Thus, overall, although we believe that a bottom-up model such as the one portrayed in Figure 4b is a good place to begin to explore this issue, further research is needed before firm conclusions can be drawn about how exactly identity-specific motivations are incorporated into the self-concept.

General Discussion

Previous research on self-regulation has primarily focused either on broad, domain-general motivational orientations that can operate across time and in different contexts, or on immediate, situation-specific motivational demands that arise from the particular incentives offered by the present context. In this article, we have extended such research by examining how the unique and numerous identities (i.e., the roles, relationships, and social categories) that individuals construct for themselves might help them to coordinate their domain-general and situational-specific motivations. Specifically, by assessing people's identity-specific motivations, we investigated how their identities can organize what types of internalized motivations are brought to bear in the specific situations that activate these identities.

Using the distinct types of broad motivations described by regulatory focus theory (Higgins, 1997) as a framework for assessing the activation and organization of identity-specific motivations, Studies 1 and 2 demonstrated that the idiosyncratic identities that people develop do indeed differ in whether they are more associated with motivations for growth and advancement (i.e., promotion) or safety and security (i.e., prevention), and that these identity-specific motivations do not directly correspond with people's broader, domain-general motivations. Moreover, these studies also demonstrated that such identity-specific motivations for

promotion or prevention better predicted people's promotion- or prevention-focused responses in situations where that particular identity was active as compared with their domain-general motivations. Studies 3a and 3b then illustrated that differences in identity-specific motivations reflect differences in how these identities are represented within the self-concept, in that identities that were the most motivationally distinct were also perceived as the least compatible and integrated overall. Finally, Studies 4 and 5 suggested that identity-specific motivations for promotion or prevention emerge as a result of the overall motivational character of the set of traits associated with a particular identity, rather than as a result of direct connections between identities and motivations. Specifically, whereas no evidence emerged to support the view that activating a particular identity influenced the promotion or prevention motivations associated with traits connected to that identity (Study 4), our findings did indicate that the motivations for promotion or prevention specific to particular identities corresponded with the motivations associated with the traits to which people's identities are connected (Study 5).

Implications for Understanding Self-Regulation

One important implication of the present findings regarding the influence of identity-specific motivations on self-regulation is that it adds a more nuanced perspective to previous considerations of the interaction between people's chronic, domain-general motivational orientations and the immediate motivational demands of specific situations. As noted at the outset, researchers have typically studied this interaction in terms of when and how one of these forms of motivation overrides or replaces the other, or how individuals with different chronic motivations might react to specific situational demands (Bargh et al., 2001; Lisjak et al., 2012; see Bargh et al., 2010). By contrast, the identification of identity-specific motivations allows for the possibility of some integration between chronic and situational influences.

Specifically, our findings suggest that by virtue of their role in organizing and coordinating how people perceive and respond to specific situations, the identities that people develop come to inform what motivational demands they experience in these situations. Considering the motivations that people associate with their own unique set of stable identities, therefore, allows one to ask additional questions about how people might differ in terms of when their broader motivational orientations are activated and what traits and behaviors become accessible when such activation does occur. Furthermore, to the extent that the identities that people develop are frequently defined by and embedded in the idiosyncratic social situations that they typically encounter in their daily lives (e.g., Boldero & Francis, 2000), the present studies may further add to the growing recognition that what is labeled "self-regulation" may often involve, or even require, consideration of interdependent relationships with others (e.g., Fitzsimons, Finkel, & vanDellen, 2015; see also Levine, Resnick, & Higgins, 1993).

Finally, beyond these theoretical advances over previous perspectives, the present findings also offer the important practical benefit of enhancing how well the effects of people's motivations on their thoughts and actions can be predicted, as compared with examining either traditional domain-general tendencies or situation-specific demands. If participants do differ in both the identities activated in specific situations and the traits that may

constitute these identities, then appreciating and assessing these identity-centric differences will provide a better window into the motivations guiding people's cognitions and behavior at any given time, as the results of Studies 1 and 2 suggest.

