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Kenneth D. Locke¹

Abstract

Six studies ($N = 1,682$) used the *Circumplex Scales of Intergroup Goals* (CSIG)—an inventory based on the interpersonal circle—to assess individuals' agentic and communal goals for interactions between groups (nations in Studies 1-4, organizations in Study 5, political parties in Study 6). Noteworthy findings included the following: People with stronger unagentic-and-uncommunal goals perceived other groups as dangers, were wary of intergroup negotiations, and sanctioned authoritarianism and inequality. People with stronger agentic-and-uncommunal goals proudly identified with their country and compatriots, disapproved of nations unlike their own, and preferred the conservative candidate in a national election. People with stronger communal-and-unagentic goals identified with people beyond their ingroup, and wanted their group to resolve intergroup conflicts by behaving cooperatively rather than competitively or aggressively. By providing an encompassing framework capable of organizing and integrating these types of diverse findings, the circumplex model can facilitate cumulative scientific progress.

Keywords

interpersonal circumplex, intergroup, goals, agency, communion

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Humans are prodigiously social: Complex networks and patterns of relationships and interactions give shape and meaning to our lives. Relationships can exist between individuals (e.g., friends, family members, coworkers) and also between groups or between individuals and groups to which they do and do not belong (e.g., kinship groups, task groups, cities, and nations). To the degree that individuals use the same cognitive space to conceptualize interactions among persons and among groups, models that have helped clarify interpersonal motives and dispositions should also help clarify intergroup motives and dispositions.

Perhaps the most popular model for conceptualizing, organizing, and assessing interpersonal motives and dispositions is the interpersonal circle or interpersonal circumplex (Fournier, Moskowitz, & Zuroff, 2011; Gurtman, 2009). As Figure 1 shows, two orthogonal axes define the interpersonal circumplex: a vertical axis of dominance, power, or *agency* and a horizontal axis of solidarity, warmth, or *communion*. Thus, each point within the circumplex space represents a weighted mixture of agency and communion. The interpersonal circumplex can be divided into broad segments (e.g., quarters) or narrow segments (e.g., sixteenths) but is most often divided into the eight octants. By convention, each octant has a generic two-letter code (shown in parentheses in Figure 1). As one circumnavigates the circle, each octant

reflects a progressive blend of the two axial dimensions; thus, adjacent octants are more similar than more distant octants, and opposite octants reflect opposing interpersonal orientations. The thesis of the current article is that the interpersonal circumplex can provide a generative and integrative model for investigating and understanding individuals' goals for intergroup interactions.

Multiple literatures support the centrality of agency and communion. Socioanalytic theory (Hogan, 1982) and evolutionary psychology (Bugental, 2000) highlight how natural selection favored those who mastered the challenges of negotiating and coordinating communion or “getting along” (e.g., attachments and coalitions) and agency or “getting ahead” (e.g., hierarchical status and power). Evidence that different hormones and neurotransmitters are associated with regulating communion (e.g., oxytocin; Bartz & Hollander, 2006) and agency (e.g., testosterone; Archer, 2006) supports the view that they are essential yet distinct tasks. From a psychometric perspective, factor analyses show that the dimensions of agency

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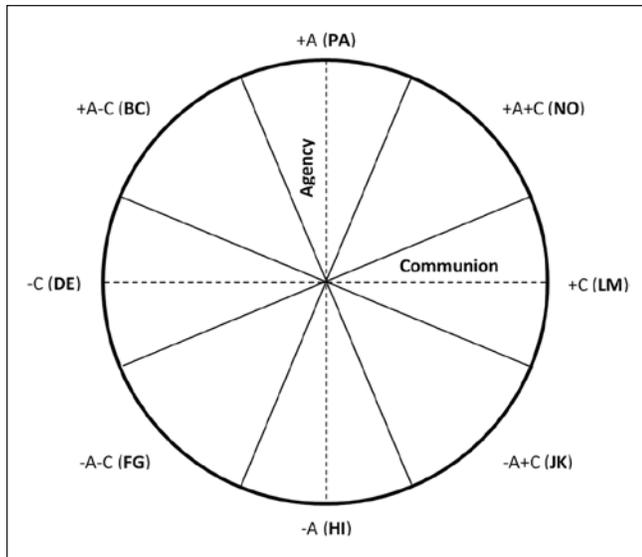


Figure 1. The Interpersonal Circumplex.

and communion account for a large proportion of the variance in ratings of interpersonal behaviors and traits (Wiggins, 1979), and the interpersonal factors of the five-factor model of personality—extraversion and agreeableness—are rotational variants of agency and communion (McCrae & Costa, 1989). A rapidly expanding literature suggests that agency and communion are “fundamental dimensions of social judgment” (Abele, Cuddy, Judd, & Yzerbyt, 2008), providing the basic coordinates onto which people map, for example, their stereotypes of social groups and nations (Cuddy, Fiske, & Glick, 2008), conceptions of masculinity and femininity (Lippa, 2001), and strategies for self-presentation and self-enhancement (Paulhus & John, 1998). More broadly, agency and communion are pervasive, core themes in individuals’ life stories (McAdams, Hoffman, Mansfield, & Day, 1996) and in basic social and cultural values such as ambition, status, harmony, and equality (Trappnell & Paulhus, 2012).

The circumplex defined by agency and communion has provided a unifying conceptual space in which to organize and connect findings from diverse approaches to studying interpersonal relations (Wiggins, 2003); for example, people in the “low agency and low communion” region of the circumplex tend to be self-critical and socially anxious, to report attachment avoidance and avoidant personality disorder symptoms, and to evoke controlling or dismissive reactions from others. To the extent that agency and communion are fundamental dimensions of social cognition, the circumplex may provide a similarly helpful framework for organizing, interpreting, and integrating the results of diverse theoretical and methodological approaches to studying how individuals conceptualize and approach intergroup relations. I tested this possibility in a series of six studies.

In Study 1, I describe the development and psychometric properties of the *Circumplex Scales of Intergroup Goals*

(CSIG), a measure of individuals’ goals for intergroup interactions. Next, I test whether the agentic and communal goals assessed by the CSIG predict individual differences in (a) social attitudes and dispositions (Studies 1, 3, and 5), (b) how people compare their nation with other nations (Study 2), and (c) how people conceptualize and resolve conflicts between nations, organizations, and political parties (Studies 4-6). In the discussion, I show how the circumplex can help organize the various findings into coherent clusters.

Study 1

The purpose of Study 1 was to construct a 32-item CSIG, explore its psychometric properties, and test its convergent validity with existing measures of social attitudes.

Method

English-speaking citizens of the United States (240 females, 158 males), Canada (46 females, 34 males), and India (67 females, 120 males) accessed and completed an online questionnaire through Amazon’s Mechanical Turk website (MTurk; Buhrmester, Kwang, & Gosling, 2011) in exchange for US\$0.30. The above sample only included respondents who completed the questionnaire and correctly answered two validity-check questions embedded in the questionnaire.

I used the 64-item Circumplex Scales of Interpersonal Values (CSIV; Locke, 2000) as my starting point for constructing the CSIG. The CSIV assesses the importance individuals place on interpersonal experiences associated with each circumplex octant. For each item, respondents indicate how important that experience is for them on a 5-point (*not at all, somewhat, moderately, very, extremely*) scale. To change the CSIV into a measure of intergroup goals, I modified many of the items to better fit an intergroup context; for example, the CSIV item “I go along with what they want” was changed to “we avoid conflict” and the CSIV item “I express myself openly” was changed to “we get the chance to express our views.”

The CSIV and CSIG assess what social-cognitive and motivational theories label the “subjective value” (Mischel, 1973) or “incentive value” (Atkinson, 1964) of specific experiences or outcomes. However, within the social sciences more generally, the term *value* often refers to more abstract attitudes with deontological connotations. Therefore, I decided that it would be less ambiguous to refer to construct being assessed by the CSIG as “goals.”

Because personality varies to some degree across contexts, a ubiquitous issue in personality assessment is whether to assess general or context-specific dispositions. I designed the CSIG so that the items could apply to any group, but the instructions could situate the items within specific contexts, such as interactions between nations or organizations. When I was developing the CSIG (and using the CSIG in Studies 1-4), the instructions asked respondents what they wanted

Table 1. CSIG Items.

