A motivational hierarchy within: Primacy of the individual self, relational self, or collective self? ☆

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ABSTRACT

The individual self, relational self, and collective self are important and meaningful aspects of identity. However, they plausibly differ in their relative importance such that one self lies closer to the motivational core of the self-concept, better represent the "home base" of selfhood, or, simply stated, is motivationally primary. Four multi-method studies tested the relative motivational-primacy of the selves. Despite their disparate methods, the studies yielded consistent evidence of a three-tiered hierarchy with the individual self at the top, followed by the relational self, and trailed at the bottom by the collective self. The same hierarchy emerged in the Eastern culture of China and the Western cultures of the US and UK. Such pancultural consistency suggests that the motivational hierarchy is a fundamental pattern of the human self.

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Introduction

A tolerably unanimous opinion ranges the different selves of which a man may be 'seized and possessed,' and the consequent different orders of his self-regard, in an hierarchical scale…
— William James (1890, p. 313)

Identity occupies a central role in psychological theory, because of its influence on emotion, cognition, and behavior (Alicke et al., 2005; Leary & Tangney, 2012; Sedikides & Spencer, 2007; Tajfel & Turner, 1979). Identity, however, is not a singular experience, although it is typically approached as such empirically. Instead, there is a diversity of identity within the person, and theory development necessitates a more nuanced understanding of that diversity (Bodenhausen, 2010). Toward such an understanding, the current research provides evidence of a pancultural motivational hierarchy among three fundamental forms of self.

Three fundamental selves

Identity expands beyond representation of personal distinctiveness and additionally involves internalization and integration of important relationships and groups. Stated otherwise, the self-concept comprises three fundamental forms of identity such that persons define themselves as independent social agents, interdependent partners of dyadic relationships, and interconnected members of social groups (Andersen & Chen, 2002; Brewer & Gardner, 1996; Chen et al., 2006; Sedikides & Brewer, 2001). The *individual self* reflects the unique nature of a person and consists of the constellation of aspects (e.g., characteristics, traits, interests, roles, goals, experiences) that differentiate the person from others. The *relational self* reflects interpersonal attachments with close relationship partners and consists of those aspects that are shared with partners and define roles within the relationships. The *collective self* reflects membership in and identification with core social groups and consists of those aspects that are shared with ingroup members and differentiate the ingroup from relevant outgroups. Each self is inherently social (Simon, 1997). Each self involves assimilations and contrasts, which respectively occurs between-and-within persons, dyads, and groups for the individual, relational, and collective self. Furthermore, each self is important and meaningful to human experience (Hawkley et al., 2005) and is associated with psychological and physical well-being (Correll & Park, 2005; Deci & Ryan, 2000; Gable et al., 2004; Hardie et al., 2005; Haslam et al., 2009; Myers & Diener, 1995; Sheldon & Filak, 2008; Taylor et al., 2003a,b; Uchino et al., 1996).

Although the selves are each important and meaningful, they may not be equally important and meaningful. As William James suggests in the quotation that starts this article, self-definitions presumably differ in motivational significance. One self might lie closer to the motivational core of the self-concept, better represent the psychological "home base" of selfhood, be more central to human experience, or, simply stated, be motivationally primary. Consistent with such a possibility is a program of research that establishes, albeit preliminarily, the motivational primacy of the individual self over the collective self (Gaertner et al., 1999; Gaertner et al., 2002). In this article, in addition to needed replication, we offer two crucial advances to the theoretical model of motivational self-primacy. First, we consider the positioning of the *relational self* in the motivational hierarchy. Second, we consider more broadly the hierarchy in regard to *cultural influences* on the self-concept. We begin with an overview of extant work on the motivational self-primacy issue in order to provide a framework for these additions.

A motivational hierarchy between the individual and collective self

Gaertner et al. (1999, 2002) reviewed evidence for three mutually exclusive hypotheses regarding the motivational primacy of the individual versus collective self. The *individual-self primacy hypothesis* suggests that the individual self is the more fundamental or primary self. The *collective-self primacy hypothesis*, on the other hand, attributes primacy to the collective self. Finally, the *contextual-primacy hypothesis* grants inherent primacy to neither self and, instead, suggests that relative primacy depends upon contextual factors that render a self momentarily accessible. Given that each hypothesis, when considered alone, was theoretically plausible and backed by circumstantial and empirical evidence, Gaertner and colleagues initiated a program of research that pitted the hypotheses against each other. They reasoned that the motivationally primary self would come into view when threatened, such that the primary self would evidence stronger reactions to threat; alternatively, if contextual primacy were operative, the more accessible self would evidence stronger reactions to threat.

In a series of experiments, they threatened and assessed the relative reactions of the individual self and collective self. As an example of the prototypical experimental procedure, students at the University of North Carolina at Chapel Hill (UNC-CH) completed a creativity test and learned that either they (personally) or their group (UNC-CH) performed poorly (Gaertner et al., 1999, Study 2). Across experiments, Gaertner and colleagues (a) assessed multiple reactions to threat (i.e., anger, mood state, strategic self-perception, derogation of threatening feedback), (b) controlled various confounding variables (i.e., domain of threat, relative importance of threat domain, delay between the onset of threat and assessment of reaction), (c) targeted a variety of ingroups serving as a collective self (i.e., ascribed groups, achieved groups, novel groups), (d) invoked multiple methods for varying the selves' accessibility (i.e., activated simultaneously both selves, maximized the salience of one self and minimized the salience of the other, pre-measured idiographic identification with the targeted ingroup), and (e) employed diverse operationalizations of threat. In each instance, participants reacted more strongly to threat of their individual than collective self, suggesting that there is a motivational hierarchy along which the individual self occupies a more prominent position.

Gaertner et al. (2002) also addressed a criticism endemic to any set of studies—namely that the finding for individual-self primacy was unique to the particular threats, ingroups, and measures that were implemented. They searched the literature for relevant empirical studies and conducted a random-effects meta-analysis. They identified 16 effect sizes that assessed relative reaction to threat of the individual versus collective self, and 21 effect sizes that assessed relative reaction to enhancement of the individual versus collective self. The effect sizes involved a variety of ingroups, used various threats or

enhancements, and measured an array of reactions. Furthermore, they assessed two moderators relevant to the contextual primacy hypothesis: (a) whether the targeted ingroup was a novel laboratory group versus a pre-existing group (e.g., sorority, political party), and (b) strength of ingroup identification. Results did not vary with the contextual moderators, and were consistent with individual-self primacy. Specifically, participants reacted more strongly to (a) threat of their individual self than collective self by approximately 0.50 standard deviations, and (b) enhancement of their individual self than collective self by approximately 0.40 standard deviations. Metaphorically speaking, people scream louder in response to threat and smile brighter in response to enhancement of their individual than collective self.

del Prado et al. (2007) conceptually replicated findings for the motivational primacy of the individual self over the collective self using the Aspects of Identity Questionnaire (AIQ-IV; Cheek et al., 2002, February). The AIQ-IV assesses the subjective importance of identity orientations that reflect, in part, the individual self and collective self. Multi-sample responses to the AIQ-IV indicated that persons valued their individual self as more important than their collective self. Thus, extant empirical tests identify the elevated motivational status of the individual self over the collective self (for reviews, see: Gaertner & Sedikides, 2005; Gaertner et al., 2008a, 2008b).

What about the relational self?

Absent from Gaertner and colleagues' research was consideration of the motivational status of the relational self (Andersen & Chen, 2002; Chen et al., 2006). As with the individual, collective, and contextual primacy-hypotheses, arguments can be offered for the plausibility of a fourth hypothesis: the relational self is primary.

Based on a litany of evidence that people readily form social attachments, strongly resist the termination of existing bonds, and suffer a variety of mental and physical ills when deprived of stable interpersonal relationships, Baumeister and Leary (1995, p. 495) suggested that "a desire to form and maintain strong, stable, interpersonal relationships" is a fundamental human motive. This need to belong may be a marker of relational-self primacy. Indeed, given the relevance of interpersonal relationships, scholars have begun exploring the possibility that natural selection shaped systems for responding to and monitoring inclusionary status, such as calibrating a self-evaluation system that registers fluctuations in inclusionary standing (Leary et al., 1998) and piggybacking sensitivity to exclusion on an existing system attuned to physical threat (MacDonald & Leary, 2005; Panksepp, 1998).

Testament to the centrality of social relationships to human functioning are findings indicating that (a) social exclusion manifests as pain in that it activates similar neural pathways as does bodily trauma (Eisenberger et al., 2003), (b) people spontaneously categorize information in terms of social relationships, suggesting that relationships serve as natural mnemonic categories (Sedikides et al., 1993), and (c) stored mental representations of significant others guide interactions with new persons by influencing perception of (Andersen & Cole, 1990; Glassman & Andersen, 1999), affective reactions to (Andersen & Baum, 1994; Andersen et al., 1996), and behaviors toward (Berk & Andersen, 2000) those new persons. Furthermore, the influence of those representations is broad, in part, because they remain chronically accessible (Andersen et al., 1995) and extend beyond person perception to impact on goal pursuit (Shah, 2003).

A skeptic might dismiss the primacy of the relational self on grounds that similar arguments could be offered for the collective-self primacy hypothesis, which past research ruled less plausible. There is reason, however, to suspect that the relational self, forged via close interpersonal bonds, is experientially more vital than the collective self and, perhaps, even more so than the individual self. The dyad, for example, is phylogenetically the most ancient repeated social configuration (Caporael, 1997), which enables internal fertilization and, among humans, provides the initial bond that promotes infant survival (Bowlby, 1969). Mental

representations of significant others more strongly guide social perception than do mental representations based on group stereotypes (Andersen & Cole, 1990, Study 3). del Prado et al.'s (2007) multi-sample research with the AIQ-IV additionally indicated that persons valued their relational self as more important than their collective self, which suggests that the relational self also has an elevated motivational status over the collective self. Comparisons of AIQ-IV responses for the individual versus relational self, however, were mixed. Some samples (as we discuss subsequently) valued the individual self as more important, other samples valued the relational self as more important, and other samples equally valued the individual and relational selves. Thus, earlier ascription of primacy to the individual self may have been premature and unwarranted.

Contextual-primacy redux: Does motivational-primacy vary by culture?

The burgeoning cultural movement, which was spurred by Triandis's (1989) conceptualization of self in cultural context and by Markus and Kitayama's (1991a,b) theory of independent and interdependent self construal, suggests that the cognitive, emotional, and motivational elements of the self-system are forged by culture (Heine et al., 1999). In this regard, culture may broadly reflect the functioning of the contextual-primacy hypothesis. Socially transmitted norms and ideals of what it means to be a good person are internalized and orchestrate the self-system in accordance with cultural standards and values. Norms of Western cultures (e.g., North America, Northern and Western Europe, Australia) are said to emphasize agency, uniqueness, and personal success (Bellah et al., 1985; Cahoone, 1996) and orchestrate an independent (i.e., idiocentric, separate, individualistic) self-system (Markus & Kitayama, 1991a,b; Triandis, 1989). Norms of Eastern cultures (e.g., China, India, Japan, South East Asia) are said to emphasize communality, connectedness, and the importance of others (De Vos, 1985; Hsu, 1948; Leung, 1997) and orchestrate an interdependent (i.e., allocentric, connected, collectivistic) self-system (Markus & Kitayama, 1991a,b; Triandis, 1989).