Implications for Regulatory Focus Theory

In addition to these overall implications for studying self-regulation, our findings also have direct implications for regulatory focus theory. As with other typical perspectives on self-regulation, this theory holds that people have broad, chronic motivations for promotion and prevention that generally guide their behaviors across multiple domains, but at the same time recognized that the immediate incentives or motivational demands of specific situations can at least temporarily override chronic motivations (see Higgins, 1997; Molden et al., 2008; Scholer & Higgins, 2012). Indeed, many past studies have demonstrated the similar effects of both chronic, domain-general and temporary, situation-specific motivations for promotion or prevention on the same particular judgment or behavior (e.g., Förster et al., 2001; Idson et al., 2000; Scholer et al., 2014; Shah & Higgins, 1997).

The present studies extend these findings by demonstrating that people possess separate identity-specific motivations for promotion or prevention that are (a) only weakly correlated with their domain-general motivations for promotion or prevention, and (b) better predict people's promotion- or prevention-focused responses when corresponding identities have been activated in the present situation. These results suggest that some reconsideration of what defines one's "chronic" regulatory focus may be warranted. In particular, while Studies 4 and 5 support the foundational idea that people possess broad, stable motivations that emerge from the unique traits that they themselves define as more promotion- or prevention-focused (i.e., as ideals versus oughts; Higgins, 1987, 1997), these studies also advance our novel hypothesis that it is the connections between these broad motivations and specific identities that systematically determine which motivations will reliably drive thought and action in identity-associated situations. In addition, Studies 1 and 2 further suggest that these broader motivations are not truly chronic, finding that they only influence people's responses once the relevant identity has been activated (cf. Brown & McConnell, 2009; see also Boldero & Francis, 2000). In other words, as alluded to above, what have previously been conceptualized as chronic, domain-general motivations for promotion, or prevention may instead be more dependent on the immediate social context (Levine et al., 1993).

The findings of the present research may also suggest a reconceptualization of how manipulations of regulatory focus may have influenced people's responses in a variety of previous studies. Similar to our methodology in Study 5, a frequent strategy for temporarily activating motivations for promotion or prevention has been to ask people to describe either their personal hopes and aspirations (i.e., ideals) or duties and obligations (i.e., oughts), respectively (see Molden et al., 2008). However, in light of the present findings, it is possible that such a manipulation may be effective in producing promotion- or prevention-focused responses because, in prompting people to think about specific ideals and oughts, it is also prompting them to think about the identities to which these traits are connected. In other words, analogous to

Study 2, this type of manipulation may temporarily activate people's promotion- or prevention-focused identities, which then predict people's immediate responses in ways that measures of their domain-general motivations for promotion or prevention do not (see also Lisjak et al., 2012). Future research on regulatory focus would, therefore, benefit from a closer examination of the effect of directly activating people's ideal and ought self-guides on the activation of identity-specific motivations, and how these types of procedures might differ in their mechanisms from other means of temporarily manipulating people's current regulatory focus (e.g., providing gain-focused or loss-focused incentives for task performance; Molden et al., 2008).

Implications for Understanding the Self-Concept

Beyond these implications for self-regulation, the present studies also contribute to our understanding of the organization of the mental representations that make up the self-concept. First, our findings reaffirm the wealth of prior research suggesting that people's self-concepts are perhaps best viewed as collections of multiple context-dependent identities, each of which is associated with a specific set of descriptive traits (see McConnell, 2011; Oyserman et al., 2012). At the same time, our work extends these perspectives by directly assessing the distinct types of motivations associated with people's identities, and illustrating the potential consequences of these identity-specific motivations (see also Marsh, 1990). That is, consistent with previous findings that activating a specific identity leads people to selectively respond to information relevant to the particular traits attached to this identity (e.g., Brown & McConnell, 2009; McConnell et al., 2009) and to engage in more identity-relevant behavior (e.g., Ross et al., 2002), the present studies suggest that activating an identity also leads to the activation of identity-specific motivational sensitivities and priorities.