Octant	Scale name	Items: "It is important that . . ."
PA	Be authoritative	we are assertive; we are decisive; we appear confident; they see us as capable
BC	Be tough	we show that we can be tough; we are aggressive if necessary; we not appear vulnerable; we not show our weaknesses
DE	Be self-protective	we do whatever is in our best interest; we keep our guard up; we are the winners in any argument or dispute; we are better than them
FG	Be wary	they stay out of our business; we not trust them; we let them fend for themselves; we not get entangled in their affairs
HI	Be conflict-avoidant	we avoid conflict; they not get angry with us; we not make them angry; we not get into arguments
JK	Be cooperative	we are friendly; we celebrate their achievements; they feel we are all on the same team; we are cooperative
LM	Be understanding	we appreciate what they have to offer; we understand their point of view; we are able to compromise; we show concern for their welfare
NO	Be respected	they respect what we have to say; we get the chance to express our views; they listen to what we have to say; they see us as responsible

Note. CSIG = Circumplex Scales of Intergroup Goals.

"when my country's representatives or leaders interact with representatives or leaders of other countries."

I assessed Social Dominance Orientation (SDO)—which involves endorsing dominance, superiority, and favoritism of one's own group over others—with 10 balanced items from the SDO Scale (Pratto, Sidanius, Stallworth, & Malle, 1994), including "some groups of people are simply inferior to other groups" and "no one group should dominate in society" (R). I assessed Right-Wing Authoritarianism (RWA)—which involves endorsing traditional group norms and authoritarian methods to defend those norms against perceived threats—with 10 balanced items from the RWA Scale (Altemeyer, 1996), including "Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs" and "There is no 'ONE right way' to live life; everybody has to create their own way" (R).

I assessed *patriotic self-investment*—which involves experiencing the group as a source of solidarity, satisfaction, and identity—with the following items from Leach et al.'s (2008) group identification scale (showing the wording used for American participants): "I am glad to be an American"; "Being an American gives me a good feeling"; "Being an American is an important part of how I see myself"; "The fact that I am an American is an important part of my identity"; "I feel solidarity with my country"; and "I feel committed to my country." Collective narcissism involves investment in—and sensitivity to threats to—an inflated image of one's ingroup (Golec de Zavala, Cichocka, Eidelson, & Jayawickreme, 2009). I assessed *patriotic narcissism* using two items adapted from Golec de Zavala et al.'s (2009) Collective Narcissism Scale: "I feel my country does not get the respect it deserves" and "It really makes me angry when others criticize my country."

The RWA, SDO, self-investment, and narcissism items were rated on 7-point scales ranging from *strongly disagree* to *neutral* to *strongly agree*. In the current sample, the

Cronbach's alphas for the RWA, SDO, self-investment, and narcissism scales were, respectively, .91, .86, .96, and .73. All ($n = 665$) participants completed the SDO, RWA, and initial 64-item CSIG scales; most ($n = 402$) American and Canadian participants also completed the patriotic self-investment and narcissism measures, but Indian participants did not.

Results and Discussion

To create the CSIG, I followed the following procedure that has been used to create other circumplex inventories (e.g., Alden, Wiggins, & Pincus, 1990; Hopwood et al., 2011; Locke & Sadler, 2007; Wiggins, Trapnell, & Phillips, 1988). First, I ipsatized each individual's responses to the CSIG items to control for overall response elevation. Then, by conducting a series of iterative principal components analyses (PCAs)—examining item loadings, item communalities, item-scale correlations, and overall conformity to a circumplex structure—I culled the initial set of 64 items down to a final set of 32 items organized into the eight 4-item octant scales shown in Table 1. (PCAs are the preferred variable reduction technique when developing and testing circumplex inventories because (a) the aim is to produce octant scales from which two orthogonal principal components—agency and communion—can be computed as weighted sums and (b) circumplex models are agnostic as to whether agency and communion are simply useful summaries of octant scores versus latent constructs causing octant scores, as is assumed by factor analytic approaches.)

I computed participants' octant scores by averaging the four items from each octant. Figure 2 shows descriptive statistics and reliabilities for each scale. All internal consistencies were good except for the FG (*be wary*) scale, which also had the lowest mean rating. Conducting a PCA on the correlations between ipsatized octant scales yielded a clear

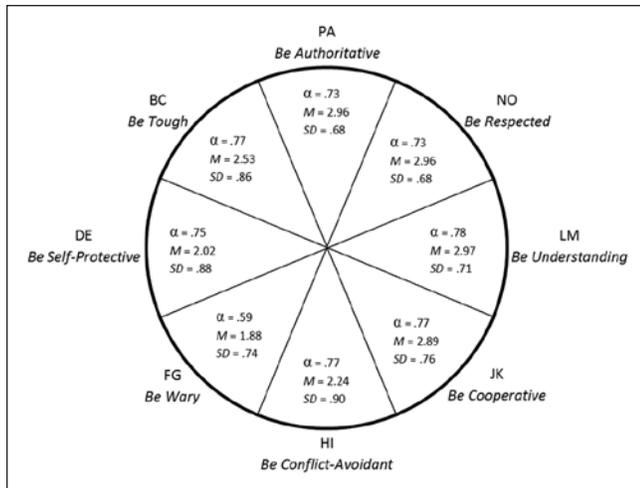


Figure 2. Circumplex Scales of intergroup goals.
Note. Descriptive statistics are from Study 1.

two-factor solution: The first two factors explained 64.5% of the variance and were the only factors with eigenvalues greater than 1, and the octant scales formed a circular pattern within that two-dimensional space. Theoretical rather than statistical criteria determine the orientation of factors in circumplex models (because in a perfect circumplex, all rotations of orthogonal dimensions are statistically indistinguishable). Therefore, I used Procrustean rotation to align the two dimensions with the theoretical orientation of the communal and agentic dimensions. Table 2 shows the loading of each octant on the two rotated dimensions and reveals the expected sinusoidal pattern: On the communal dimension, LM and adjacent octants had positive loadings, whereas DE and adjacent octants had strong negative loadings; on the agentic dimension, PA and adjacent octants had positive loadings, whereas HI and adjacent octants had negative loadings.

To test whether the circumplex pattern would replicate in an independent sample, I repeated the preceding analysis on the CSIG data from Studies 2 to 6 ($n = 1,017$). Conducting a PCA on the correlations between ipsatized octant scales again yielded a clear two-factor solution: The first two factors explained 63.3% of the variance and were the only factors with eigenvalues greater than 1. Table 2 shows the loading of each octant on the two dimensions after Procrustean rotation and again shows the expected sinusoidal pattern of increasing and decreasing loadings as one circumnavigates the circumplex.

To formally test whether the CSIG's octant scales conformed to a circular model, I used a randomization test of hypothesized order relations (Tracey, 2000). A circular model makes 288 predictions about the relative magnitudes of correlations among eight octant scales (with stronger positive correlations between octant scales that are closer on the circle). The program RANDALL (Tracey, 1997) computes a

correspondence index (CI) equal to the proportion of predictions met minus the proportion violated. The CI can range from -1.0 (all predictions violated) to 1.0 (perfect fit). Table 3 shows the results of tests of hypothesized order relations conducted on the samples from each of the studies reported in this article: The number of predictions met ranged from 246 to 270 (out of 288) and the CI s ranged from $.71$ to $.87$ (all $ps < .001$), thus indicating significant conformity to a circular model. In addition, Table 3 shows the results of conducting PCAs on the ipsatized octant scales: Across all samples reported in this article, the first two components consistently explained at least 59% of the variance. (Table 3 also provides the same information for the CSIV, which was administered in Studies 2 and 3; as expected, the CSIV scales also formed a circumplex.)