Accordingly, patterns of motivational primacy might fluctuate across the broader cultural context. Such a culture-as-contextual-primacy perspective anticipates that the individual self tops the motivational hierarchy in Western cultures, but is subordinate to the relational and collective selves in Eastern cultures. Of lesser certainty is the relative positioning of the relational and collective selves in Eastern cultures (Brewer & Chen, 2007). Both selves are amenable to norms of interdependence, connectedness and the importance of others, and therefore might be of equivalent motivational potency. On the other hand, Yuki's (2003) review of collective behavior indicates that Eastern culture is represented more so by interpersonal relationships internalized as the relational self than by ingroup-associations internalized as the collective self, and thereby implies the relative primacy of the relational self.

In contrast to the culture-as-contextual-primacy perspective and consistent with the possibility of the pancultural primacy of the individual self are data attesting to the potent presence of the individual-self even in Eastern cultures (Brown, 2010; Cai et al., 2011; Sedikides et al., 2005, 2007). Self-description tasks, for example, reveal a stronger presence of the individual self than collective self, such that persons provide a greater preponderance of individual-self aspects than collective-self aspects. That pattern replicates across (a) persons with an independent self-construal characteristic of Western cultures and persons with an interdependent self-construal characteristic of Eastern cultures (Gaertner et al., 1999, Investigation 4), (b) samples of Chinese and North American students (Ross et al., 2002; Trafimow et al., 1991) as well as samples of Filipino and Mexican students (del Prado et al., 2007), and (c) manipulated primes of the individual versus collective self (Trafimow et al., 1991). Crucially, that pattern is *not* an artifact of (a) task instructions that bias for individual-self aspects (e.g., "Who am I" vs. "Who are you"; Gaertner et al., 1999, Investigation 4) nor of

(b) structured versus open-ended assessment techniques (del Prado et al., 2007). Indeed, del Prado et al. (2007) reviewed multiple studies from multiple cultures assessing the preponderance of individual versus collective self-descriptions and concluded that, "the individual-self primacy hypothesis was supported in virtually all of the studies" (p. 1136).

Of additional relevance are data from North America, China, and Japan involving Implicit Association Tests that directly pit (a) evaluation of self versus evaluation of best-friend and (b) evaluation of self versus evaluation of an ingroup (Yamaguchi et al., 2007). Consistent with the pancultural primacy of the individual self, participants from all three countries regard self more favorably than they regard either their best-friend or ingroup. (The Yamaguchi et al. study did not pit best-friend versus ingroup.)

Of final relevance are the previously discussed AIQ-IV comparisons of the subjective valuing of the selves (del Prado et al., 2007). The tendency for persons to value subjectively both the individual self and relational self more than the collective self occurred in the individualistic cultures of the United States and Australia as well as the collectivistic cultures of Mexico and the Philippines. Furthermore, variation in the relative valuing of the individual versus relational self did not track the expectations of the culture-as-contextual-primacy perspective. In Australia and the Philippines, the individual self and relational self were rated as equally important. In the United States, the relational self was rated as more (not less) important than the individual self. In Mexico, the relational self was rated as less (not more) important than the individual self. A notable limitation, however, is that the ratings of the individual and relational self shared a substantial correlation (ranging across samples from .56 to .72), which suggests that the AIQ-IV does not constitute a pure method for distinguishing the motivational significance of the individual self and relational self. In the current research, we (a) broaden the examination of the motivational hierarchy using multiple methods and operationalizations of all three selves, and (b) assess the hierarchy in different cultural contexts.

The current research

We report four studies that assessed the relative positioning of the individual, relational, and collective selves along the motivational hierarchy. We controlled the accessibility of the selves with two approaches: a narrative task and culture. The narrative task engaged participants to think about and write an essay describing who they are in terms of a given self. Such tasks increase the immediate accessibility of the targeted mental representation (Andersen et al., 1995). We used a within-subjects design in Study 1 to render accessible each self immediately prior to the relevant measures by having participants write a narrative for each self. We used a between-subjects design in Studies 2 and 4, in which participants wrote a narrative for one self to render it accessible. Furthermore, we conducted Study 3 in the absence of the narrative task to ensure that ensuing patterns of motivational primacy are distinct from the narrative task.

Moreover, we tailored the narrative task to capture the broad nature of a self. Each self comprises traits, characteristics, roles, experiences, affiliations, goals, and associations. Rather than focusing exclusively on a particular role, trait, or experience – as Gaertner et al. (1999) did – we instructed participants to think broadly about a given self so as to capture its full potential.

Importantly, we varied across studies the particular manner in which the selves were defined for participants so as to ensure that any conclusions generalize across the peculiarities of any given set of definitions. In Studies 1 and 4, for example, participants thought and wrote about multiple relationships and groups that comprise their relational self or collective self. In Study 2, on the other hand, participants thought and wrote about one specific (i.e., their most important) relationship or group. With yet another procedural definition, Study 3 equated the

selves in terms of a trait-based conception derived via meta-contrasts with non-self persons, relationships, and groups.

The narrative task additionally enables an idiographic analysis of the selves. Previous comparisons of the individual versus collective self used a nomothetic method of targeting the collective self by referencing the same ingroup for all participants (while varying the particular ingroup across studies and, in some cases, assessing idiographic ingroup identification). The narrative task enables participants to select the particular aspects that idiosyncratically represent their individual self, relational self, or collective self. Furthermore, tracking those aspects (a) yields access to the subjectively perceived basis of each self, and (b) enables a nuanced analysis of whether general patterns of primacy are moderated by specific self-definitional bases.

In contrast to the narrative task, which enables control of immediate contextual accessibility, culture provides a handle on the issue of chronic contextual accessibility. By conducting our research in Western and Eastern cultures (Studies 3 and 4), we obtained samples of participants whose life histories were differentially shaped by socialization pressures emphasizing independence and individuality versus interdependence and connectedness.

Study 3 compares participants from the UK and China to test whether chronicity via culture moderates patterns of motivational primacy. Study 4 invokes a between-subjects manipulation of the narrative task among participants in the US and China and, thereby, enables a test of the possibilities that motivational primacy is a product of immediate accessibility, chronic accessibility, or immediacy and chronicity acting in tandem.

Finally, we examined motivational primacy across studies using different paradigms to bolster confidence in the phenomenon. In Study 1, we implemented Gaertner et al.'s (1999, 2002) paradigm of assessing the relative reaction of the selves to threat and broadly threatened the internalized nature of a given self: participants considered the potential loss of that self, and all that is associated with it. In Study 2, we examined whether the selves differentially avoid threat. Studies 3 and 4, in contrast, assessed the subjective value of the selves and their proactive capacity to promote a desired future.

Study 1

Previous research assessing the motivational primacy of the individual-self versus collective-self threatened the selves by targeting a specific aspect of a given self. Participants in various studies, for example, discovered via an ostensible personality inventory that they personally or their group possess a negatively valued trait, received performance feedback indicating that they or their group lacks an important ability (creativity), or received an insult about themselves or their group (Gaertner et al., 1999). In Study 1, rather than threatening a specific aspect of a self, we threatened the very existence of a self in its entirety. We did so by engaging participants in an imagination task. We had participants imagine that it is possible for selves to be removed and that they awoke one day having lost their individual, relational, or collective self. Participants subsequently responded to items assessing their reaction to having lost the given self. To forestall any hesitance from readers concerned with this imagination task, we note that the participants were willing and able to exercise their imagination and expressed no problems or difficulties with the task.

Method

Three hundred and thirty eight undergraduates (171 females, 167 males) at the University of Tennessee completed a questionnaire. The first page explained that persons define themselves in three ways and provided the following definitions:

The *individual self* is a form of self that differentiates a person from others in terms of unique traits, experiences, and characteristics. It is the self that is separate and independent from other persons. The *relational self* is a form of self that is derived from close relationships (e.g., friendship, romantic relationship, parent–child) and represents aspects of self that are shared with relationship partners and define a person's role or position within important relationships. It is the self that is based on attachment to important relationship partners.

The *collective self* is a form of self that is derived from membership in important groups and represents aspects of self that are shared with group members and differentiates members from non-members. It is the self that is based on identification with important groups.

Participants wrote a narrative describing themselves in terms of a given self, imagined that it is scientifically possible for selves to be removed, imagined that they awoke one day having lost the self about which they previously wrote, and finally rated their reaction to having lost that self. Participants rated: (a) "The emotional impact of losing this self would be" (1 = *minimal*, 5 = *extremely high*); (b) "If I lost this self, I would be exactly the same person" (1 = *strongly disagree*, 5 = *strongly agree*); (c) "If I lost this self, my life would be meaningless" (1 = *strongly disagree*, 5 = *strongly agree*); and (d) the extent to which (1 = *not at all*, 5 = *extremely*) they would experience each of three positive-mood adjectives (content, happy, pleased) and three negative-mood adjectives (blue, sad, unhappy). Participants completed the paired narrative and imagination task for each self, with the ordering of the selves counterbalanced. On the last page of the questionnaire, participants completed a forced-choice selection among the three selves in response to the question, "In what self do you feel most true or 'at home'? That is, which self is the real YOU?"

Results

Females and males evidenced the same pattern among selves based on means and *p*-values and, therefore, we do not consider the variable sex further. For presentational expediency, we averaged the impact, same-person (reverse scored), and meaningless-life ratings into an index which we dub "effect-on-life." (Separate analyses on each measure yield the same conclusions as does the index.) We report unadjusted pair-wise tests among the selves and emphasize that Bonferroni adjusted tests yield the same conclusions. Table 1 displays the results for each self.[1]

Effect-on-life. A multivariate repeated-measures ANOVA revealed a significant effect among the selves, $F(2, 336) = 151.36$, $p = .001$. Participants imagined that their life would be affected more by the loss of their individual self than by the loss of either their relational self, $F(1, 337) = 16.74$, $p = .001$, $d = 0.27$, or collective self, $F(1, 337) = 289.00$, $p = .001$, $d = 1.26$; also, participants imagined that their life

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[1] The number of participants attending a given session varied within and between studies, with such session size (a) for Study 1, ranging from 1 to 11 participants, (b) for Study 2, invariantly consisting of one participant, (c) for Study 3, ranging from 1 to 23 participants in the UK sample and consisting of approximately 10 participants in the Chinese sample, and (d) for Study 4, ranging from 1 to 11 participants in the US sample and consisting of approximately 10 participants in the Chinese sample. For studies in which (a) there was variation in session size and (b) we could link session size to participant data (i.e., Study 1, Study 3 UK sample, and Study 4 US sample) we employed two approaches for testing whether patterns of primacy among the selves varied with session size. One approach treated session size as a continuous variable and the other approach treated it as a 3-level variable denoting whether participants attended sessions alone, in dyads, or in groups (there were no dyadic sessions for the UK sample). Both approaches indicated that patterns of primacy among the selves did not vary with session size on any dependent measure. Furthermore, the results of Study 2, in which participants invariantly attended sessions alone, conceptually replicated the results of Studies 1, 3, and 4, in which session size varied.