In addition, the present studies also contribute more broadly to our understanding of the role of the self-concept in goal pursuit. Although a long history of research on self-regulation has emphasized the importance of the self-concept in how people set and monitor progress toward personally relevant goals—such as by directing attention toward addressing perceived self-discrepancies regarding the attainment or maintenance of desired traits or outcome (e.g., Carver & Scheier, 1982; Higgins, 1987; Markus & Nurius, 1986)—our findings provide additional insight into how such goal-setting and monitoring might occur. Specifically, McConnell and colleagues (2007, 2012) have more recently argued that the organization of desired traits into a set of broader identities may facilitate people's ability to recognize and address such discrepancies. Our findings provide empirical evidence consistent with this proposal by demonstrating that people's distinct identities do indeed appear to create distinct motivational priorities that then influence people's specific responses when such identities are active.

Finally, our findings also provide direct support for the proposal that the types of motivations people associate with particular identities may stem from the motivational nature of the specific traits they connect to these identities (e.g., McConnell, 2011). As depicted in Figure 4b, Study 5 found that identities connected to growth- and advancement-related traits were associated with motivations for promotion, whereas identities connected to safety-

and security-related traits were less associated motivations for promotion. By contrast, no evidence was found for the alternative possibility that—perhaps as a result of some consistent history of experience or socialization (cf. Higgins, 1997)—people's identities might come to be directly connected to particular types of motivations and, thus, when activated, could influence how the traits connected to these identities are pursued (see Figure 4a). To summarize, although more research is needed to definitively determine the specific structure of how identity-specific motivations are represented within the self-concept, the present research provides some initial insight on this question in terms of the motivational role and broad organization of identities and the traits to which they are connected.

Concluding Remarks

The current research provides evidence for the importance of the particular identities that people form in understanding how they self-regulate in pursuit of their goals. Specifically, the present findings demonstrate that (a) the extent to which people are predominantly motivated by promotion or prevention differs across their different identities, (b) these distinct identity-specific motivations better predict their responses than existing measures of domain-general motivations for promotion or prevention, and (c) the distinct motivations associated with people's various identities appear to emerge as a result of their connections to idiosyncratic sets of motivationally imbued traits. Such findings provide new insights with regard to our understanding of the motivations that guide people's behaviors in specific situations, and how these situation-specific motivations relate to people's more general motivational concerns. Overall, then, building from James' (1890) insight, the present research may illuminate when people might feel they must act as humans or officials, politicians or moralists, and how exactly entering those roles might spur them to think and act.

References

- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84, 888–918. <http://dx.doi.org/10.1037/0033-2909.84.5.888>
- Baldwin, M., Keelan, J., Fehr, B., Enns, V., & Koh-Rangarajoo, E. (1996). Social-cognitive conceptualization of attachment working models: Availability and accessibility effects. *Journal of Personality and Social Psychology*, 71, 94–109. <http://dx.doi.org/10.1037/0022-3514.71.1.94>
- Bargh, J. A., & Gollwitzer, P. M. (1994). Environmental control of goal-directed action: Automatic and strategic contingencies between situations and behavior. In W. D. Spaulding (Ed.), *Nebraska symposium on motivation* (Vol. 41, pp. 71–124). Lincoln, NE: University of Nebraska Press.
- Bargh, J. A., Gollwitzer, P. M., Lee-Chai, A., Barndollar, K., & Trötschel, R. (2001). The automated will: Nonconscious activation and pursuit of behavioral goals. *Journal of Personality and Social Psychology*, 81, 1014–1027. <http://dx.doi.org/10.1037/0022-3514.81.6.1014>
- Bargh, J. A., Gollwitzer, P. M., & Oettingen, G. (2010). Motivation. In S. Fiske, D. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (Vol. 2, pp. 268–316). New York, NY: Wiley. <http://doi.org/10.1007/978-90-481-3112-9>
- Benet-Martínez, V., Leu, J., Lee, F., & Morris, M. W. (2002). Negotiating biculturalism: Cultural frame switching in biculturals with oppositional versus compatible cultural identities. *Journal of Cross-Cultural Psychology*, 33, 492–516. <http://dx.doi.org/10.1177/0022022102033005005>