Because the CSIG octants form a circle, a respondent's octant scores can be combined to yield an overall horizontal vector (communal dimension) score and an overall vertical vector (agentic dimension) score as follows (Leary, 1957; Locke, 2011):

$$\text{Communal Dimension} = \text{LM} - \text{DE} + (.707 \times [\text{JK} + \text{NO} - \text{BC} - \text{FG}]), \quad (1)$$

$$\text{Agentic Dimension} = \text{PA} - \text{HI} + (.707 \times [\text{BC} + \text{NO} - \text{JK} - \text{FG}]). \quad (2)$$

The CSIG agentic dimension score indicates how much respondents want their nation to be confident and strong rather than timid and scared; the CSIG communal dimension score indicates how much respondents want their nation to be engaged and open rather than competitive and guarded. The reliability of dimension scores were calculated using methods used to compute reliabilities of weighted sums (Markey & Markey, 2009; Nunnally & Bernstein, 1994); the resulting alphas for the CSIG agentic and communal dimensions were $.77$ and $.87$, respectively.

To assess convergent validity, I regressed SDO, RWA, Self-Investment, and Narcissism scores on the communal and agentic dimension scores. In the regression analyses throughout this article, unless I specify otherwise, I enter communal and agentic goals as simultaneous predictors and report standardized coefficients. Table 4 shows the results. Agentic goals related negatively to SDO and RWA but positively to patriotic self-investment and narcissism. Communal goals were negatively related to all four scales. Figure 3 plots the t -values for these regression coefficients on the communal and agentic dimensions; thus, the points show the locations of individuals scoring high on each measure. Individuals scoring high on RWA and SDO were located in the unagentic-and-uncommunal region, indicating that they want their country to be wary and self-protective. Individuals scoring high on patriotic self-investment and narcissism were located in the agentic-and-uncommunal region, indicating that they want their country to be tough and strong, with those high in

Table 2. Loading of CSIG Octant Scales on the Communal and Agentic Principal Components.

Scale	Communal		Agentic	
	Study 1	Studies 2-6	Study 1	Studies 2-6
Be authoritative (PA)	0.02	0.19	0.83	0.76
Be tough (BC)	-0.60	-0.60	0.55	0.45
Be self-protective (DE)	-0.80	-0.81	0.04	0.15
Be wary (FG)	-0.69	-0.73	-0.20	-0.24
Be conflict-avoidant (HI)	0.19	0.26	-0.79	-0.78
Be cooperative (JK)	0.80	0.76	-0.34	-0.36
Be understanding (LM)	0.84	0.81	-0.15	-0.12
Be respected (NO)	0.52	0.42	0.51	0.62

Note. CSIG = Circumplex Scales of Intergroup Goals.

Table 3. Results of Principal Components Analyses and Tests of Circular Order Relations on the CSIG and CSIV Octant Scales.

Measure/Study	<i>n</i>	% variance explained (by first two components)	Circular order predictions met (out of possible 288)
CSIG			
Study 1	665	64.9	269 (<i>CI</i> = .87***)
Study 2	327	62.7	263 (<i>CI</i> = .83***)
Study 3	207	66.3	255 (<i>CI</i> = .77***)
Study 4	94	59.2	254 (<i>CI</i> = .76***)
Study 5	177	63.6	246 (<i>CI</i> = .71***)
Study 6	212	62.3	270 (<i>CI</i> = .87***)
CSIV			
Study 2	327	63.1	265 (<i>CI</i> = .84***)
Study 3	207	67.2	257 (<i>CI</i> = .78***)

Note. A significant *CI* indicates that the pattern of correlations among octant scales conforms to a circular model. CSIG = Circumplex Scales of Intergroup Goals; CSIV = Circumplex Scales of Interpersonal Values; *CI* = correspondence index.

†*p* < .10. **p* ≤ .05. ****p* ≤ .005.

narcissism emphasizing self-protection and those high in self-investment emphasizing assertion. In sum, the CSIG showed clear and sensible associations with other measures of social attitudes.

Study 2

When people compare themselves with others, they can notice how they are similar, dissimilar, better, or worse (Locke, in press). Research on naturally occurring social comparisons found that interpersonal values moderated the emotional impact of comparisons: People with stronger *interpersonal* communal values (as assessed by the CSIV) reported stronger positive reactions to noticing that someone was similar but reported either weaker or no stronger reactions to noticing that someone was better-off or worse-off (Locke, 2003). People not only compare themselves with other individuals also compare their groups with other

groups. The current study tested whether intergroup goals would moderate the impact of intergroup comparisons.

Social Identity Theory (Tajfel & Turner, 1986) and Optimal Distinctiveness Theory (Brewer, 1991) posit that people who identify with a group will prefer intergroup comparisons that show their group to be distinct from and superior to other groups. Perceiving one’s country as an indistinct member of a more inclusive collection of countries can be unsettling (Riketta 2002), and the desire and tendency to positively differentiate one’s country from other countries may be particularly potent among those who strongly identify with their country (Lalonde, 2002; Nigbur & Cinnirella, 2007). Therefore, I expected that people with stronger agentic and weaker communal intergroup goals (i.e., people who tended to express more patriotic self-investment and narcissism in Study 1) would be particularly prone to make and take pleasure in intergroup comparisons that portray their country as distinct and superior to other countries. For comparison purposes, I also tested the effects of interpersonal goals assessed by the CSIV.

Method

U.S. citizens (201 females, 121 males, 5 unspecified; *M* age = 20.4 years, *SD* = 4.5) attending the University of Idaho completed the CSIG and the 32-item version of the CSIV. Octant alphas for the CSIG and CSIV ranged from .53 to .81; reliabilities for the agentic and communal dimensions were .73 and .86 for the CSIG and .67 and .85 for the CSIV. Between completing the two circumplex inventories, participants were asked to “please think of one way in which the United States is similar to or different from another country . . .” They then indicated what was the other country, what characteristic they compared, and—with respect to this characteristic—to what extent the United States was similar, different, better-off, and worse-off than that other country on 1 (*not at all*) to 5 (*very*) scales. Finally, on the same 5-point scale, they indicated the degree to which comparing the United States and the other country on this characteristic made them feel happy, sad, proud of the United States, pity for the United States,

Table 4. Regression of Measures of Social Attitudes on Communal and Agentic Intergral Goals (Study 1).

Attitude measure	Communal			Agentic		
	B	SE	sr ²	b	SE	sr ²
SDO	-0.54**	.03	0.27	-0.24**	.03	0.05
RWA	-0.46**	.04	0.19	-0.19**	.04	0.03
Patriotic self-investment	-0.15**	.05	0.02	0.36**	.05	0.11
Patriotic Narcissism	-0.34**	.05	0.10	0.22**	.05	0.04

Note. *n* = 665 for SDO and RWA analyses; *n* = 402 for self-investment and narcissism analyses. SDO = Social Dominance Orientation; RWA = Right-Wing Authoritarianism.
[†]*p* < .10. * *p* ≤ .05. ***p* ≤ .005.

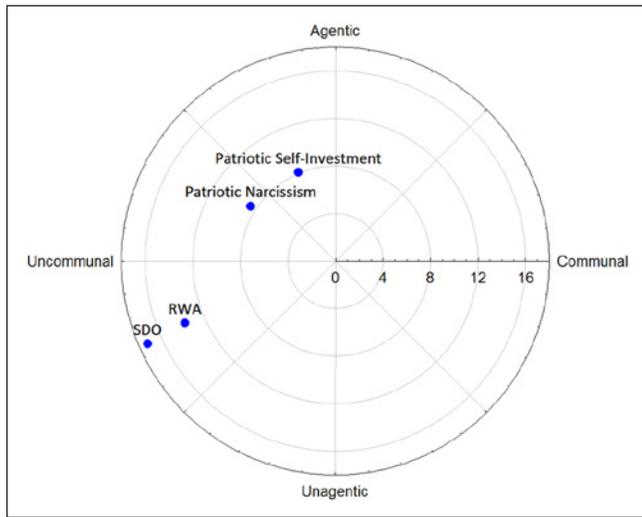


Figure 3. Results (*t*-values) from regression of social attitudes onto agentic and communal goals (Study 1).

admiration for <other country>, and contempt for <other country>. (Where <other country> appears, the survey software automatically inserted the country the participant had indicated they compared with the United States; 42 participants did not specify either the country with which they compared the United States or the particular characteristic they compared and were omitted from the analyses involving national comparisons.)

Because similarity and (reverse-scored) difference ratings were correlated, $r(283) = .77$, and yielded parallel results, I summed the two ratings to create an overall measure of *perceived similarity* between the United States and the other country. Likewise, because better-off and (reverse-scored) worse-off ratings were correlated, $r(283) = .53$, and yielded parallel results, I summed the two ratings to create an overall measure of *perceived superiority* of the United States.