Table 1
Descriptive statistics of the Study 1 measures for each self.

Measure	Self		
	Individual	Relational	Collective
Effect-on-life	4.19 (0.73)	3.98 (0.81)	3.11 (0.98)
Mood			
Positive	1.30 (0.55)	1.32 (0.59)	1.74 (0.88)
Negative	4.15 (0.93)	4.16 (0.97)	3.23 (1.12)
Real-you	.60	.36	.04

Note. Standard deviations are reported in parentheses. The real-you data are the proportion of participants who selected a given self as their "real-you." All pairwise comparisons within a row differ at $p < .05$ (with Bonferroni adjustment), with the exception of the Individual versus Relational self on the positive and negative mood measures.

would be affected more by the loss of their relational self than by loss of their collective self, $F(1, 337) = 200.04$, $p = .00$, $d = 0.97$.[2]

Positive and negative mood. Results are based on 329 observations, because nine participants did not complete the mood measure. A 2 (mood: positive, negative) × 3 (self) multivariate repeated measures ANOVA revealed a Mood × Self effect, $F(2, 327) = 94.24$, $p = .001$, which we decomposed by examining the self effect in levels of mood. Means for *positive mood* approached the scale minimum, suggesting that the loss of any self would be regarded as unpleasant. Nonetheless, a significant self effect, $F(2, 327) = 44.15$, $p = .001$, indicated that participants imagined a *more* positive mood following loss of their collective self than loss of either their individual self, $F(1, 328) = 77.70$, $p = .0001$, $d = 0.62$, or relational self, $F(1, 328) = 75.06$, $p = .001$, $d = 0.57$, and the latter selves did not differ, $F(1, 328) = 0.59$, $p = .44$, $d = 0.04$. Similarly, the self effect for *negative mood*, $F(2, 327) = 109.53$, $p = .001$, indicated that participants imagined a *less* negative mood following loss of their collective self than loss of either their individual self, $F(1, 328) = 160.99$, $p = .001$, $d = 0.90$, or relational self, $F(1, 328) = 187.79$, $p = .001$, $d = 0.89$, and the latter selves did not differ, $F(1, 328) = 0.04$, $p = .83$, $d = 0.01$.

The "real you". We compared the frequency with which participants selected a given self as their "real you," using a multinomial logistic regression with a generalized logit function. More participants selected as the "real you" their individual self (60%, $n = 203$) than either their relational self (36%, $n = 121$), $\chi^2(1) = 20.30$, $p = .001$, $d = 0.29$, or collective self (4%, $n = 14$), $\chi^2(1) = 93.66$, $p = .001$, $d = 1.47$, and more participants selected their relational than collective self, $\chi^2(1) = 58.37$, $p = .001$, $d = 1.19$.

Bases of the selves. For a more nuanced understanding of the data, we coded participants' narratives in terms of the self-reported content on which they based their selves. When describing their individual self, all participants discussed a variety of traits that ostensibly made them unique. There was, however, little consistency across participants in the particular traits discussed which did not readily allow the traits to be classified into classes in their own right. Participants did describe with some consistency religion and ethnicity, with ethnicity being defined broadly in terms of race, nationality, gender, or geographic origin (e.g., "I was born in Brooklyn") and, as described in the subsequent section, we coded for the emergence of groups and interpersonal relationships in individual-self descriptions and re-analyzed the data to take this into account.

When describing their relational self, participants mentioned at least one of seven relational partners: child, parent, sibling, other

family member, friend, romantic partner, or a religious relationship with God or Jesus Christ. Additionally, participants described some partners whom we could not readily label, and so we coded such descriptions as "no label."

When describing their collective self, participants mentioned at least one of nine groups: common interest group (a group based on a shared interest but does not necessarily involve interaction among members), ethnicity (again broadly defined), family, group of best friends, fraternity/sorority, religion, school, team, and work. Additionally, participants described some groups we could not readily label, and so we coded such affiliations as "no label."

Two judges coded independently the narratives and subsequently discussed to consensus any disagreements. Table 2 details the frequency and percentage of participants who evidenced a given basis of self and Cohen's Kappa for the judges' pre-discussion reliability. In the current study, the self bases are not mutually exclusive, such that participants could have described a given self in terms of multiple bases (e.g., some of the 16.57% of participants who mentioned ethnicity when describing their individual self may overlap with the 13.61% of participants who mentioned religion when describing their individual self).

For exploratory purposes, we examined whether the bases of self moderated the results of the previously reported analyses. We were particularly interested in whether the reported patterns of motivational primacy reversed as a function of a particular self-basis. For each dependent measure, we replicated the pairwise comparisons involving a given self and tested the moderating effect of each basis for the given self. Given that bases with lower frequencies have restricted variability and statistical power, we approached the exploratory analyses focusing not only on p-values but additionally on patterns of means. Concurrently, we were also concerned with reliability and considered a basis to be a moderator if its reversal occurred on at least two of the four measures. With such criteria, none of the bases had a moderating effect.

Less stringent evidence of moderation occurred for basing the relational-self on religion for the effect-on-life measure, $F(1, 336) = 3.44$, $p = .06$, such that religion ostensibly strengthened the relational self relative to the individual self. Participants who did *not* base their relational self on religion imagined their life would be affected more by the loss of their individual self ($M = 4.19$) than relational self ($M = 3.97$), $F(1, 327) = 19.01$, $p = .001$. In contrast, participants who *did* base their relational self on religion imagined their life would be affected descriptively more by the loss of their relational self ($M = 4.37$) than individual self ($M = 4.03$), $F(1, 9) = 1.32$, $p = .28$. (Note that the same conclusion is yielded with an error term that pooled across levels of religion for added power, $F[1, 336] = 1.26$, $p = .26$.) Such moderation is suspect, however, because a similar reversal did not occur on any of the other measures.

An artifact of overlapping selves?. A cautious reader might note from Table 2 that some bases of the individual self imply group memberships and interpersonal relationships (i.e., ethnicity and religion). Indeed, some participants discussed their individual self in regard to an affiliation with a particular geographic region ("from the South"), race, gender, or living their life for Jesus. Thus, it is plausible that the patterns of individual self primacy are driven, in part, by participants who define their individual self in reference to groups and relationships. Stated otherwise, some participants may have an individual self that overlaps with their relational or collective self and, therefore, gains a motivational boost from the overlap. It is important to note, however, that this possibility cannot explain patterns of individual-self primacy in earlier research that used nomothetic procedures for targeting and operationally distinguishing the individual and collective selves (Gaertner et al., 1999). To explore such a possibility in the current data, we recoded the individual-self narratives by (a) counting the number of distinct statements a participant provided when describing the individual self, and (b) coding whether a statement referenced a relationship, a group,

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[2] To equate effect sizes from within-subject and between-subjects designs, we report Cohen's d scaled as a between-subjects effect using the pooled standard-deviation of the compared means (Morris & DeShon, 2002). Similarly, we convert the odds ratio (OR) for frequency data to d following Cooper et al. (2009): $d = [ln(OR)\sqrt{3}]/\pi$.

Table 2
Bases of the selves.

Bases of Self	Study 1			Study 2			Study 4					
							United States			China		
	f	%	K	f	%	K	f	%	K	f	%	K
Individual Self	(N=338)			(N=55)			(N=156)			(N=168)		
Ethnicity	56	16.57	.70	11	22.00	.88	69	44.23	.91	27	16.07	.72
Family	–	–	–	–	–	–	88	56.41	.95	76	45.24	.87
Only-child	–	–	–	–	–	–	3	1.92	1.00	7	4.17	.65[b]
Religion	46	13.61	.82	11	22.00	.81	25	16.03	.79	4	2.38	.01[b]
Relational Self	(N=338)			(N=61)			(N=167)			(N=162)		
Child	3	0.89	1.00	1	1.64	1.00	2	1.20	.66[b]	0	0.00	[a]
Friend	209	61.83	.93	4	6.56	.78	144	86.23	.93	101	62.35	.84
No-label	57	16.84	.90	9	14.75	.87	0	0.00	[a]	1	0.62	.03[b]
Other family member	23	6.80	.88	1	1.64	1.00	24	14.37	.87	3	1.85	.33[b]
Parent	211	62.43	.95	15	24.59	.95	151	90.42	.90	61	37.65	.81
Religion	10	2.96	.95	3	4.92	1.00	12	7.19	.81	0	0.00	[a]
Romantic	169	50.00	.86	23	37.70	.96	93	55.69	.88	15	9.26	.96
Sibling	59	17.46	.89	5	8.20	1.00	70	41.92	.89	15	9.26	.93
Collective Self	(N=338)			(N=61)			(N=166)			(N=168)		
Common interest	96	28.40	.59	3	4.92	.79	66	39.76	.66	65	38.69	.81
Ethnicity	37	10.95	.90	3	4.92	.79	31	18.67	.80	7	4.17	.87
Family	31	9.17	.75	12	19.67	1.00	38	22.89	.91	2	1.19	1.00
Fraternity/sorority	49	14.50	.90	7	11.48	1.00	44	26.51	.98	0	0.00	.00[b]
Friends	54	15.98	.79	14	22.95	.86	97	58.43	.80	58	34.52	.87
No-label	64	18.93	.79	0	0.00	[a]	2	1.20	.49[b]	10	5.95	.77
Religion	100	29.59	.93	13	21.31	.95	52	31.33	.93	2	1.19	.00[b]
School affiliation	27	7.99	.81	0	0.00	[a]	24	14.46	.66	4	2.38	.66[b]
Team	93	27.51	.81	9	14.75	.94	53	31.93	.64	4	2.38	.66[b]
Work	19	5.62	.56	0	0.00	[a]	20	12.05	.81	18	10.71	.88

Note. K = Cohen's Kappa. Participants wrote a narrative, from which the bases were coded, for each self in Study 1 and for one self in Studies 2 and 4. Bases within a self are mutually exclusive only in Study 2 in which participants wrote about the most important aspect of a self.
[a] Inter-judge agreement was 100% for the absence of this category.
[b] Inter-judge agreement exceeded 94% but the low variability of the category yielded a low Kappa.

or neither a relationship nor a group. As displayed in Table 3, participants provided on average 8.44 statements describing their individual self. The majority of those statements (i.e., 83.22%) made no reference to relationships or groups and only a small percentage referenced either a relationship (i.e., 7.08%) or a group (i.e., 9.69%).

We then conducted a more conservative test of individual-self primacy. We repeated the analyses of the effect-on-life, mood, and real-you measures but included only the responses of participants who made no reference to groups or relationships in their individual-self narrative. That is, the reanalysis consisted only of those participants whose individual self evidenced no overlap with their relational and collective selves. The reanalysis yielded the same conclusions (based on direction of effects and p-values) as did the initial analysis on the full data set. Thus, the motivational-boost-via-overlapping-selves explanation cannot account for the patterns of individual-self primacy.