- Boldero, J., & Francis, J. (2000). The relation between self-discrepancies and emotion: The moderating roles of self-guide importance, location relevance, and social self-domain centrality. *Journal of Personality and Social Psychology*, 78, 38–52. <http://dx.doi.org/10.1037/0022-3514.78.1.38>
- Bowlby, J. (1969). *Attachment and loss: Volume 1. Attachment*. New York, NY: Basic Books.
- Brown, C. M., & McConnell, A. R. (2009). When chronic isn't chronic: The moderating role of active self-aspects. *Personality and Social Psychology Bulletin*, 35, 3–15. <http://dx.doi.org/10.1177/0146167208324675>
- Carver, C. S., & Scheier, M. F. (1982). Control theory: A useful conceptual framework for personality-social, clinical, and health psychology. *Psychological Bulletin*, 92, 111–135. <http://dx.doi.org/10.1037/0033-2909.92.1.111>
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York, NY: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9781139174794>
- 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. <http://dx.doi.org/10.1037/0022-3514.86.3.388>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. London, United Kingdom: Routledge.
- Crump, M. J., McDonnell, J. V., & Gureckis, T. M. (2013). Evaluating Amazon's Mechanical Turk as a tool for experimental behavioral research. *PLoS ONE*, 8, e57410. <http://dx.doi.org/10.1371/journal.pone.0057410>
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227–268. http://dx.doi.org/10.1207/S15327965PLI1104_01
- Evans, G. A. L., Lambon Ralph, M. A., & Woollams, A. M. (2012). What's in a word? A parametric study of semantic influences on visual word recognition. *Psychonomic Bulletin & Review*, 19, 325–331. <http://dx.doi.org/10.3758/s13423-011-0213-7>
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4, 272–299. <http://dx.doi.org/10.1037/1082-989X.4.3.272>
- Faddegon, K., Scheepers, D., & Ellemers, N. (2008). If we have the will, there will be a way: Regulatory focus as a group identity. *European Journal of Social Psychology*, 38, 880–895. <http://dx.doi.org/10.1002/ejsp.483>
- Fazio, R. H. (1995). Attitudes as object-evaluation associations: Determinants, consequences, and correlates of attitude accessibility. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 247–282). Mahwah, NJ: Erlbaum.
- Fitzsimons, G. M., Finkel, E. J., & vanDellen, M. R. (2015). Transactive goal dynamics. *Psychological Review*, 122, 648–673. <http://dx.doi.org/10.1037/a0039654>
- Förster, J., Grant, H., Idson, L. C., & Higgins, E. T. (2001). Success/failure feedback, expectancies, and approach/avoidance motivation: How regulatory focus moderates classic relations. *Journal of Experimental Social Psychology*, 37, 253–260. <http://dx.doi.org/10.1006/jesp.2000.1455>
- Förster, J., & Tory Higgins, E. (2005). How global versus local perception fits regulatory focus. *Psychological Science*, 16, 631–636. <http://dx.doi.org/10.1111/j.1467-9280.2005.01586.x>
- Fulmer, C. A., Gelfand, M. J., Kruglanski, A. W., Kim-Prieto, C., Diener, E., Pierro, A., & Higgins, E. T. (2010). On “feeling right” in cultural contexts: How person-culture match affects self-esteem and subjective well-being. *Psychological Science*, 21, 1563–1569. <http://dx.doi.org/10.1177/0956797610384742>
- Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making*, 26, 213–224. <http://dx.doi.org/10.1002/bdm.1753>
- Hamilton, R., Vohs, K. D., Sellier, A. L., & Meyvis, T. (2011). Being of two minds: Switching mindsets exhausts self-regulatory resources. *Organizational Behavior and Human Decision Processes*, 115, 13–24. <http://dx.doi.org/10.1016/j.obhdp.2010.11.005>
- Hanson, D. A. A. (2011). *Regulatory focus theory: The influence of media on opportunity recognition* (Unpublished Master's thesis). University of Pretoria, Pretoria, South Africa.
- Haws, K., Dholakia, U., & Bearden, W. O. (2010). An assessment of chronic regulatory focus measures. *Journal of Marketing Research*, 47, 967–982. <http://dx.doi.org/10.1509/jmkr.47.5.967>
- Hazlett, A., Molden, D. C., & Sackett, A. M. (2011). Hoping for the best or preparing for the worst? Regulatory focus and preferences for optimism and pessimism in predicting personal outcomes. *Social Cognition*, 29, 74–96. <http://dx.doi.org/10.1521/soco.2011.29.1.74>
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319–340. <http://dx.doi.org/10.1037/0033-295X.94.3.319>
- Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, 52, 1280–1300. <http://dx.doi.org/10.1037/0003-066X.52.12.1280>
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology*, 30, 1–46. [http://dx.doi.org/10.1016/S0065-2601\(08\)60381-0](http://dx.doi.org/10.1016/S0065-2601(08)60381-0)
- Higgins, E. T., & Bargh, J. A. (1987). Social cognition and social perception. *Annual Review of Psychology*, 38, 369–425. <http://dx.doi.org/10.1146/annurev.ps.38.020187.002101>
- Higgins, E. T., Friedman, R. S., Harlow, R. E., Idson, L. C., Ayduk, O. N., & Taylor, A. (2001). Achievement orientations from subjective histories of success: Promotion pride versus prevention pride. *European Journal of Social Psychology*, 31, 3–23. <http://dx.doi.org/10.1002/ejsp.27>
- Higgins, E. T., Roney, C. J., Crowe, E., & Hymes, C. (1994). Ideal versus ought predilections for approach and avoidance: Distinct self-regulatory systems. *Journal of Personality and Social Psychology*, 66, 276–286. <http://dx.doi.org/10.1037/0022-3514.66.2.276>
- Higgins, E. T., Shah, J., & Friedman, R. (1997). Emotional responses to goal attainment: Strength of regulatory focus as moderator. *Journal of Personality and Social Psychology*, 72, 515–525. <http://dx.doi.org/10.1037/0022-3514.72.3.515>
- Hodges, A. J., & Park, B. (2013). Oppositional identities: Dissimilarities in how women and men experience parent versus professional roles. *Journal of Personality and Social Psychology*, 105, 193–216. <http://dx.doi.org/10.1037/a0032681>
- Hugenberg, K., & Bodenhausen, G. V. (2004). Category membership moderates the inhibition of social identities. *Journal of Experimental Social Psychology*, 40, 233–238. [http://dx.doi.org/10.1016/S0022-1031\(03\)00096-9](http://dx.doi.org/10.1016/S0022-1031(03)00096-9)
- Idson, L. C., Liberman, N., & Higgins, E. T. (2000). Distinguishing gains from nonlosses and losses from nongains: A regulatory focus perspective on hedonic intensity. *Journal of Experimental Social Psychology*, 36, 252–274. <http://dx.doi.org/10.1006/jesp.1999.1402>
- James, W. (1890). *The principles of psychology*. New York, NY: Holt and Co. <http://dx.doi.org/10.1037/11059-000>
- Kihlstrom, J. F., & Cantor, N. (1984). Mental Representations of the Self. *Advances in Experimental Social Psychology*, 17, 1–47.
- Knowles, M. L., Lucas, G. M., Molden, D. C., Gardner, W. L., & Dean, K. K. (2010). There's no substitute for belonging: Self-affirmation following social and nonsocial threats. *Personality and Social Psychology Bulletin*, 36, 173–186. <http://dx.doi.org/10.1177/0146167209346860>
- Kraus, S. J. (1995). Attitudes and the prediction of behaviour: A meta-analysis of the empirical literature. *Personality and Social Psychology Bulletin*, 21, 58–75. <http://dx.doi.org/10.1177/0146167295211007>
- Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Chun, W. Y., & Sleeth-Keppeler, D. (2002). A theory of goal systems. *Advances in*