The data were collected throughout the fall of 2012, and participants reported which candidate they supported in the 2012 U.S. presidential election; 152 supported Obama (the more liberal candidate), 98 Romney (the more conservative

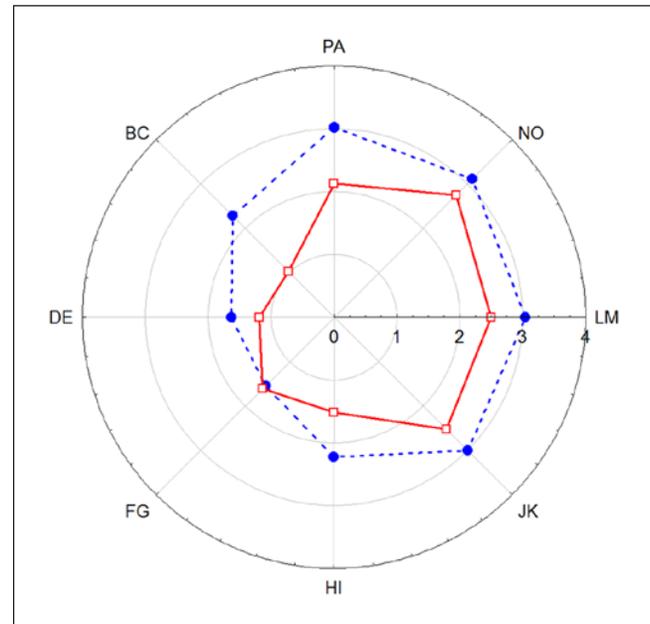


Figure 4. Mean octant ratings, on 0 (*not at all important*) to 4 (*extremely important*) scales, for the CSIG (circles) and CSIV (squares), Study 2.

candidate), 75 “Neither/Other,” and 2 responses were not recorded.

Results and Discussion

The CSIG and CSIV showed moderate correlations: $r(322) = .46$ between their communal dimensions and $r(322) = .23$ between their agentic dimensions. Figure 4 plots the raw CSIV and CSIG octant scores and highlights several patterns. First, in interpersonal and international contexts, people favored communal over uncommunal goals, and, to a lesser extent, agentic over unagentic goals. Second, CSIG scores exceeded CSIV scores in all octants except FG, all paired $t(323)s > 9$, $ps < .001$. Third, the greatest CSIG-CSIV differences were in the PA and BC octants ($ts > 21$): Participants placed more importance on their leaders being

Table 5. Regression of National Comparison Experiences on Communal and Agentic Intergroup Goals (Study 2).

National comparison experiences	Communal			Agentic		
	<i>b</i>	<i>SE</i>	<i>sr</i> ²	<i>b</i>	<i>SE</i>	<i>sr</i> ²
Simple effects of intergroup goals on . . .						
Perceived similarity	-0.07	.06	.00	-0.06	.06	.00
Perceived superiority	-0.18**	.06	.03	0.04	.06	.00
Happy	-0.27**	.06	.07	0.05	.06	.00
Sad	0.16*	.06	.02	-0.07	.06	.00
Proud of United States	-0.25**	.06	.06	0.09	.06	.01
Pity for United States	0.12*	.06	.01	-0.08	.06	.01
Contempt for other	-0.18**	.06	.03	0.01	.06	.00
Admiration for other	0.19**	.06	.03	0.02	.06	.00
Interaction of perceived similarity × Goal on . . .						
Happy	0.05	.06	.00	0.00	.06	.00
Sad	-0.19**	.05	.03	-0.10	.05	.01
Proud of United States	0.05	.06	.00	0.02	.06	.00
Pity for United States	-0.14*	.06	.02	-0.09	.06	.01
Contempt for other	-0.10	.06	.01	-0.15*	.06	.02
Admiration for Other	-0.09	.06	.01	0.02	.06	.00
Interaction of Perceived superiority × Goal on . . .						
Happy	0.01	.05	.00	0.04	.05	.00
Sad	0.01	.06	.00	0.07	.06	.00
Proud of United States	-0.01	.05	.00	0.05	.05	.00
Pity for United States	-0.03	.05	.00	0.02	.05	.00
Contempt for other	0.10	.06	.01	0.14*	.06	.02
Admiration for other	-0.12*	.05	.01	-0.02	.05	.00

†*p* < .10. **p* ≤ .05. ***p* ≤ .005.

tough and authoritative with other countries than on themselves being tough and authoritative with other individuals.

Next, I tested whether intergroup goals predicted preferences for the two main presidential candidates (dummy-coded as Obama supporters = 0, Romney supporters = 1). Logistic regression of presidential preference on *z*-scored agentic and communal intergroup goals clearly showed that stronger agentic goals (*b* = 0.57, *SE* = .16, Wald χ^2 = 13.0) and weaker communal goals (*b* = -0.53, *SE* = .15, Wald χ^2 = 11.9) predicted supporting Romney versus Obama, *ps* ≤ .001.

The remaining analyses involved national comparisons. First, I regressed the national comparison variables on agentic and communal intergroup goals. Table 5 (upper rows) shows that stronger communal goals predicted less favorable views of the United States relative to other countries; specifically, stronger communal goals predicted more pity for the United States, less perceived superiority, happiness, and pride in the United States, and more admiration and less contempt for the other country.

Second, I tested for Goals × Perceived similarity interactions (while controlling for those variables' linear effects). Table 5 (middle) shows the results. The Communal goals × Similarity interaction predicted pity and sadness, while the Agentic goals × Similarity interaction predicted contempt.

Simple slopes analyses showed that less similarity predicted more pity for the United States among communal (1 *SD* above the mean) but not uncommunal (1 *SD* below the mean) participants (*bs* = -0.30 vs. -0.03, *SEs* = .08); the tendency for less similarity to predict more sadness was stronger among communal than uncommunal participants (*bs* = -0.57 vs. -0.20, *SEs* = .07 and .08); and less similarity predicted more contempt for the other country among agentic but not unagentic participants (*bs* = -0.25 and 0.05, *SEs* = .08).

Third, I tested for Goals × Perceived superiority interactions. Table 5 (bottom) shows the results. The Communal goals × Superiority interaction predicted admiration, while the Agentic goals × Superiority interaction predicted contempt. Plotting simple slopes showed that countries perceived as superior to the United States elicited more admiration from communal than uncommunal participants (*bs* = -0.65 and -0.42, *SEs* = .07), while countries perceived as inferior to the United States elicited contempt from agentic but not unagentic participants (*bs* = 0.15 and -0.12, *SEs* = .08 and .09).

To summarize, intergroup goals predicted the nature and impact of comparisons among countries. Greater communal goals predicted feeling less happy and superior, less pride in and more pity toward America, and less contempt and more admiration toward the other country. Perceiving America as

different tended to evoke feelings of sadness and pity for America among people who valued communion but to evoke feelings of contempt for the other country among people who valued agency. Perceiving America as superior was most likely to evoke contempt for other countries among people who valued agency; perceiving America as inferior was most likely to evoke admiration for other countries among people who valued communion. Thus, the results generally supported the prediction that people with more agentic and less communal international goals would be the most prone to make and relish comparisons that frame their country as positively differentiated from other countries.

Finally, I repeated the preceding analyses on the *interpersonal* goals assessed by the CSIV. Only four coefficients were significant. Agentic and communal values were positively related to admiring the other country, both $bs = 0.12$, $SEs = .06$, $ps < .05$. The interaction of communal values and perceived similarity predicted sadness; the tendency for less similarity to predict more sadness was stronger among communal than uncommunal participants ($bs = -0.53$ vs. -0.26 , $SEs = .07$ and $.08$). Finally, the interaction of agentic values and perceived superiority predicted sadness; superiority reduced sadness more among agentic than unagentic participants, $bs = -0.42$ and -0.15 , $SEs = .08$. In sum, the CSIV did predict national comparisons (albeit not as well as the CSIG did): Valuing interpersonal agency or communion predicted admiring other countries, valuing agency and perceiving America as superior predicted feeling less sad, and valuing communion and perceiving America as similar to the other country also predicted feeling less sad. The latter result parallels those for international goals above and from Locke's (2003) study of interpersonal social comparisons: In each case, perceiving similarities was most positively related to well-being in people who valued communion.