Discussion

We activated the individual, relational, and collective self with a narrative task, assessed relative reactions to the imagined loss of the activated self, and assessed which self participants considered to be their true or real self. In contrast to past research that used a nomothetic

methodology, the current study implemented an idiographic methodology that enabled participants to represent their collective (and relational) self with whichever social groups (or interpersonal relationships) they deemed appropriate. Despite this methodological alteration, the results replicated past findings of individual versus collective self primacy, and provided insight into the relative motivational status of the relational self.

Comparison of the collective versus individual self replicated past research in further establishing the elevated motivational status of the individual self. The imagined loss of the individual self consistently generated stronger reactions (i.e., larger effect on life, less positive mood, more negative mood) than did the imagined loss of the collective self. Likewise, the majority of participants (60%) indicated that their individual self is the self in which they feel most true or real, whereas only a minority of participants (4%) did so for their collective self. These patterns did not vary systematically as a function of the self-reported bases of either self.

Comparison of the collective versus relational self revealed the elevated motivational status of the relational self. Participants consistently evidenced stronger reactions to the imagined loss of the relational than collective self, and were more likely to indicate that they feel most true or real in their relational (i.e., 36%) than collective self. These patterns did not vary systematically as a function of the self-reported bases of either self.

Comparison of the individual versus relational self revealed mixed evidence for the elevated motivational status of the individual self. The mood measures suggested that the individual and relational self share equivalent status in that the imagined loss of the individual and relational selves generated equivalent mood states. On the other hand, the motivational equivalence could be a consequence of ceiling and floor effects on the negative and positive mood measures, respectively. Nonetheless, those measures were sufficiently sensitive to distinguish the individual and relational self from the collective self (with the

Table 3
Mean number of statements describing the individual self and mean percentage referencing a relationship, a group, or neither a relationship nor a group by study.

Statements	Study 1	Study 2	Study 4	
			USA	China
Mean number	8.44	7.24	9.62	7.54
Mean percentage referencing				
Neither relationship nor group	83.22	79.32	75.82	76.12
Relationship	7.08	11.86	10.11	13.00
Group	9.69	8.82	14.07	10.87

negative mood difference being non-significant for the relational self). In contrast, the effect-on-life and real-you measures evidenced a stronger motivational presence of the individual than relational self. Participants anticipated that the loss of the individual self would yield a larger effect on their life than would loss of the relational self, and were more likely to indicate that they feel most true or real in their individual self. These patterns did not vary systematically as a function of the self-reported bases of either self.

The results provide evidence of a three-tiered motivational hierarchy among the selves, with the individual self at the top of the hierarchy, followed by the relational self, and trailed at the bottom of the hierarchy by the collective self. As a caveat, however, two of the three effect-on-life items referenced the pronoun "I" (e.g., "If I lost this self, I would be exactly the same person."). Such items may have activated the individual-self, thereby reducing the motivational potency of the relational self or collective self. On the other hand, as we discussed previously, past research indicates that such pronoun usage (e.g., referencing "I" versus "you") does not alter patterns of individual-self versus collective-self primacy (Gaertner et al., 1999, Study 4). Furthermore, the effect-on-life item that did not invoke the pronoun "I" (i.e., "the emotional impact of loosing this self would be"), which was the first item to be completed, evidenced the three-tiered hierarchy as did the "real you" measure, which similarly did not invoke the pronoun "I" (the mood measures also lacked the "I" pronoun and found primacy of the individual [and relational] self over the collective self). Nonetheless, the materials used in subsequent studies do *not* invoke the "I" pronoun to ensure that ensuing patterns of primacy are not a product of the "I" pronoun. Study 2 offers another test of the motivational hierarchy using a paradigm different than that of Study 1.

Study 2

Literature reviews detail the many means by which persons inoculate themselves against threats to a favorable self-view (Alicke & Sedikides, 2009, 2011a; Leary et al., 2009; Sedikides, 2012; vanDellen et al., 2011). Motivated reasoning or defensive processing diffuses threat by rendering it less valid, diagnostic, or self-relevant (Alicke & Sedikides, 2011b; Campbell & Sedikides, 1999; Dunning et al., 1995; Sedikides & Alicke, 2012). Self-handicapping provides alternative and self-favorable attributions for anticipated threat (Jones & Berglas, 1978; Tice & Baumeister, 1990). Disidentifying with a chronically threatened aspect of self prevents further erosion of a favorable self-view (Sherman & Cohen, 2006; Steele, 1997), and distracting or escaping self-awareness buffers against the pain and displeasure of an experienced threat (Baumeister, 1991; Hayes et al., 1996). Finally, a particularly strategic means of self-protection is pre-emptive avoidance of threat in favor of enhancement (Sedikides & Gregg, 2008; Sedikides & Strube, 1997). Persons, for example, actively attend to desirable attributes and shun undesirable attributes when contemplating core self-attributes (Sedikides, 2012; Sedikides & Green, 2000, 2004), and selectively engage in tasks diagnostic of desirable core self-attributes and avoid tasks diagnostic of undesirable core self-attributes (Sedikides, 1993; for a review, see Gregg et al., 2011).

Study 2 examines motivational primacy in a threat-avoidance paradigm, with the rationale that persons will avoid more fervently a threat to their more primary selves. Furthermore, the study examines an alternative explanation for past findings regarding the motivational primacy of the individual versus collective self. We first describe the threat-avoidance paradigm and then discuss the alternative explanation.

O'Mara (2005) presented college students with an excerpt of an interview with a recent college graduate who detailed unexpectedly unpleasant post-graduation experiences (derived from Lockwood et al., 2002). Participants were randomly assigned to write either a self-threatening essay describing how the unpleasant events that befell the recent graduate could befall themselves personally or a mundane essay describing how they personally manage their time in college.

Essays were coded for whether participants followed directions by writing the requested essay, with the rationale that the threat posed by contemplating an unpleasant future could be avoided by disregarding the instructions and writing off topic. Indeed, 100% of participants instructed to write the mundane essay did so and described how they manage time, whereas only 45% of participants instructed to write the threatening essay did so and described how unpleasant events could befall themselves. Relevant to the motivational-primacy issue is whether persons differentially avoid writing the threatening essay as a function of contemplating unpleasant events in regard to their individual self, relational self, or collective self.

This paradigm additionally enables us to address an alternative explanation for why persons react more strongly to threat and enhancement of the individual (and relational) self than collective self. Perhaps the differential reactions manifested in past research reflect the non-motivational tendency to judge as more extreme singular than generalized targets. Klar and colleagues (Giladi & Klar, 2002; Klar, 2002; Klar & Giladi, 1997), for example, demonstrated that any member of a liked group (e.g., a randomly selected student at one's university, police officer, soap fragrance) is rated more positively than the group average (e.g., average student at one's university, average police officer, average fragrance), and any member of a disliked group is rated more negatively than the group average. Given that greater emphasis is placed on consideration of the singular than the generalized target, the singular target is judged more extreme. Such an account suggests that previous research operationalized the individual self as a singular target and operationalized the collective self as a generalized target in the form of an ingroup for which participants may have had abstract representations.

Of course, this alternative account is rendered less applicable by the between-subjects methodology used in past research. The singular versus generalized target effect involves a comparative judgment in which a singular target is judged *in reference to* a generalized target (see also: Guenther & Alicke, 2010; Sedikides & Alicke, 2012). It is unlikely that participants in past research who received a threat to their individual (but not collective) self reacted only after contemplating how they would have reacted had they received a similar threat to their collective self (and vice-versa for participants who received a threat to their collective but not individual self). When rating feelings of anger following an insult to their individual self, for example, the alternative account requires that participants additionally pondered how angry they would have felt following an insult to their collective self (Gaertner et al., 1999, Experiment 4). While such a possibility is unlikely, it is, nonetheless, a possibility.

To rule out the singular-versus-generalized explanation of prior research findings, we conceptually replicated the threat avoidance paradigm of O'Mara (2005) and threatened each self as a singular target. We instructed participants to write an essay explaining how negative events could befall (a) themselves personally, (b) their partner in their most important dyadic relationship, or (c) a member (other than themselves) of their most important social group. Consequently, the singular-versus-generalized-target effect is rendered inoperable and cannot account for differential avoidance of threat among the selves.

Method

Participants were 177 (92 females, 82 males, 3 unidentified) University of Tennessee undergraduates. They wrote one of three narratives. Instructions for the *individual-self* narrative read:

Being a unique individual is an important part of life. Indeed, you are a unique individual with your own background, personality traits, skills, abilities, interests, and hobbies. Please take a few minutes and describe what makes you unique.

Instructions for the *relational-self* narrative read:

Being part of interpersonal relationships is an important part of life. Indeed, you belong to many important interpersonal relationships,

such as those with family members, friends, and romantic interests. Write the initials of the person with whom you share *the relationship that is most important to you.* Please take a few minutes and describe that most important relationship and explain what you share in common with the member of that relationship.

Instructions for the *collective-self* narrative read:

Being a member of social groups is an important part of life. Indeed, you belong to many social groups. Write the name of the *social group to which you belong that is most important to you.* Please take a few minutes and describe that most important group and explain what you share in common with the members of that group.

Unlike Study 1, there was no explicit reference to a "self"; participants described their personal uniqueness, most important relationship, or most important group. Participants were then informed that an ongoing project has been examining the experiences of recent graduates and were asked to read an excerpt from an ostensible interview with a student who recently graduated college and was facing unexpected difficulties (from Lockwood et al., 2002):

… I tried to get a job, but it's harder than I expected. I haven't been able to find a good job. I have spent a lot of time working in fast food places, and doing some pretty boring stuff. I really expected that things would get easier after I graduated, but people are right when they say it's tough out there. Right now I'm pretty down about things. I'm not sure where I'm going to go from here — I can't afford to go back to school, but I also can't find a good job …this is not where I expected to be at this point in my life!

Further instructions explained that the investigators are interested in why people experience such difficulties and asked participants to consider such negative experiences in terms of the narrative they previously wrote. Participants who wrote the individual-self narrative were instructed to "describe what you think could *cause you* to have a negative experience…similar to the student you just read about." Participants who wrote the relational-self narrative were instructed to "describe what you think could *cause the person with whom you share that most important relationship* to have a negative experience…similar to the student you just read about." Participants who wrote the collective-self narrative were instructed to "describe what you think could *cause a member of your most important group (other than you)* to have a negative experience…similar to the student you just read about."

Results

Females and males evidenced the same pattern among selves based on means and *p*-values and, therefore, we do not consider the variable sex further. We report unadjusted pair-wise tests among the selves and emphasize that, with one noted exception, the same conclusions are reached with Bonferroni adjusted tests.