- Experimental Social Psychology*, 34, 331–378. [http://dx.doi.org/10.1016/S0065-2601\(02\)80008-9](http://dx.doi.org/10.1016/S0065-2601(02)80008-9)
- Lafrenière, M.-A., Sedikides, C., & Lei, X. (2016). Regulatory fit in self-enhancement and self-protection: Implications for life satisfaction in the west and the east. *Journal of Happiness Studies*, 17, 1111–1123. <http://dx.doi.org/10.1007/s10902-015-9634-8>
- Levine, J. M., Resnick, L. B., & Higgins, E. T. (1993). Social foundations of cognition. *Annual Review of Psychology*, 44, 585–612. <http://dx.doi.org/10.1146/annurev.ps.44.020193.003101>
- Lisjak, M., Molden, D. C., & Lee, A. Y. (2012). Primed interference: The cognitive and behavioral costs of an incongruity between chronic and primed motivational orientations. *Journal of Personality and Social Psychology*, 102, 889–909. <http://dx.doi.org/10.1037/a0027594>
- Manian, N., Strauman, T. J., & Denney, N. (1998). Temperament, recalled parenting styles, and self-regulation: Testing the developmental postulates of self-discrepancy theory. *Journal of Personality and Social Psychology*, 75, 1321–1332. <http://dx.doi.org/10.1037/0022-3514.75.5.1321>
- Markus, H. R., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41, 954–969. <http://dx.doi.org/10.1037/0003-066X.41.9.954>
- Marsh, H. W. (1990). A multidimensional, hierarchical model of self-concept: Theoretical and empirical justification. *Educational Psychology Review*, 2, 77–172. <http://dx.doi.org/10.1007/BF01322177>
- Marsh, H. W., & Craven, R. G. (2006). Reciprocal effects of self-concept and performance from a multidimensional perspective: Beyond seductive pleasure and unidimensional perspectives. *Perspectives on Psychological Science*, 1, 133–163. <http://dx.doi.org/10.1111/j.1745-6916.2006.00010.x>
- Maslow, A. (1955). Deficiency motivation and growth motivation. In M. Jones (Ed.), *Nebraska symposium on motivation: Vol. 3. 1955* (pp. 1–30). Lincoln, NE: University of Nebraska Press.
- McConnell, A. R. (2011). The multiple self-aspects framework: Self-concept representation and its implications. *Personality and Social Psychology Review*, 15, 3–27. <http://dx.doi.org/10.1177/1088868310371101>
- McConnell, A. R., Rydell, R. J., & Brown, C. M. (2009). On the experience of self-relevant feedback: How self-concept organization influences affective responses and self-evaluations. *Journal of Experimental Social Psychology*, 45, 695–707. <http://dx.doi.org/10.1016/j.jesp.2009.03.011>
- McConnell, A. R., Shoda, T. M., & Skulborstad, H. M. (2012). The self as a collection of multiple self-aspects: Structure, development, operation, and implications. *Social Cognition*, 30, 380–395. <http://dx.doi.org/10.1521/soco.2012.30.4.380>
- McConnell, A. R., & Strain, L. M. (2007). Content and structure of the self-concept. In C. Sedikides & S. J. Spencer (Eds.), *The self in social psychology* (pp. 51–73). New York, NY: Psychology Press.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York, NY: Guilford Press.
- Molden, D. C., & Higgins, E. T. (2012). Motivated thinking. In K. J. Holyoak & R. G. Morrison (Eds.), *Oxford handbook of thinking & reasoning* (pp. 300–319). New York, NY: Oxford University Press.
- Molden, D. C., Lee, A. Y., & Higgins, E. T. (2008). Motivations for promotion and prevention. In J. Y. Shah & W. L. Gardner (Eds.), *Handbook of motivation science* (pp. 169–187). New York, NY: Guilford Press.
- Molden, D. C., Lucas, G. M., Gardner, W. L., Dean, K., & Knowles, M. L. (2009). Motivations for prevention or promotion following social exclusion: Being rejected versus being ignored. *Journal of Personality and Social Psychology*, 96, 415–431. <http://dx.doi.org/10.1037/a0012958>