Study 3

McFarland, Webb, and Brown (2012) found that identifying with all humanity (more than with more restrictive groups) was associated with global humanitarian concern and awareness, and with valuing ingroup and outgroup members equally. Therefore, I hypothesized that individuals with strong communal and weak agentic intergroup goals would identify most strongly with all humanity, whereas (in accord with results of Studies 1 and 2) individuals with strong agentic and weak communal goals would identify most strongly with their compatriots. To test these hypotheses, I administered the CSIG and a slightly modified version of McFarland et al.'s *Identification With All of Humanity Scale* (IWAHS). For comparison purposes, I also administered the CSIV.

Method

U.S. citizens (129 females, 78 males; M age = 34.7 years, $SD = 13.0$) accessed and completed an online questionnaire through

MTurk in exchange for US\$0.30. The sample only includes respondents who completed the questionnaire and correctly answered two validity-check questions. Their ethnicities were 79.6% Caucasian/White, 5.3% African/Black, 5.3% Asian, 2.9% Latino, and 8.8% Mixed or Other. The questionnaire consisted of (in order) the CSIG, IWAHS, and CSIV.

The IWAHS contains three 9-item scales measuring identification with community, fellow citizens, and the whole world. Responses are made on 5-point scales. Scale points vary slightly across items; for example, the scale for "How close do you feel to each of the following groups?" ranges from *not at all* to *very*, while the scale for "How often do you use the word 'we' to refer to the following groups of people?" ranges from *almost never* to *very often*. In the current study, I modified the IWAHS by changing the "my community" items to refer instead to "my friends" (which corresponds to the interpersonal focus of the CSIV). In the current sample, the alphas for the friends, country, and world scales were, respectively, .92, .90, and .88.

For the CSIG and CSIV, octant alphas ranged from .62 to .86; the reliabilities of the agentic and communal dimensions were .79 and .90 for the CSIG and .65 and .88 for the CSIV. The similarities and differences between the CSIV and CSIG were identical to those reported in Study 3: The measures were moderately correlated ($rs = .36$ and $.23$ for the communal and agentic dimensions); on both measures, people endorsed more communal than uncommunal (and, to a lesser extent, more agentic than unagentic) goals; and CSIG scores exceeded CSIV scores, especially in the "PA" and "BC" octants.

Results and Discussion

I regressed each IWAHS scale on agentic and communal goals assessed by either the CSIG or CSIV; following McFarland et al.'s (2012) recommendations, I controlled for the variance each IWAHS scale shared with the other IWAHS scales. Table 6 shows the results. As expected, communal intergroup goals predicted identifying with all humanity rather than with other Americans; conversely, agentic intergroup goals predicted identifying with other Americans rather than with all humanity. Communal interpersonal goals predicted identifying with friends and all humanity but not with other Americans. Unexpectedly, agentic interpersonal and intergroup goals showed weak positive associations with identification with friends.

Figure 5 plots the regression coefficients' t -values on the goals circumplex, and highlights that identifying with compatriots was associated most strongly with agentic intergroup goals, identifying with all humanity was associated most strongly with communal intergroup goals, and identifying with friends was associated most strongly with communal interpersonal goals. Interpersonal goals were at best weak predictors of identifying with humanity or compatriots, while intergroup goals were at best weak predictors of identifying with friends.

Table 6. Regression of Identification With Friends, Americans, and Humanity on Agentic and Communal Goals (Study 3).

Identification Scale	Intergroup						Interpersonal					
	Communal			Agentic			Communal			Agentic		
	<i>b</i>	<i>SE</i>	<i>sr</i> ²	<i>b</i>	<i>SE</i>	<i>sr</i> ²	<i>b</i>	<i>SE</i>	<i>sr</i> ²	<i>b</i>	<i>SE</i>	<i>sr</i> ²
Friends	0.11	.07	.01	0.15*	.07	.02	0.34**	.07	.11	0.16*	.07	.03
Americans	-0.24**	.06	.05	0.40**	.06	.13	0.00	.07	.00	0.11	.07	.01
Humanity	0.39**	.07	.13	-0.19**	.07	.03	0.20*	.07	.04	-0.06	.07	.00

[†]*p* < .10. * *p* ≤ .05. ***p* ≤ .005.

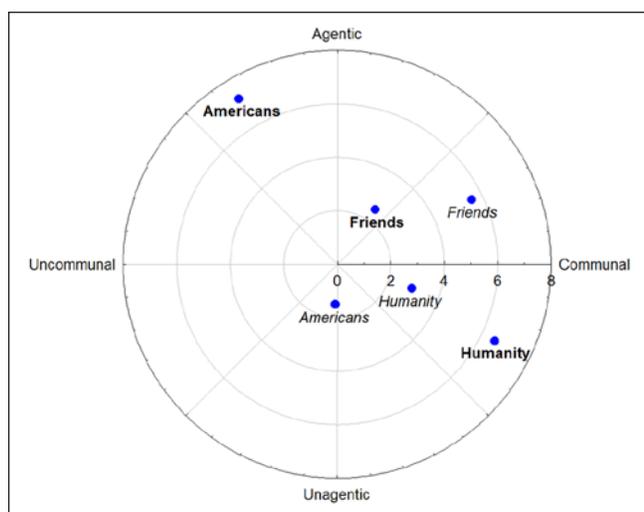


Figure 5. Results (*t*-values) from regression of identification with friends, other Americans, and all humanity on agentic and communal intergroup goals (in bold-face) and agentic and communal interpersonal goals (in italics), Study 3.

A recent experience-sampling study found similar correlates of communal values: Individuals who reported valuing communal relationships with others reported experiencing in everyday life more love toward specific close others (e.g., family members, best friends) and for humanity as a whole (Le, Impett, Kogan, Webster, & Cheng, 2013). However, that study did not assess communion with groups. The current study suggests that interpersonally communal persons may feel more connected to others, but that connection may be stronger toward either all humanity or specific individuals than toward groups they only belong to by accident (as is true for most citizens).

Study 4

Nations have many options for addressing disputes with other nations, including negotiation, acceptance, and aggression. To test whether intergroup goals would predict preferences for how to resolve disputes between nations, I asked participants to indicate which of the various tactics they

would use to resolve a conflict between their nation and another nation. I expected that people who emphasized communal (vs. uncommunal) goals would favor approaches that involve negotiation rather than threats and people who emphasized agentic (vs. unagentic) goals would favor approaches that involve being active and firm rather than passive or yielding.

Method

U.S. citizens (51 females, 42 males, 1 unknown; *M* age = 34.3 years, *SD* = 11.7) accessed and completed an online questionnaire through MTurk in exchange for US\$0.15. The sample only includes respondents who completed the questionnaire and correctly answered two validity-check questions. Their ethnicities were 71.0% Caucasian/White, 8.6% African/Black, 6.5% Asian, 2.2% Latino, and 11.9% Mixed or Other.

First, participants completed the CSIG. Octant alphas ranged from .63 to .83; the reliabilities of the agentic and communal dimensions were .77 and .84. Next, participants were randomly assigned to read one of two scenarios involving a dispute between two nations. The conflict scenarios (and conflict resolution tactics below) were adapted from Derlega, Cukur, Kuang, and Forsyth (2002). One scenario was,

... Nation B borrowed a moderate amount of money from the nation that you live in. Nation B has owed your nation this money for quite some time. Although your nation had an agreement with nation B to pay the money back on a certain date, the date has passed and nation B has not offered to repay the money.

The other scenario was,

... The nation that you live in depends on a river for some of its water. Nation B that is located upriver also depends on this river for some of its water. Your nation has an agreement with nation B that each nation would only draw a specific amount of water from the river. Recently, however, nation B has been taking more than its share of water from the river and the river has gone dry, resulting in your group not getting your share of water from the river.

Table 7. Regression of Conflict Resolution Tactics on Communal and Agentic Intergroup Goals (Studies 4 and 5).