Threat avoidance. Two judges independently coded (no, yes) whether participants avoided threat by disregarding the instructions and not describing how negative events could befall the targeted self. The judges agreed on 92% of the essays (Cohen's Kappa = 0.76) and discussed to consensus the few disagreements. We regressed (with logistic regression) avoidance (no, yes) on the targeted self (individual, relational, collective). An effect of self, $\chi^2(2, n = 177) = 14.77$, $p = .006$, indicated that the selves differentially avoided the threat. In particular, *fewer* participants avoided a threat to their collective-self (7%, 4 of 61 participants) than either their relational self (30%, 18 of 61 participants), $\chi^2(1) = 9.21$, $p = .002$, $d = 0.98$, or individual self (40%, 22 of 55), $\chi^2(1) = 14.76$, $p = .001$, $d = 1.24$,; also, participants did not differ in avoidance of a threat to the latter two selves, $\chi^2(1) = 1.40$, $p = .24$,

$d = 0.26$. Of the 44 participants who avoided the threat, 55% ($n = 24$) wrote about a person other than the requested target (such as writing about the college graduate who was ostensibly interviewed in the excerpt they read), 2% ($n = 1$) wrote nonsensical gibberish, 23% ($n = 10$) indicated that the threat cannot happen, and 20% ($n = 9$) did not explain how the threat could happen. These four categories of threat avoidance did not vary in relative frequency across the three selves, $\chi^2(6) = 2.66$, $p > .85$; this conclusion holds with or without inclusion of the collective self, which generates low expected frequencies, and with or without inclusion of the low frequency gibberish category.

Bases of the selves. As in Study 1, we examined whether the basis of self discussed in the narrative (middle column of Table 2) moderated the previously reported patterns (in this study self-bases are mutually exclusive, because participants wrote about their one most important relationship or group). No self-basis evidenced a statistically significant reversal of the reported patterns. Two bases evidenced a descriptive reversal such that the three participants who based their relational self on religion and the one person who based her relational self on another family member (grandmother) avoided the threat to their relational self, which yield descriptively stronger tendencies to avoid threat to the relational self than the individual or collective self. However, the low occurrence of those bases ($n = 3$ and 1) preclude any substantive conclusion.

We also aggregated across particular self-bases to address the possibility that participants were more likely (descriptively, if not significantly) to avoid threat to the individual self because the threat task was more relevant, and therefore more threatening, for the individual self. The task involved describing how one's self, partner of one's most important relationship, or member of one's most important group could experience difficulties finding meaningful employment after graduation. Such a task is of direct relevance to the individual self of our college-student participants for whom post-graduation employment is in their pending future. However, such a task plausibly is of less relevance to the relational self and collective self if either self is based on a partner or member for whom post-graduation employment is not an issue (e.g., parents, Jesus).

A more balanced test would be provided by limiting comparisons to bases of self for which the threat is relevant. Thus, we compared responses among the (a) participants in the individual-self condition, (b) 32 participants in the relational-self condition for whom the threat was relevant in that they based the relational self on either a friend ($n = 4$), romantic partner ($n = 23$), or a sibling ($n = 5$), and (c) 30 participants in the collective self condition for whom the threat was relevant in that they based the collective self on a member of their fraternity/sorority ($n = 7$), group of friends ($n = 14$), or team ($n = 9$) — school affiliation also constitutes a relevant basis, but it did not occur in this study (frequency = 0). The comparisons substantiated rather than invalidated the previous finding of individual-self primacy. Significantly more participants avoided threat to their individual self (40%, 22 of 55 participants) than threat to their *relevant* relational-self (16%, 5 of 32 participants), $\chi^2(1) = 5.24$, $p = .02$ (but shy of the Bonferroni adjusted $p = .0167$), or their *relevant* collective self (10%, 3 of 30 participants), $\chi^2(1) = 7.20$, $p = .007$, and avoidance of threat to the latter selves did not differ, $\chi^2(1) = 0.4296$, $p = .51$.

The stronger tendency to avoid threat to the individual self cannot be attributed to the differential relevance of the threat across selves. If anything, comparisons against the individual self were intensified when the relational and collective self were restricted to a relational partner or group member for whom the threat was relevant. On the other hand, the shifting conclusions regarding the relational self suggest that the presumed potency of the relational self observed with comparisons in the full data set is likely an artifact of relational-self bases that are irrelevant to the threat task. In particular, participants whose relational-self basis was *not* threat-relevant were significantly *more* likely to avoid the threat (45%, 13 of 29 participants) than

participants whose relational-self basis was threat relevant (16%, 5 of 32 participants), $\chi^2(1) = 5.81$, $p = .015$. Rather than reflecting motivational potency, the unwillingness of participants in the full data set to face a threat to their relational self is attributable to the threat being irrelevant to their most important relational partner (i.e., they could not describe how Jesus or their parents would have difficulty with post-graduation employment — but they could do so for a sibling, friend, or romantic partner). Finally, avoidance of threat to the collective self did not vary as a function of whether the collective self-basis was threat relevant or not, and avoidance of threat to the individual self did not vary as a function of whether the individual self was defined in terms of ethnicity or religion, all $\chi^2 < 1.18$ and $p > .28$.

An artifact of overlapping selves?. As in Study 1, we examined whether referencing relationships or groups in the individual-self narrative accounts for patterns of individual self-primacy. As displayed in Table 3, participants provided on average 7.24 statements describing their individual self and the majority of those statements (i.e., 79.32%) made no reference to relationships or groups with only a small percentage referencing a relationship (i.e., 11.86%) or a group (i.e., 8.82%). We reanalyzed the threat-avoidance data retaining only participants who made no reference to relationships or groups when describing their individual self. The reanalysis yielded the same conclusions (based on direction of effects and p-values) as did the analysis with the full data set. The alternative explanation based on overlapping selves cannot account for the pattern of individual-self primacy.

A generalized group representation?. It is possible, despite our intention, that participants in the collective-self condition thought and wrote about how negative events could befall a generalized representation of their group (rather than a specific group member) and, therefore, evidenced a lessened motivational-potency of the collective self. To assess that possibility, we recoded the threat-avoidance essays in the collective-self condition as to whether participants (a) wrote about a specific group member (i.e., used an exemplar based description such as by naming the person or using personal pronouns), (b) wrote about an abstracted or generalized group-member (i.e., used a prototype based description such as discussing the "typical" group member or discussing the group in generalities), or (c) wrote a description that was not discernible as to whether they contemplated a specific or generalized other.

The majority of the 61 participants in the collective-self condition provided an exemplar based description ($n = 40$, or 65.57%), which was more frequent than the lesser minority who provided either a prototype based description ($n = 6$, or 9.83%), $\chi^2(1) = 18.77$, $p = .0001$, or a non-discernible description ($n = 15$, or 24.59%), $\chi^2(1) = 10.49$, $p = .0012$. More importantly, Fisher's exact test indicates that the primary dependent measure (i.e., threat avoidance) did not vary as a function of the latter three categories, $p = .38$. Indeed, the findings of the main analysis replicate even when we restrict the collective-self condition to those 40 participants who provided an exemplar based description of a specific group member: *fewer* participants avoided a threat to their collective-self (5%, 2 of 40 participants) than either their relational self (30%, 18 of 61 participants), $\chi^2(1) = 7.11$, $p = .008$, or individual self (40%, 22 of 55), $\chi^2(1) = 10.71$, $p = .001$. Hence, the lessened potency of the collective self is not attributable to participants contemplating a threat to a generalized (rather than specific) group member.

Discussion

We activated either the individual, relational, or collective self with a narrative task and assessed avoidance of threat to that self by examining whether participants complied with instructions to describe how negative events could befall that self. Comparison of the individual and collective self replicated extant findings of the elevated motivational status of the individual self in that more participants avoided a threat to their individual than collective self. Similarly, comparison of the individual and relational self evidenced the elevated status of the individual self in that more participants avoided a threat to their individual than relational self (particularly when the relational self was based on a partner for whom the threat was relevant; i.e., friend, romantic partner, or sibling). Finally, results were mixed for comparison of the relational and collective self such that in the full data set more participants avoided a threat to their relational than collective self. However, that tendency appears to be an artifact of participants for whom the relational self was based on a partner for whom the threat was irrelevant. A focused comparison limited to participants for whom the relational and collective selves were based on a partner or group member for whom the threat was relevant indicated that participants were equally willing to face a threat to the relational and collective self.

Study 2 additionally rules out an alternative explanation of past findings. Given that we threatened each self as a singular target, the tendency to avoid threat to the individual self more so than the relational or collective self cannot be attributed to a non-motivational consequence of more extremely judging singular than generalized targets. Despite this operational change, we continued to find evidence of differential reactivity of the selves to threat. Such continuity of results across a disparate methodology adds further credence to and confidence in the motivational underpinning of the selves' differential reactions to threat (and enhancement). Studies 3 and 4 employ additionally divergent paradigms for exploring motivational primacy, and test whether patterns of primacy are culturally moderated.

Study 3

The current study uses a money allocation task to assess the extent to which people value subjectively the three selves. In line with past research (Lea & Webley, 2006; Li et al., 2002), we reasoned that the value of selves can be expressed through money in the same manner as the value of basic necessities (e.g., shelter, food) and companionship (e.g., rentafriend.com). If participants had a sum of money at their disposal, how would they distribute it among the three selves? The motivational primacy hypotheses suggest that the most valued self will receive the largest allocation, and the least valued self will receive the smallest allocation. The hypotheses, of course, differ in regard to which self is the most valued. Importantly, we provided participants with a putative sum of money that could be equally divided among the selves, which allows for the possibility that, when all three selves are simultaneously accessible (as is the case with the current allocation task), all three selves will be equally valued as the contextual primacy hypotheses predicts. Finally, we collected data in the Western culture of the UK and the Eastern culture of China to test whether culture serves as a broader form of the contextual primacy hypotheses.

If the motivational hierarchy is a product of culture – as the culture-as-contextual-primacy perspective implies – the pattern of primacy (and, therefore, allocations) among the selves will shift across cultures, with the individual self being the most valued self in the UK and the least valued self in China. That is, British participants will allocate more money to the individual self than to the relational and collective selves, whereas Chinese participants will allocate less money to the individual self than to the relational and collective selves. However, if the motivational primacy of the individual self is pancultural – as relevant data suggest (del Prado et al., 2007; Gaertner et al., 1999, Experiment 4; Yamaguchi et al., 2007) – then both cultures will evidence individual-self primacy.

Method

One hundred and forty four undergraduates (63 females, 81 males) at the University of Southampton, UK and 155 undergraduates (76 females, 78 males, 1 unidentified) at Zhejiang University, China completed a questionnaire. The questionnaire was presented and completed in

participants' native language, with materials translated and back-translated by a "committee" of bilingual speakers (Brislin, 1980).

The first page informed participants that people define themselves in three ways: as a "unique individual," as a "partner in a close relationship," and as a "member of a group." The selves were defined for participants as follows:

Unique individual. This self-description consists of personality traits (characteristics) that make you totally unique and distinct from any other person.

Partner in a close relationship (e.g., friendship, romantic relationship, parent–child relationship). This self-description consists of personality traits (characteristics) that you have in common with this close relationship partner and only with this partner. That is, these are personality traits (characteristics) you share with your partner and nobody else.