- Molden, D. C., & Winterheld, H. A. (2013). Motivations for promotion or prevention in close relationships. In J. A. Simpson & L. Campbell (Eds.), *The Oxford handbook of relationships*. New York, NY: Oxford University Press. <http://dx.doi.org/10.1093/oxfordhb/9780195398694.013.0015>
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, 45, 867–872. <http://dx.doi.org/10.1016/j.jesp.2009.03.009>
- Oyserman, D., & Destin, M. (2010). Identity-based motivation: Implications for intervention. *The Counseling Psychologist*, 38, 1001–1043. <http://dx.doi.org/10.1177/0011000010374775>
- Oyserman, D., Elmore, K. C., & Smith, G. C. (2012). Self, self-concept, and identity. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (2nd ed., pp. 69–104). New York, NY: Guilford Press.
- Oyserman, D., & James, L. (2011). Possible identities. In S. Schwartz, K. Luyckx, & V. Vignoles (Eds.), *Handbook of identity theory and research* (Vol. 196, pp. 117–145). New York, NY: Springer. http://dx.doi.org/10.1007/978-1-4419-7988-9_6
- Papi, M. (2016). *Motivation and learning interface: How regulatory fit affects incidental vocabulary learning and task experience*. Lansing, MI: Michigan State University.
- Pierce, T., & Lydon, J. E. (2001). Global and specific relational models in the experience of social interactions. *Journal of Personality and Social Psychology*, 80, 613–631. <http://dx.doi.org/10.1037/0022-3514.80.4.613>
- Pittman, T., & Zeigler, K. (2007). Basic human needs. In A. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2nd ed., pp. 473–489). New York, NY: Guilford.
- Ratcliff, R. (1993). Methods for dealing with reaction time outliers. *Psychological Bulletin*, 114, 510–532. <http://dx.doi.org/10.1037/0033-2909.114.3.510>
- Roccas, S., & Brewer, M. B. (2002). Social identity complexity. *Personality and Social Psychology Review*, 6, 88–106. http://dx.doi.org/10.1207/S15327957PSPR0602_01
- Roe, N. J., Hur, T., & Pennington, G. L. (1999). Counterfactual thinking and regulatory focus: Implications for action versus inaction and sufficiency versus necessity. *Journal of Personality and Social Psychology*, 77, 1109–1120. <http://dx.doi.org/10.1037/0022-3514.77.6.1109>
- Ross, M., Xun, W. Q. E., & Wilson, A. E. (2002). Language and the bicultural self. *Personality and Social Psychology Bulletin*, 28, 1040–1050. <http://dx.doi.org/10.1177/01461672022811003>
- Schmid, K., Hewstone, M., & Al Ramiah, A. (2013). Neighborhood diversity and social identity complexity implications for intergroup relations. *Social Psychological & Personality Science*, 4, 135–142. <http://dx.doi.org/10.1177/1948550612446972>
- Scholer, A. A., & Higgins, E. T. (2012). Too much of a good thing? Trade-offs in promotion and prevention focus. In R. M. Ryan (Ed.), *The Oxford handbook of human motivation* (pp. 65–84). New York, NY: Oxford University Press. <http://dx.doi.org/10.1093/oxfordhb/9780195399820.013.0005>
- Scholer, A. A., Ozaki, Y., & Higgins, E. T. (2014). Inflating and deflating the self: Sustaining motivational concerns through self-evaluation. *Journal of Experimental Social Psychology*, 51, 60–73. <http://dx.doi.org/10.1016/j.jesp.2013.11.008>
- Semin, G. R., Higgins, T., de Montes, L. G., Estourget, Y., Valencia, J. F., Higgins, E. T., & Valencia, J. F. (2005). Linguistic signatures of regulatory focus: How abstraction fits promotion more than prevention. *Journal of Personality and Social Psychology*, 89, 36–45. <http://dx.doi.org/10.1037/0022-3514.89.1.36>
- Shah, J., & Higgins, E. T. (1997). Expectancy x value effects: Regulatory focus as determinant of magnitude and direction. *Journal of Personality and Social Psychology*, 73, 447–458. <http://dx.doi.org/10.1037/0022-3514.73.3.447>
- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, 46, 407–441. <http://dx.doi.org/10.3102/00346543046003407>
- Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universi-