	Communal			Agentic		
	<i>b</i>	<i>SE</i>	<i>sr</i> ²	<i>b</i>	<i>SE</i>	<i>sr</i> ²
Study 4						
Tactics						
Threaten-aggress	-0.43***	.10	.18	0.02	.10	.00
Threaten-publicize	0.05	.11	.00	0.20 [†]	.11	.04
Negotiate-compromise	0.41***	.10	.16	0.14	.10	.02
Negotiate-mediate	0.16	.11	.02	0.09	.11	.01
Accept-mend	0.07	.10	.01	-0.19 [†]	.10	.03
Accept-avoid	-0.09	.10	.01	-0.23*	.10	.05
Study 5						
Tactics						
Threaten-legal	-0.13 [†]	.08	.02	0.05	.08	.00
Threaten-publicize	-0.32**	.07	.10	-0.14*	.07	.02
Negotiate-compromise	0.28**	.07	.08	0.13 [†]	.07	.02
Negotiate-mediate	0.20*	.07	.04	0.08	.07	.01
Accept-mend	0.16*	.07	.03	0.07	.07	.01
Accept-avoid	-0.09	.07	.01	-0.16*	.07	.03
Organizational self-investment	0.31**	.07	.09	0.15*	.07	.02

[†]*p* < .10. **p* ≤ .05. ***p* ≤ .005.

After reading the scenario, participants read the following six conflict resolution tactics, each starting with “you would have your nation . . .”: “. . . threaten to take aggressive action against the other nation” (*Threaten-Aggress*); “. . . threaten to publicize the other nation’s action thus damage their image and reputation” (*Threaten-Publicize*); “. . . negotiate with the other nation hoping that you both would compromise to reach a solution acceptable to both nations” (*Negotiate-Compromise*); “. . . negotiate with the other nation using a neutral country as a ‘third party’ mediator and try to reach a settlement by following the mediator’s guidance” (*Negotiate-Mediate*); “. . . accept the situation as is and attempt to mend relations” (*Accept-Mend*); “. . . accept the situation as is and avoid further contact with the other nation” (*Accept-Avoid*). The participants ranked “how likely you would be to use each tactic to resolve this dispute.”

Results and Discussion

Participants’ rankings were coded from 1 (least likely) to 6 (most likely). Table 7 shows the results of regressing each tactic on agentic and communal intergroup goals. (Because scenario did not moderate the effects of intergroup goals, I combined participants’ responses to the two scenarios.) Communal goals strongly predicted endorsing *negotiate-compromise* and not endorsing *threaten-aggress*. Agentic goals predicted endorsing *threaten-publicize* and not endorsing *accept-mend* and *accept-avoid*. Figure 6 projects the regression coefficients’ *t*-values onto the circumplex. Negotiating was located in the communal region; threatening public exposure in the agentic region; threatening aggression

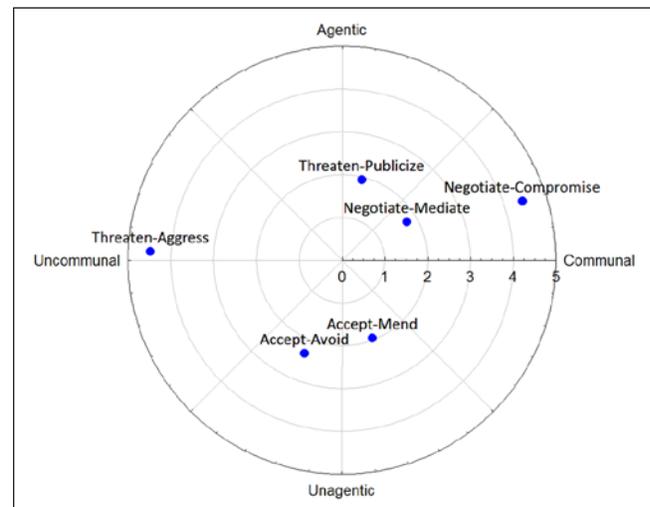


Figure 6. Results (*t*-values) from regression of conflict resolution tactics on agentic and communal goals (Study 4).

in the uncommunal region; and accepting the situation in the unagentic region. Thus, as expected, the conflict resolutions tactics had distinct and theoretically sensible projections on the circumplex defined by agentic and communal intergroup goals.

Study 5

The preceding studies applied the CSIG to interactions between nations. However, if the agentic and communal dimensions underlie how people conceptualize any

intergroup interaction, then the CSIG should be applicable to other intergroup contexts. In Study 5, I tested whether the CSIG—modified to ask about interactions between *organizations*—would predict organizational investment and tactics for resolving conflicts between organizations. Following Study 4, I predicted that communal goals would predict negotiation tactics, unagentic goals would predict acceptance tactics, and agentic and uncommunal goals would predict threat tactics.

Method

Employees (99 females, 77 males, 1 unknown; M age = 32.3 years, SD = 11.8) at a company or organization in the United States with at least 5 employees (median $n_{\text{employees}} = 120$) accessed and completed an online questionnaire through MTurk in exchange for US\$0.20. The sample included only respondents who completed the questionnaire and correctly answered two validity-check questions. Their ethnicities were 70.5% White/Caucasian, 11.9% Black, 9.1% Asian, 2.8% Latino, and 5.7% Mixed or Other. The most common occupational categories were “retail/wholesale trade” (18.1%), “professional/financial/business services” (14.1%), and “educational services” (13.6%).

First, participants completed the CSIG. The instructions were modified to ask about “When members or representatives of my company/organization interact with other companies or organizations.” Octant alphas ranged from .65 to .76; the reliabilities of the agentic and communal dimensions were .69 and .85.

Second, participants completed the self-investment and narcissism items from Study 1, except the items referred to company/organization instead of country (e.g., “I feel committed to my company/organization” and “It really makes me angry when others criticize my company/organization”). In the current sample, Cronbach’s alphas for organizational self-investment and narcissism were, respectively, .93 and .50. Because organizational narcissism showed mediocre reliability and was unrelated to CSIG agency and communion, I will not discuss it further (except to suggest that alternative items may be needed to assess collective narcissism in organizational contexts).

Third, participants responded to conflict scenarios analogous to those in Study 4. One scenario was,

... Organization B has offices next to your organization in the same facility. When organization B first moved in, your organization agreed to let them temporarily use some of your infrastructure (e.g., equipment, meeting rooms, support staff). Although organization B agreed to pay your organization for the use of those resources by a specific date, that date has passed and—despite several reminders from your organization—organization B has still not offered to pay the money they owe.

The other scenario was,

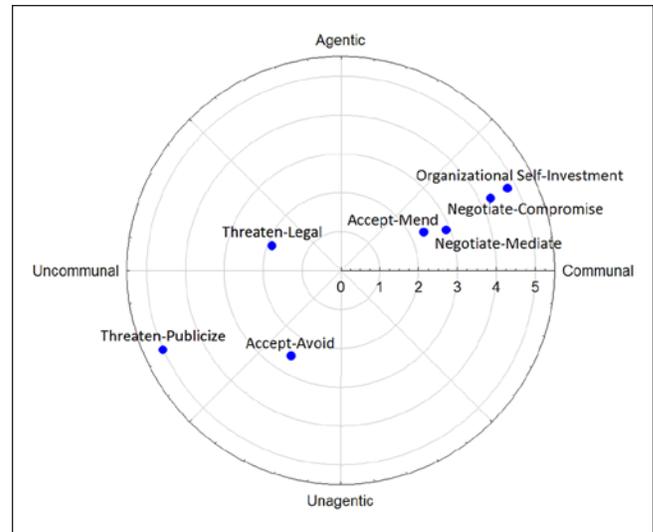


Figure 7. Results (t -values) from regression of organizational self-investment and conflict resolution tactics on agentic and communal goals (Study 5).

... Your organization and organization B share the same facility, and have an agreement regarding the use of the shared resources, including parking spaces and a large meeting room. Recently, however, despite complaints from your employees, organization B has been repeatedly using more than its share of parking spaces and conference room time. This has resulted in your group having to reschedule meetings and park in inconvenient locations.

Participants then ranked the likelihood of using each of the six conflict resolution tactics described in Study 4, except nation was replaced with organization and the Threaten-Aggress tactic was changed to Threaten-Legal (“You would have your organization threaten to take legal action against the other organization”).