Member of a group (E.G., work-elated group, hobby-elated group, university). This self-description consists of personality traits (characteristics) that you have in common with this group and only with this group. That is, these are personality traits (characteristics) you share with the group to which you belong and with none of the many other groups to which you do not belong.

On each of three subsequent tasks, participants allocated a fixed sum of money among the three selves to indicate how much they valued each self. We equated the money between the UK and China and used an amount that allowed participants to divide equally the money among the selves, if they so desired. The amount was 90,000 British Pounds (GBP) in the UK and 900,000 Chinese Yuan (CNY) in China. Specifically, participants allocated the money indicating (a) how much they would spend bettering each self, (b) how much each self is worth, and (c) how much they would expect to receive if they could sell each self. For each task, participants were instructed that they could allocate any amount from 0 to 90,000 GBP (900,000 CYN) to a given self as long as the total across the three selves was 90,000 GBP (900,000 CNY). Participants wrote on a line preceding each self the amount they allocated to that self. We counterbalanced the order in which the selves were defined and listed on the allocation tasks.

Results

Four UK males provided unusable data in that their allocations did not sum to 90,000. To yield a common metric for the GBP and CNY currencies, we converted the allocations to the proportion of money allocated to each self on a given task. (Other conversions, such as transforming the allocations to z-scores or converting one currency to the other, yield the same conclusions as what we report with proportions.) We averaged the proportions allocated to each self across the three tasks (with Cronbach's alphas for the individual, relational, and collective self of .72, .72, and .66 in the UK and .70, .77, and .70 in China). We arcsine-transformed the proportions for inferential analysis and present raw proportions for ease of interpretation. Given that allocations across the selves are ipsative (i.e., always sum to 90,000, or 900,000, or 1.0 as a proportion), we tested each pair-wise comparison among the selves (e.g., individual vs. relational) and whether culture, sex, or Culture × Sex moderated a given comparison (e.g., Individual-vs.-Relational × Culture), with culture and sex as between-subjects variables and allocations to pairs of selves as a within-subjects variable. A preliminary analysis treating allocation task (improve, worth, sell) as a within-subject variable indicated that the pairwise-patterns among the selves were consistent across the tasks and such consistency did not vary by culture, sex, or Culture × Sex (e.g., no such Individual-vs.-Relational × Task × Culture × Sex effects).

The allocations evidenced a pancultural three-tiered hierarchy, with the individual self at the top and the collective self at the bottom.

Specifically, participants allocated a greater proportion of money to their individual self ($M = .42$, $SD = .16$) than either to their relational self ($M = .33$, $SD = .12$), $F(1, 290) = 38.78$, $p = .0001$, $d = 0.64$, or their collective self ($M = .25$, $SD = .11$), $F(1, 290) = 143.18$, $p = .0001$, $d = 1.26$, and they allocated more money to their relational self than to their collective self, $F(1, 290) = 64.24$, $p = .0001$, $d = 0.70$. As depicted in Table 4, the ordering of the three tiered hierarchy was consistent across culture and sex, with persons of both cultures and sexes allocating money primarily to their individual self, secondarily to their relational self, and lastly to their collective self. However, a significant Individual-vs.-Collective × Culture × Sex effect, $F(1, 290) = 4.22$, $p = .0407$, indicated that the magnitude by which participants allocated more money to their individual self than to their collective self was stronger for British females than for Chinese females, $F(1, 137) = 4.94$, $p = .0179$, and did not vary culturally for males, $F(1, 153) = 0.72$, $p = .3989$. Nonetheless, persons of both cultures and sexes evidenced the same three-tiered hierarchy among the selves.

Discussion

We activated the individual, relational, and collective self by defining simultaneously the selves for participants and having them divide a fixed sum of money among the selves. Participants allocated money primarily to their individual self, secondarily to their relational self, and lastly to their collective self. Such data are consistent with the possibility of a three-tiered motivational hierarchy among the selves. Importantly, British and Chinese participants evidenced the same three tiered hierarchy among their self-allocations, thereby suggesting that the hierarchy is a pancultural phenomenon.

A skeptic might argue that the current finding of individual-self primacy is an artifact of the money allocation task in that substantial evidence suggests money promotes a shift away from social dependence and dependents (Vohs et al., 2006, 2008). In response, we suggest that the skeptic consider two points. First, such a money-based explanation cannot account for the primacy of the relational self over the collective self in the current data. The money explanation, it seems, would predict an equivalent allocation to the collective self and relational self, if not a greater allocation to the former than the later, given that the relational self is derived from close interpersonal social relations. Second, the current results replicate conceptually the findings of individual-self primacy detected in other methodologically diverse paradigms that neither primed nor invoked money (i.e., Studies 1 and 2 of the current research as well as the diverse paradigms of: del Prado et al., 2007; Gaertner et al., 1999, 2002; Yamaguchi et al., 2007). Thus, the money-explanation cannot account for the full array of findings in the current study nor can it account for conceptually similar findings from methodologically distinct paradigms. Nevertheless, to bolster further confidence in these findings and provide another cross-cultural examination of the motivational hierarchy, we implemented an alternative paradigm in Study 4.

Table 4
Mean proportion of money allocated to each self as a function of culture and sex for Study 3.

Culture and sex	Self		
	Individual	Relational	Collective
UK			
Males	.41 (.18)	.34 (.14)	.25 (.11)
Females	.44 (.16)	.33 (.11)	.23 (.11)
China			
Males	.45 (.16)	.31 (.13)	.24 (.13)
Females	.40 (.13)	.33 (.10)	.26 (.09)

Note. All pair-wise comparisons within a row differ at $p < .05$ (with and without Bonferroni-adjustment on arcsine transformed proportions) with the exception of the individual versus relational self among UK males for whom the unadjusted test has $p = .059$.

Study 4

The current study tests the motivational primacy hypothesis in regard to the relative proactive capacity of each self. Motivation enables proactive functioning to construct a desired future via goals and ideals (Carver & Scheier, 2002; Elliott & Dweck, 1988; Gollwitzer & Moskowitz, 1996). Such goals and ideals act as incentives escalating people through the future toward their aspirations and away from unwanted pitfalls (Oyserman et al., 2004). Successful progression toward goals enhances subjective well-being (Emmons, 1986), particularly to the extent those satisfied goals further the achievement of longer term goals (King et al., 1998). Goals, of course, are not always achieved (Baumeister & Heatherton, 1996), and awareness of such failure produces deeply unpleasant feeling states (Duval & Wicklund, 1972; Higgins, 1987). An example of the power goals exert on welfare is the finding that *imagining* the successful accomplishment of life goals enhances subjective wellbeing three weeks into the future and physical health five months into the future (King, 2001). Assuredly, people pursue goals for individual, relational, and collective reasons (Gore & Cross, 2006; Mitchell & Silver, 1990; Sheldon & Houser-Marko, 2001).

We examined whether the selves are associated differentially with future goals. We reasoned that more primary selves would be associated more frequently with future goals and less primary selves would be associated less frequently with future goals. Furthermore, we differentially primed the selves with a between-subjects manipulation of the narrative task to allow for the possibility that the ordering of the motivational hierarchy would vary with which ever self was activated. Finally, we collected data in the United States and China to test whether culture moderates the ordering of the motivational hierarchy. If the hierarchy is a product of culture, future goals should be associated more frequently with the individual self than with the relational or collective self in the US, and the pattern should reverse in China such that future goals should be associated less frequently with the individual self than with the relational or collective self. On the other hand, if the three-tiered hierarchy detected previously is pancultural, future goals should be associated primarily with the individual self, secondarily with the relational self, and leastly with the collective self in both the US and China.

Method

Four hundred and eighty nine American undergraduates (299 females, 190 males) at the University of Tennessee, USA participated as did 498 Chinese undergraduates (310 females, 184 males, and 4 unidentified) at Sun Yat-Sen University, China. Materials were presented and completed in participants' native language, with materials translated and back-translated by a committee of bilingual speakers (Brislin, 1980).

Participants randomly received instructions to write a narrative describing themselves in terms of their individual self, relational self, or collective self. Instructions for the *individual-self* narrative read:

Being a unique individual is an important part of life. Indeed, you are a unique individual with your own unique background, personality traits, skills, abilities, interests, and hobbies. Please take a few minutes and describe what makes you unique.

Instructions for the *relational-self* narrative read:

Being part of interpersonal relationships is an important part of life. Indeed, you belong to many important interpersonal relationships, such as those with family members, friends, and romantic interests. Please take a few minutes and describe the interpersonal relationships to which you belong and what you share in common with the members of those relationships.

Instructions for the *collective-self* narrative read:

Being a member of social groups is an important part of life. Indeed, you are a member of many social groups. Please take a few minutes and describe the groups to which you belong and what you share in common with the members of those groups.

After writing one of the narratives, participants completed the future-goal task. Participants had 15 min to write and describe the 12 goals they had for the future. Pilot testing indicated that 15 min was a sufficient time interval and that 12 goals approached the limit of the number of goals that people report. After writing their goals, participants went back through their goals and indicated whether a given goal represented their individual self, relational self, or collective self, with accompanying instructions defining the three selves:

The *individual-self* consists of those aspects of who you are that make you a unique person. That is, the individual-self consists of attributes and characteristics that differentiate you from other people, and the goals and ambitions you have for yourself as a unique individual.
The *relational-self* consists of those aspects of who you are that you share with relationship partners. That is, the relational-self consists of attributes and characteristics that make you similar to persons with whom you share relationships, and goals and ambitions you have for those relationships.
The *collective-self* consists of those aspects of who you are that you share with members of groups to which you belong. That is, the collective-self consists of attributes and characteristics that make you similar to the other people in your groups, and goals and ambitions you have for those groups.

The categorization task required mutually-exclusive categorizations, such that a given goal could be categorized as representing only one of the three selves.

Results

Only 11 participants listed fewer than 12 goals (2 Americans and 2 Chinese listed 11 goals, 1 American and 3 Chinese listed 10 goals, 1 Chinese listed 9 goals, and 1 American and 1 Chinese listed 8 goals) for a total of 11,821 goals across the 987 participants, with 11,794 goals attributed to a given self. Analyses involving sex necessarily exclude the four Chinese participants whose sex was unidentified, in which case the total number of goals for such analyses came to 11,773, with 11,746 goals attributed to a given self. We report unadjusted pair-wise tests among the selves and emphasize that the same conclusions are reached with Bonferroni adjusted tests.

Before detailing the results we briefly explain the sensibility of having participants, not detached judges, attribute goals to selves. Self-to-goal links can be idiosyncratic. The same goal could be motivated across persons by different selves. For example, a goal to quit smoking could reflect the individual self (e.g., promoting individual health and longevity), the relational self (e.g., promoting a long life with a spouse), or the collective self (e.g., minimizing the burden of health care costs for the country). The participant, with a breadth of idiosyncratic self-knowledge that is not accessible to detached judges, is best positioned to indicate how their goals link to their selves.