- ties' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology*, 102, 1178–1197. <http://dx.doi.org/10.1037/a0027143>
- Stirratt, M. J., Meyer, I. H., Ouellette, S. C., & Gara, M. A. (2008). Measuring identity multiplicity and intersectionality: Hierarchical classes analysis (HICLAS) of sexual, racial, and gender identities. *Self and Identity*, 7, 89–111. <http://dx.doi.org/10.1080/15298860701252203>
- Vaala, S. E. (2012). *Mothers' cognitions and structural life circumstances as predictors of infants' and toddlers' television and video exposure* (Unpublished doctoral dissertation). Philadelphia, PA: University of Pennsylvania.
- Wang, Z. (2010). *Impact of cultural differences in affect valuation on customer decision making* (Unpublished doctoral dissertation). Lawrence, KS: University of Kansas.
- Westjohn, S. A., Arnold, M. J., Magnusson, P., & Reynolds, K. (2016). The influence of regulatory focus on global consumption orientation and preference for global versus local consumer culture positioning. *Journal of International Marketing*, 24, 22–39. <http://dx.doi.org/10.1509/jim.15.0006>
- Wiener, R. L., & Farnum, K. S. (2013). The psychology of jury decision making in age discrimination claims. *Psychology, Public Policy, and Law*, 19, 395–409. <http://dx.doi.org/10.1037/a0032826>
- Xie, G.-X., & Kahle, L. R. (2014). Approach or avoid? The effect of regulatory focus on consumer behavioural responses to personal selling attempts. *Journal of Personal Selling & Sales Management*, 34, 260–271. <http://dx.doi.org/10.1080/08853134.2014.929503>
- Yang, H., Stamatogiannakis, A., & Chattopadhyay, A. (2015). Pursuing attainment versus maintenance goals: The interplay of self-construal and goal type on consumer motivation. *Journal of Consumer Research*, 42, 93–108. <http://dx.doi.org/10.1093/jcr/ucv008>