Results and Discussion

Table 7 shows the results of regressing organizational self-investment and conflict resolution tactics on agentic and communal intergroup goals. Stronger investment in the organization was associated with stronger communal and agentic goals. To resolve conflicts, people with stronger communal goals were particularly apt to eschew threats and favor negotiating or accepting the situation and mending relations. People with stronger agentic goals were particularly apt to eschew accepting and avoiding but were more apt to negotiate than threaten to publicize the other organization’s misdeeds. Thus, organizational investment and conflict resolutions tactics generally showed sensible relations with intergroup goals.

Figure 7 plots the regression coefficients’ t -values on the goals circumplex and highlights similarities and differences

between the current findings involving interorganizational relations and the previous findings involving international relations. Whereas patriotic self-investment was linked to agentic but not communal goals (see Figure 3), organizational self-investment was linked to agentic and communal goals. Thus, whereas patriotic self-investment predicted wanting *unilateral* respect for one's country, organizational self-investment predicted wanting *mutual* respect between organizations, perhaps because individuals more regularly interact with individuals from other organizations or because they experience their identity as a citizen as more immutable than their identity as an employee. As in Study 4, communal goals predicted negotiating and unagentic goals predicted accepting the situation and avoiding further contact; however, in contrast to Study 4, *accept-mend* shifted from the unagentic to the communal region, while *threaten-publicize* shifted from the agentic to the uncommunal region (perhaps because uncommunal people, lacking the option to threaten aggression, resorted to threats of public shaming instead).

Study 6

Halevy and colleagues (Halevy, Chou, & Murnighan, 2012; Halevy & Katz, 2013) have investigated how parties engaged in a conflict or negotiation perceive and evaluate the outcomes resulting from their each taking cooperative or competitive actions. If the two parties ("us" and "them") engage in what game theorists call a one-shot game, then there are four possible outcomes: We and they make cooperative moves (*Collaborating*); we make a cooperative move while they make a competitive move (*Yielding*); they make a cooperative move while we make a competitive move (*Dominating*); and we and they make competitive moves (*Clashing*). Almost everyone prefers (and assumes the other party would also prefer) to either *Collaborate* or *Dominate* than to either *Clash* or *Yield*. However, individuals differ in their preferences for *Collaborating* versus *Dominating* and in their preferences for *Clashing* versus *Yielding*.

These differences in preferences mean that different individuals can experience the same conflict as instantiating one of four different mixed-motive games or "conflict templates": Prisoner's Dilemma, Chicken, Assurance, and Maximizing Difference (Halevy & Katz, 2013). Maximizing Difference involves construing *Collaborating* as the best outcome and *Clashing* as the worst. Assurance involves construing *Collaborating* as the best outcome and *Yielding* as the worst. Prisoner's Dilemma involves construing *Dominating* as the best outcome and *Yielding* as the worst. Chicken involves construing *Dominating* as the best outcome and *Clashing* as the worst. The best way to maximize one's outcomes depends on what game is being played. If the game is Assurance or Chicken, then the best strategy is, respectively, to match or to do the opposite of the other party's expected move. If the game is Maximizing Difference or Prisoner's Dilemma, then the best strategy is, respectively, to always

cooperate or to always compete. Thus, the goals of the two parties are the most compatible in Maximizing Difference games and the most incompatible in Prisoner's Dilemma games.

I hypothesized that intergroup goals would predict individuals' preferred outcomes and conflict templates. People with relatively agentic and uncommunal goals (to be authoritative, tough, and self-protective) should find beating (*dominating*) other groups particularly reinforcing and being dominated by other groups (*yielding*) particularly punishing; that is, they should prefer competing to cooperating and tend to perceive conflicts as Prisoner's Dilemmas games. Conversely, people with relatively communal and unagentic goals (to be understanding, cooperative, and conflict-avoidant) should find mutual cooperation (*collaborating*) particularly reinforcing and mutual competition (*clashing*) particularly punishing; that is, they should prefer cooperating to competing and tend to perceive conflicts as Maximizing Difference games. I tested these hypotheses by assessing individuals' perceptions of a conflict between the two dominant political parties in the United States—the (more liberal) Democratic Party and (more conservative) Republican Party.

Method

U.S. citizens (129 females, 239 males; M age = 30.1 years, $SD = 10.2$) accessed and completed an online questionnaire through MTurk in exchange for US\$0.33. The sample only includes respondents who completed the questionnaire and correctly answered two validity-check questions. Their ethnicities were 75.0% Caucasian/White, 4.1% African/Black, 11.7% Asian, 4.9% Latino, and 4.3% Mixed or Other.

First, participants selected one of the following three options: (a) I am a registered Democrat or generally support the positions taken by the Democratic Party; (b) I am a registered Republican or generally support the positions taken by the Republican Party; (c) I do not favor or prefer either one of the two major parties over the other. The current MTurk sample expressed less support for the Republican Party than is typically found in representative samples of the U.S. population; specifically, 159 participants supported the Democratic Party, 53 supported the Republican Party, and 156 favored neither of the two major parties. Participants who supported neither party were directed to a different questionnaire from the other participants and will not be discussed further.

The participants who supported either the Democrats or Republicans ($n = 212$) then read the following overview of a political conflict occurring at the time the data was collected (September 18-19, 2013):

The United States Congress is once again experiencing "gridlock." The position of many Democrats is that in order for the federal government to meet its obligations, we should increase the limit on how much money the government can borrow, raise taxes on wealthier individuals, and make small

Table 8. Percentage of Participants Endorsing Each Conflict Template (Combination of the Best and the Worst Outcomes), Study 6.

Best outcome is . . .	Worst outcome is . . .		Marginal totals (for the best outcome)
	Clashing (we act competitively, they act competitively)	Yielding (we act cooperatively, they act cooperatively)	
Dominating (we act competitively, they act cooperatively)	Chicken 08.5%	Prisoner's Dilemma 21.7%	30.2%
Collaborating (we act cooperatively, they act cooperatively)	Maximizing Difference 43.4%	Assurance 26.4%	69.8%
<i>Marginal totals (for worst outcome)</i>	51.9%	48.1%	

Note. The name of each conflict template appears in bold.

reductions to some benefit programs such as Medicare and Social Security. The position of many Republicans is that there should be no tax increases, and also no increases in the debt ceiling unless benefit programs (such as Medicare and Social Security) are cut significantly and the Affordable Care Act (Obamacare) is either delayed or denied funding. Failure to reach a budget agreement by the end of September may mean that the federal government cannot meet various financial obligations, potentially harming both individuals who rely on government jobs and benefits and also the nation's economic recovery.

Next, participants indicated whether *Cooperating* or *Dominating* (presented in random order) would be the best resolution of this situation. For all participants, *Cooperating* was described as "Both parties make concessions and compromises in order to get a budget agreement passed." The description of *Dominating* varied according to participants' political preferences. For Republican Party supporters, it was, "The Democrats end up making concessions, while the Republicans successfully get their agenda passed without making any concessions." For Democratic Party supporters, it was, "The Republicans end up making concessions, while the Democrats successfully get their agenda passed without making any concessions."

Next, participants indicated whether *Clashing* or *Yielding* (presented in random order) would be the worst resolution of this situation. For all participants *Clashing* was described as, "Neither Republicans nor Democrats make concessions, and congressional 'gridlock' continues." The description of *Yielding* depended on participants' political preferences. For Republican Party supporters, it was, "The Republicans end up making concessions, while the Democrats successfully get their agenda passed without making any concessions." For Democratic Party supporters, it was, "The Democrats end up making concessions, while the Republicans successfully get their agenda passed without making any concessions."

Finally, participants completed the CSIG. The slightly modified instructions asked: "When groups or representatives of groups that I belong to or that I support interact with other groups, how important is it that . . ." Octant alphas

ranged from .65 to .87; the reliabilities of the agentic and communal dimensions were .77 and .83, respectively.

Results and Discussion

Party affiliation did not moderate the results and was omitted from the following analyses. Table 8 shows the percentage of participants endorsing each combination of the best and the worst outcomes. The marginal totals showed that participants typically preferred *Collaborating* to *Dominating* ($\chi^2 = 33.3$) but no differences in preferences for *Clashing* versus *Yielding*. Preferring *Dominating* to *Collaborating* correlated with preferring *Clashing* to *Yielding* ($\chi^2 = 20.7$); that is, most participants perceived the conflict as either a Prisoner's Dilemma game (i.e., they always preferred the competitive option) or a Maximizing Difference game (i.e., they always preferred the cooperative option).