Number of goals attributed to the three selves. We counted the number of goals (0–12) that each participant attributed to each self to test whether future goals are differentially associated with the selves. We employed a data-analytic strategy appropriate for the statistical assumptions of counts and the within-subject nature of the self-

attribution variable. We tested hypotheses in PROC GENMOD of SAS using a generalized linear model with a Poisson distribution, type 3 simultaneous generalized estimating equations, and an unstructured variance–covariance matrix (Coxe et al., 2009; McCullagh & Nelder, 1989). We regressed the 2949 counts (i.e., three counts – one for each self – nested in each of the 983 participants) onto a 3 (self-attribution: individual, relational, collective) × 3 (narrative: individual, relational, collective) × 2 (sex: male, female) × 2 (culture: USA, China) factorial model. Readers concerned with the ipsative nature of counts across the three selves and who contemplate separate analyses testing pair-wise differences among selves will be reassured that such tests are identical to the pair-wise contrasts in the current analysis.

A self main effect, $\chi^2(2) = 2012.83$, $p = .001$, indicated that goals were attributed to the selves in a manner consistent with a three-tiered motivational hierarchy along which the individual self is at the top and the collective self is at the bottom. In particular, participants attributed more goals to their individual self ($M = 6.57$ or 55% of goals) than they attributed to either their relational self ($M = 3.02$ or 25% of goals), $\chi^2(1) = 1264.73$, $p = .001$, $d = 0.43$, or collective self, ($M = 2.30$ or 19% of goals), $\chi^2(1) = 1334.87$, $p = .001$, $d = 0.58$, and they attributed more goals to their relational than collective self, $\chi^2(1) = 80.24$, $p = .001$, $d = 0.15$. The ordering of the three tiered hierarchy was consistent across culture and sex, with one exception. As displayed in Table 5, a trend toward a Self × Culture × Sex interaction, $\chi^2(2) = 5.08$, $p = .078$, indicated that American males were the only sample to attribute an equivalent number of goals to their relational and collective self (with both of the latter selves being attributed fewer goals than the individual self). Indeed, the Relational versus Collective comparison for American Males was significantly smaller than the magnitude of the same comparison across the other three samples (American Females, Chinese Females, Chinese Males), $\chi^2(1) = 21.33$, $p = .001$ (i.e., 1 vs. 3 contrast of the Relational vs. Collective comparison). Thus, the tendency to attribute more goals to the individual self than to either the relational or collective self was consistent across culture and sex, and all but American males attributed more goals to the relational than collective self.

Also attesting to the primacy of the individual self is that all participants attributed at least one goal to their individual self, whereas 30 participants (8 Chinese and 22 Americans) did not attribute any of their goals to the relational self, and 133 participants (70 Chinese and 63 Americans) did not attribute any of their goals to the collective self (with 2 Chinese and 1 American not attributing goals to either of the latter two selves). Indeed, another way to consider the motivational hierarchy is to examine whether participants attributed goals to a given self at a level beyond chance (i.e., random attribution). With three selves to which a goal could be attributed, the chance of attributing a goal to any one self is 33.33%. We coded (no/yes) whether a participant attributed more than 33.33% of her/his goals to a given self. The results pointed to the strong presence of the individual self among future goals, with 86% of Chinese and 89% of Americans attributing goals to their individual self beyond the level

of chance and only a minority of participants doing so for the relational self (20% of Chinese and 13% of Americans) or collective self (8% of Chinese and 12% of Americans).

Bases of the selves. Two judges from each culture coded the self-narratives from their respective culture using the same coding system as the previous studies. To allow for culturally unique bases, the Chinese coders examined a sample of the Chinese narratives for the possibility of bases that we did not employ previously. Two additional bases were identified in regard to the individual-self narrative: (a) referencing one's family as an aspect of the individual self and (b) affirming one's status as an only child. Those bases were subsequently applied to the US data. As in Study 1, the bases for a given self were not mutually exclusive, such that participants could describe a given self in terms of multiple bases. Table 2 details the self-bases.

We used a series of logistic regression analyses to test whether self-bases varied in frequency between cultures (when possible, we also tested the main and interactive effects of sex). Each self-basis was significantly more frequent in the US than Chinese sample, $\chi^2(1)s > 3.30$, with the exception of only-child for the individual self, child for the relational self, and work for the collective self for which the latter three bases occurred with equivalent rates between cultures, $\chi^2(1)s < 1.29$. The only significant effect of sex, $\chi^2(1) = 6.74$, $p = .009$, indicated that mention of family in regard to the individual self was more frequent among females (56.34%) than males (40.80%). The only significant Sex × Culture interaction, $\chi^2(1) = 4.66$, $p = .030$, indicated that mention of ethnicity in regard to the collective self was more frequent for US females (21.7%) than Chinese females (1.90%), $\chi^2(1) = 12.50$, $p = .004$, and equivalent for US males (13.33%) and Chinese males (7.94%), $\chi^2(1) = 0.92$, $p = .33$.

We explored whether self-bases moderated the primacy patterns either within or between cultures. Because the narrative conditions varied between-subjects, we examined the potential moderating effect of each basis by replicating the previous analysis within each narrative condition and separately including a given self-basis (e.g., Individual vs. Relational x Romantic in the relational-narrative condition). In the interest of detecting minimal evidence of moderation, we paid less attention to *p*-values (particularly for self-bases with low frequencies) and additionally examined the data for reversals of direction with the criterion that a reversal should be evidenced by the majority of persons reporting a particular self-basis (i.e., not driven by an outlying observation). The previously reported pattern of goals attributed to the selves did not vary systematically as a function of the self-reported bases of the selves.

An artifact of overlapping selves?. We examined whether referencing relationships or groups in the individual-self narrative accounts for the pattern of individual self-primacy. As displayed in Table 3, American and Chinese participants described their individual self with an average of 9.62 and 7.54 statements. For both cultures, the majority of the statements made no reference to relationships or groups (US = 75.82% and China = 76.12%), and only a small percentage referenced a relationship (US = 10.11% and China = 13.00%) or a group (US = 14.07% and China = 10.87%). We reanalyzed the goal data retaining only participants who made no reference to relationships or groups when describing their individual self. The reanalysis yielded the same conclusions (based on direction of effects and p-values) as did the analysis with the full data set. As in Studies 1 and 2, the alternative explanation based on overlapping selves cannot account for the pattern of individual-self primacy.

Discussion

We examined motivational primacy with regard to the relative proactive capacity of the selves to construct a desired future by contributing to future goals and the possibility that such primacy is culturally moderated. After describing themselves in regard to one of

Table 5
Mean number (and proportion) of Goals attributed to each self as a function of culture and sex for Study 4.

Culture and sex	Self		
	Individual	Relational	Collective
USA			
Males	6.64 (.56)	2.66 (.22)	2.63 (.22)
Females	6.63 (.56)	3.01 (.25)	2.29 (.19)
China			
Males	6.31 (.53)	3.02 (.25)	2.56 (.21)
Females	6.70 (.56)	3.47 (.29)	1.82 (.15)

Note. All pair-wise comparisons within a row differ at $p < .05$ (with and without Bonferroni-adjustment) with the exception of the relational versus collective self among American Males.

the three selves, participants from the US and China listed their future goals and uniquely attributed the goals to the selves. The pattern of primacy among the selves was remarkably consistent across cultures. American and Chinese participants attributed over twice as many of their future goals to their individual self than to either their relational or collective self. Indeed, the prominent proactive presence of the individual self was consistent across participants, with 89% of American and 86% of Chinese participants attributing goals to their individual self at a level beyond chance. Stated otherwise, the individual self was associated with more than half of all desired goals that American and Chinese participants planned for their future. Of the remaining goals, male and female Chinese participants and female American participants attributed more goals to their relational self than their collective self. Only American males equally attributed the remaining goals to their relational and collective selves. Thus, all four samples constituted by sex and culture evidenced a motivational hierarchy topped by the individual self, and three of the four samples evidenced a three tiered hierarchy in which the individual self was followed by the relational self and trailed lastly by the collective self.

General discussion

Previous research reported stronger reactions to both threat and enhancement of the individual than collective self (Gaertner et al., 1999, 2002). The stronger reactions persisted across a variety of controls for the relative salience of the selves, various forms of feedback, and numerous forms of response. Those broad and consistent patterns prompted the conclusion that the individual self is the motivationally primary form of self-definition. We initiated the current project in an attempt to expand, if not revise, the theoretical model of motivational primacy. Thus, we examined where along the motivational hierarchy the relational self is positioned and whether culture serves as a broader extension of the contextual-primacy hypotheses such that the ordering of the motivational hierarchy varies across Western and Eastern culture. Crucially, we employed across studies diverse procedures for operationalizing the selves and assessing their relative motivational-potency to minimize the possibility that our conclusions are products of study-specific artifacts. Results yielded strong support for two conclusions and tentative support for a third conclusion.

Conclusion 1: The individual self is more primary than the collective self

All four studies conceptually replicated previous research and evidenced the elevated motivational status of the individual over the collective self. Study 1 revealed that the imagined loss of the individual self aroused stronger reactions than did the imagined loss of the collective self, and a greater percentage of persons considered their individual than collective self to be their true self. Study 2 revealed that threat to the individual self is avoided more strongly than is threat to the collective self. Study 3 revealed that both British and Chinese participants allocated more monetary resources to their individual than collective self. Finally, Study 4 revealed that both American and Chinese participants disproportionally associate their future goals with the individual than collective self.

Five aspects of these findings are particularly noteworthy in light of past research. *First*, participants in each study selected idiographically the ingroups representing their collective selves. The results refute the possibility that previous findings for individual self primacy constituted an artifact of (or is limited to) a nomothetic method that presented the same ingroup to each participant. Indeed, in Study 2 of the current research, participants represented their collective self with their idiosyncratically chosen most important ingroup. Even when represented by the most important ingroup, the motivational status of the collective self is below that of the individual self. Likewise, it is difficult to argue that the results of the current research are a product of the idiographic properties associated with the narrative task, in that conceptually

similar patterns were evidenced in previous research that lacked the narrative task as well as in Study 3 of the current research that also lacked the narrative task. *Second*, by equating the "target specificity" of the selves in Study 2, we ruled out the possibility that the stronger reaction of the individual than collective self to threat (and enhancement) is an artifact of representing the collective self with a generalized ingroup representation. *Third*, we conceptually replicated patterns of individual self primacy with consideration of the selves' relative capacity to influence proactively the future, which suggests that previous findings are not limited to the relative reactive capacity of the selves and occurs in a paradigm of proactive primacy. *Fourth*, the pattern of primacy has been detected with a wide range of procedures and methods, both in the current and existing research. Thus, the pattern is unlikely a product of a particular set of methods. *Fifth*, the pattern of primacy evidenced remarkable and replicable cross-cultural consistency. Such a consistent pattern across methods, paradigms, and cultures is reassuring and bolsters confidence in the conclusion that the individual self is motivationally more primary than the collective self.