Received November 29, 2016

Revision received June 1, 2017

Accepted July 18, 2017 ■

New Editors Appointed, 2019–2024

The Publications and Communications Board of the American Psychological Association announces the appointment of 11 new editors for 6-year terms beginning in 2019. As of January 1, 2018, new manuscripts should be directed as follows:

- *Clinician's Research Digest: Adult Populations and Clinician's Research Digest: Child and Adolescent Populations* (<http://www.apa.org/pubs/journals/crd/> and <http://www.apa.org/pubs/journals/crp/>), **Marisol Perez, PhD**, Arizona State University
- *Journal of Experimental Psychology: Learning, Memory, and Cognition* (<http://www.apa.org/pubs/journals/xlm/>), **Aaron S. Benjamin, PhD**, University of Illinois at Urbana-Champaign
- *Journal of Neuroscience, Psychology, and Economics* (<http://www.apa.org/pubs/journals/npe/>), **Samuel M. McClure, PhD**, Arizona State University
- *Journal of Threat Assessment and Management* (<http://www.apa.org/pubs/journals/tam/>), **Laura S. Guy, PhD**, Protect International Risk and Safety Services Inc., Vancouver, BC, Canada
- *Professional Psychology: Research and Practice* (<http://www.apa.org/pubs/journals/pro/>), **Kathi A. Borden, PhD**, Antioch University New England
- *Psychiatric Rehabilitation Journal* (<http://www.apa.org/pubs/journals/prj/>), **Sandra G. Resnick, PhD**, VA Connecticut Healthcare System
- *Psychology and Aging* (<http://www.apa.org/pubs/journals/pag/>), **Elizabeth A. L. Stine-Morrow, PhD**, University of Illinois at Urbana-Champaign
- *Psychology of Violence* (<http://www.apa.org/pubs/journals/vio/>), **Antonia Abbey, PhD**, Wayne State University
- *Psychology, Public Policy, and Law* (<http://www.apa.org/pubs/journals/law/>), **Michael E. Lamb, PhD**, University of Cambridge
- *Training and Education in Professional Psychology* (<http://www.apa.org/pubs/journals/tep/>), **Debora J. Bell, PhD**, University of Missouri-Columbia
- *Traumatology* (<http://www.apa.org/pubs/journals/trm/>), **Regardt J. Ferreira, PhD**, Tulane University

Current editors Thomas E. Joiner, PhD, Robert Greene, PhD, Daniel Houser, PhD, and Bernd Weber, PhD, Stephen D. Hart, PhD, Ronald T. Brown, PhD, Judith A. Cook, PhD, and Kim T. Mueser, PhD, Ulrich Mayr, PhD, Sherry Hamby, PhD, Michael E. Lamb, PhD, Michael C. Roberts, PhD, and Brian E. Bride, PhD, will receive and consider new manuscripts through December 31, 2017.