Conclusion 2: The relational self is more primary than the collective self

The current research established the elevated motivational status of the relational self over the collective self. Study 1 showed that the imagined loss of the relational self aroused stronger reactions than did the imagined loss of the collective self, and a greater percentage of persons considered their relational than collective self to be their true self. Study 2 found mixed support for the possibility that threat to the relational self is avoided more strongly than is threat to the collective self. Study 3 showed that both British and Chinese participants allocated more monetary resources to their relational than collective self. Finally, Study 4 showed that both American and Chinese participants disproportionally associate future goals with the relational than collective self (with the exception of American males). In no instance did the collective self evidence a greater motivational status than the relational self. The findings suggest that the relational self is motivationally more primary than the collective self.

Tentative conclusion 3: The individual self is more primary than the relational self

Results are consistent with the possibility that the individual self has an elevated motivational status compared to the relational self. Study 1 demonstrated that the imagined loss of the individual self aroused a stronger effect on life than did the imagined loss of the relational self, and a greater percentage of persons considered their individual than relational self to be their true self. The positive and negative mood measures evidenced floor and ceiling effects, respectively, that could not differentiate reactions to the imagined loss of the individual and relational self. Study 2 demonstrated that threat to the individual self is avoided more strongly than threat to the relational self particularly when the threat is relevant to the relational self. Study 3 demonstrated that both British and Chinese participants allocated more monetary resources to their individual than relational self. Finally, Study 4 demonstrated that American and Chinese participants disproportionately associated their future goals with the individual than relational self. These initial findings suggest that the individual self is motivationally more primary than the relational self.

A caveat: Contextual primacy?

Although the current research is consistent with the primacy of the individual self, a caveat is in order regarding the possibility of contextual primacy. To avoid confusion, it is important to distinguish contextual primacy from individual-self primacy and review briefly our control of contextual accessibility. The contextual primacy hypothesis indicates that motivational primacy is not a property of a self and,

instead, is a function of contextual factors that render accessible a given self. The individual-self primacy hypothesis, in contrast, attributes motivational primacy to the individual self such that the individual self is the motivationally essential or fundamental form of self-definition. Individual-self primacy, however, does not deny contextual influences on the accessibility of selves; contextual factors do indeed affect accessibility. Individual-self primacy is a relative construct describing a stronger motivational pull of the individual-self that is *not a product of* mere contextual factors.

As was the case with previous research (Gaertner et al., 1999, 2002), we exacted care to control the contextual accessibility of the selves. We did so in the current research with two distinct approaches: the narrative task and culture. The narrative task provided a means of controlling immediate accessibility. By having participants focus on and write about a particular self, we were able to render immediately accessible a given self before subjecting it to our various assessments (Studies 1, 2, and 4). Culture, on the other hand, provided a means to control chronic accessibility. By sampling from the Western cultures of the United States and United Kingdom and the East-Asian culture of China, we obtained two groups of participants whose life-history was differentially socialized via cultural norms emphasizing either independence-and-individuality or interdependence-and-connectedness (Studies 3 and 4).

Study 4 was particularly compelling, because it crossed the narrative task and culture to yield three possibilities of contextual primacy: (1) a Self × Narrative effect allowing for primacy via immediate accessibility such that the more "primary" self would have been the self that was made accessible by the narrative (i.e., individual self among participants who wrote the individual-self narrative, relational self among participants who wrote the relational-self narrative, and collective self among participants who wrote collective-self narrative); (2) a Self × Culture effect allowing for primacy via chronic accessibility such that the individual self would have been the more primary self for Americans and the relational-self or collective self would have been primary for Chinese; (3) a Self × Culture × Narrative effect allowing for primacy via chronic accessibility emphasizing immediate accessibility such that (a) the individual-self would have been more acutely primary for Americans who wrote the individual-self narrative, whereas (b) the relational-self or collective-self would have been more acutely primary for Chinese who wrote the relational-self or collective-self narrative. Such patterns did not emerge and the three-tiered hierarchy persisted across narratives and cultures, as generally was the case in all studies.

Despite our efforts to control both immediate and chronic accessibility, a caveat is in order particularly for the tentative conclusion that the individual self is more primary than the relational self. One constant across our research is the homogenous sampling of college students. College students might be in a phase of life that chronically demands an intense focus on personal achievement and improvement and plausibly elevates the motivational relevance of the individual self. Similarly, college students arguably are in a more transitory phase of life involving frequent changes of location and shifting social networks and such residential mobility plausibly elevates the motivational relevance of the individual self (Oishi, 2010). Sampling persons in a life phase that involves a more sustained other-focus (presumably such as during parenthood) or greater residential-stability might reveal the elevated motivational relevance of the relational self. Of course, such a shifting pattern of individual versus relational primacy across prolonged life events would be consistent with the contextual-primacy hypothesis and provides an important call for future research.

Is it simply a matter of complexity?

A skeptic might dismiss evidence for individual-self primacy with the reasoning that the individual self has greater structural complexity than do the other selves. Such a complexity account, however, anticipates a weaker (i.e., buffered; Linville, 1985, 1987) reaction of the individual self (than the other selves) to threat and cannot account for the

stronger reactions of the individual self (than the collective self) to enhancement (Gaertner et al., 2002; Sedikides & Gaertner, 2001a,b). Furthermore, complexity is a property that varies across persons for the individual self (Linville, 1987; McConnell & Strain, 2007), relational self (Showers & Kevlyn, 1999; Showers & Zeigler-Hill, 2004), and collective self (Roccas & Brewer, 2002). Hence, there is no pressing reason to assume that any one self invariantly is more complex than another self.

But, the observed hierarchy reflects poorly on the human condition

Readers might reject the possibility that the individual self is motivationally primary, because such a thesis presumably reflects poorly on the human condition. Indeed, David Carrier identified such a human-idealization bias in response to critics of his (empirically supported) hypothesis that bipedalism evolved by enhancing a capacity to kill and compete: "Among academics there often is resistance to the reality that humans are a violent species. It's an intrinsic desire to have us be more peaceful than we are" (Siegel, 2011, May 18). Aside from the fact that moralistic reasoning is an invalid means of weighing hypotheses within the scientific method, there is no good reason to presume that any one pattern of motivational primacy is necessarily ideal, desirable, or inherently good. Consider, for instance, the possibility of collective-self primacy. One might imagine that such an orientation would rid the world of social ills with individuals striving for the welfare of the group. As research attests, however, social graces crumble and conflict proliferates at the boundary of intergroup contact (Brewer, 2007; Tajfel & Turner, 1979; Wildschut et al., 2003). The possibility of relational-self primacy similarly entails a dubious side as exemplified by research indicating that interpersonal connection promotes dehumanization and harsh treatment of socially distant others (Waytz & Epley, 2012). In certain respects, the motivational primacy of the individual self might be considered a virtue: not following a group trajectory and checking behavior against whether it is "good for me" might serve a vital social function that promotes harmony by enabling persons to speak up, protest, and sway others from harmful deeds (Gaertner et al., 2008a). Even so, we suggest that readers consider our data and the hypothesis they support in regard to how humans might be rather than in regard to how humans are desired to be.

Implications for collectivism

The cultural movement has grappled with conceptual and operational definitions of collectivism (Kim et al., 1994; Oyserman et al., 2002). The three-tiered motivational hierarchy offers two implications for furthering our understanding of collectivism. A particularly troubling issue is the nature of the collective to which collectivism refers (Brewer & Chen, 2007). The pattern of relational-self over collective-self primacy observed in the Chinese samples of Studies 3 and 4 implies that (at least East-Asian) collectivism is orchestrated in regard to networks of close-interpersonal relationships more so than broad and impersonal social groups (Brewer & Chen, 2007; Yuki, 2003). Of course, that the same pattern was observed in the corresponding Western samples suggests that the stronger motivational pull of the relational than collective self is a basic aspect of the motivational structure of the human self-concept and has less to do with cultural mechanisms.

A second and perhaps more contentious implication follows from the pan-cultural tendency for individual-self primacy. Scholars agree that norms prescribing social harmony and modesty play a central role in the transmission and maintenance of collectivism. Debatable, however, is the nature of the motivation that guides behavioral acts of "collectivism" (Batson, 2011, p. 210–220). One possibility is that behavior is driven by an other-serving motive to benefit an ingroup (Dawes et al., 1990) or, as the case maybe, close interpersonal-others. Another possibility, however, is an egoistic motivation by which others are benefited out of a concern for one's own welfare. Egoism may certainly seem odd or disconnected from stereotyped conceptions of collectivism. This

oddity becomes plausible considering the importance of obligations to collectivistic culture (Triandis, 1989, 1995). Obligations reflect acts that one "should" or "ought" do, not necessarily acts that one wants to do. Subverting a "want" for a "should" might appear on the surface to be self-sacrificial and other-serving, but it could be guided by egoistic concerns of otherwise suffering sanctions from others or one's self (Cai et al., 2011). Indeed, one account of collectivism involves the calculation of long-term personal costs and benefits (Yamaguchi, 1994). Pan-cultural evidence for the motivational primacy of the individual-self certainly implies that the individual-self plays a sizeable role guiding social behavior in Eastern (and Western) culture.

Speculating the origin of the three-tiered hierarchy

The observed hierarchy begs the question "why?" Why is the motivational status of the individual self likely higher than that of the relational self and certainly higher than that of the collective self? What is the origin of this hierarchy?

The current results along with complementary findings (del Prado et al., 2007; Gaertner et al., 1999, Experiment 4; Yamaguchi et al., 2007) suggest that the hierarchy has cultural stability. Assuming such pancultural evidence replicates in future research with additional methods, populations, and life phases, it is worth speculating whether the hierarchy has evolutionary underpinning (Schmitt & Pilcher, 2004). Granted, all three selves share in the likelihood of successful transmission and subsequent survival of genes. Group life, for example, contributes to the survival of individuals and their offspring (Brewer & Caporael, 2006; Caporael, 2001). Likewise, the dyad or parental unit plays a central role in the transmission of genes and subsequent development of the offspring (Cosmides & Tooby, 1992; Wenar, 1982). Obviously, however, hominid ancestors could not reproduce until they reached, and *unless* they reached, puberty. Arguably, hominid ancestors spent the first part of their evolutionary history primarily occupied with individual survival. Continuing on this speculative line, perhaps the pattern of individual-self, followed by relational-self, followed by collective-self primacy is a footprint of natural selection. According to this argument, the individual self had a strong survival value and promoted reproduction, which was closely facilitated by dyadic relationships that featured prominently within in the backdrop of a larger social grouping (Sedikides & Skowronski, 1997, 2009; Sedikides et al., 2006).

Coda

All three selves are important to people, and all are invaluable in theorizing and experimenting on the human condition. Also, our findings (especially those on the comparative motivational primacy of the individual vs. the relational self) would need to be replicated with different designs and assessment techniques, and in different populations. Nevertheless, our cross-cultural and multi-method empirical efforts have established a hierarchy among the selves, with the individual self at the top, followed by the relational self, and trailed by the collective self. The best conclusion the data allow for now is that the three-tiered motivational hierarchy reflects a fundamental structural pattern of the human self—a pattern whose sketches were drawn by evolutionary forces.

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