Table 9 shows the results of logistic regression on agentic and communal intergroup goals of the "best outcome," the "worst outcome," and endorsement of each conflict template (combination of the best and the worst outcomes). As hypothesized, stronger communal goals or weaker agentic goals were associated with (a) perceiving *Collaborating* as better than *Dominating*, (b) perceiving *Clashing* as worse than *Yielding*, and (c) perceiving the conflict as a Maximizing Difference game and not as a Prisoner's Dilemma game. Intergroup goals did not predict perceptions of Assurance and Chicken games; however, because only 18 participants perceived the conflict as a Chicken game, the Chicken results cannot be considered reliable.

Figure 8 projects the regression coefficients' *t*-values onto the goals circumplex. Endorsing relatively agentic and uncommunal goals (i.e., valuing toughness) was associated with perceiving *Yielding* as worse than *Clashing*, *Collaborating* as worse than *Dominating*, and the overall situation as a Prisoner's Dilemma game. Conversely, endorsing relatively communal and unagentic goals (i.e., valuing cooperation) was associated with perceiving *Yielding* as better than *Clashing*, *Collaborating* as better than *Dominating*, and the overall situation as a Maximizing Difference game. Thus, the different conflict templates had distinct and

Table 9. Logistic Regression of Judgments of the Best and the Worst Outcomes on Communal and Agentic Intergroup Goals (Study 6).

	Communal			Agentic		
	<i>b</i>	<i>SE</i>	<i>sr</i> ²	<i>b</i>	<i>SE</i>	<i>sr</i> ²
Best outcome	0.58**	.17	.06	-0.37*	.17	.02
Worst outcome	-0.32*	.15	.02	0.36*	.15	.03
Games (Best–Worst combinations)						
Chicken	-0.34	.25	.01	-0.12	.26	.00
Prisoner's Dilemma	-0.54**	.19	.04	0.50*	.18	.04
Maximizing Difference	0.45**	.15	.14	-0.34*	.16	.02
Assurance	0.05	.16	.00	0.01	.16	.00

Note. $n = 212$. Best Outcome dummy-coded: dominate = 0, collaborate = 1. Worst Outcome dummy-coded: clash = 0, yield = 1. Significance tests were based on Wald chi-square values. For consistency, effect sizes reported as squared part correlations.

[†] $p < .10$. * $p \leq .05$. ** $p \leq .005$.

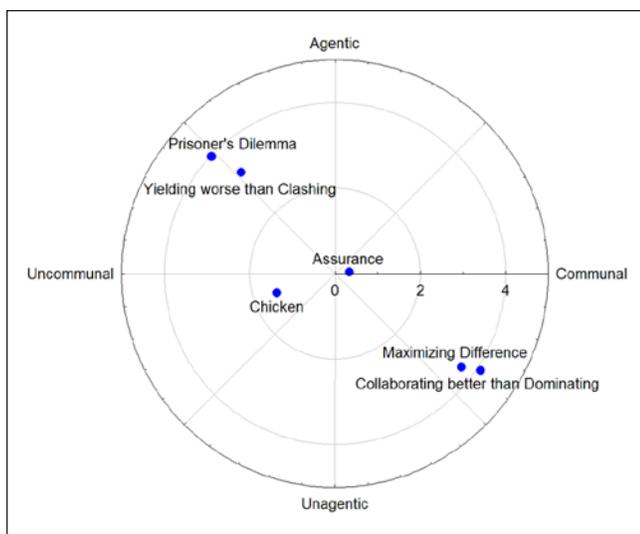


Figure 8. Results (*t*-values) from regression of games on agentic and communal goals (Study 6).

theoretically predicted locations within the circumplex defined by agentic and communal intergroup goals.

General Discussion

Summary of Findings

A series of six studies provided support for the premise that the interpersonal circumplex can provide a useful model for elucidating how people conceptualize interactions not only between individuals but also between groups and group representatives. People generally preferred communal to uncommunal intergroup goals and (to a lesser degree) agentic to unagentic intergroup goals; but there were also reliable differences among individuals in their intergroup goals. While the underlying dimensions of agency and communion define a continuous space of intergroup goals, the findings summarized below suggest that each region of that space is

associated with a coherent syndrome of thoughts, feelings, and preferences.

People with relatively uncommunal goals were protective of their own group. When comparing countries, they tended to express pride in their own country and contempt for other countries. They were most likely to propose using powerful threats to address disputes with other groups. Conversely, people with relatively strong communal goals were, if anything, more generous toward other countries than toward their own. When comparing countries, they were especially likely to express admiration for other countries and feel sadness and pity for their own country when it differed from other countries. When proposing how to resolve intergroup conflicts, they were most likely to propose negotiation and compromise.

People with relatively strong agentic goals tended to be proudly and patriotically identified with their country, contemptuous of countries unlike or inferior to their own, and inclined to resolve conflicts between their country and a neighboring country by threatening to damage the other country's reputation. Conversely, people with weak agentic goals were more inclined to settle conflicts by simply accepting the current situation and trying to avoid future discord.

People with relatively strong uncommunal and unagentic goals tended to experience the world as dangerous and competitive. Perhaps to protect their ingroup from these perceived threats, they were prone to sanction authoritarian actions and social inequality. Conversely, people with relatively strong communal and agentic goals felt the least vulnerable and anxious, and wanted their nation to be an assured, engaged, and respected presence on the international stage.

People with relatively strong communal-and-unagentic international goals tended to identify more strongly with all humanity than with their fellow citizens and support the more liberal candidate in the U.S. presidential election; conversely, people with relatively agentic-and-uncommunal international goals tended to identify more strongly with compatriots than with all humanity, support the more conservative U.S. presidential candidate, and be the most sensitive and reactive to their country not receiving its due respect.

Finally, in the context of political disputes, independent of the other party's actions, people with relatively communal-and-unagentic goals favored cooperation over competition, whereas people with relatively agentic-and-uncommunal goals favored competition over cooperation.

Interpersonal Versus Intergroup Goals

Participants in Studies 2 and 3 completed measures of interpersonal goals (the CSIV) and intergroup goals (the CSIG). While the CSIV was a stronger predictor of identifying with friends, the CSIG was a stronger predictor of identifying with compatriots or all humanity as well as of how people compared their nation with other nations. Thus, as expected, the CSIV and CSIG appear the best suited to understanding relations between, respectively, individuals and groups.

Another way the CSIV and CSIG differed was that people placed more importance on their leaders being tough and authoritative with other countries than on themselves being tough and authoritative with other individuals. This result aligns with numerous others showing that people tend to be more competitive in intergroup interactions than one-on-one interactions—a phenomenon labeled the *interindividual-intergroup discontinuity effect* (Wildschut, Pinter, Vevea, Insko, & Schopler, 2003). There may be multiple explanations for the discontinuity effect. One is that people expect intergroup relations to be less friendly and cooperative than interpersonal relations and, therefore, preemptively adopt a tough, competitive stance when dealing with outgroups (Insko & Schopler, 1998).

A complementary explanation of the discontinuity effect is that proving oneself to be a good ingroup member entails being cooperative with other group members while being indifferent or (if the ingroup and outgroup are presumed to have competing interests) hostile toward the outgroup (Cohen, Montoya, & Insko, 2006). In accord with this explanation, studies have found that being guilt-prone and knowing that other members are monitoring your choices—which presumably magnifies the influence of normative standards—magnifies the discontinuity effect (e.g., Pinter et al., 2007). Such results suggest that if people (and especially guilt-prone people) believed that other ingroup members might learn their CSIV and CSIG responses, then they may be more apt to endorse communal goals on the CSIV and endorse agentic and uncommunal goals on the CSIG than was true in the current studies in which participants' responses were private and anonymous.

In summary, while people may use the same basic dimensions—agency and communion—to conceptualize interpersonal goals and intergroup goals, how they want their group representatives to interact with other groups often differs somewhat from how they want themselves to interact with other individuals. Of course, this was expected: Otherwise the CSIV could assess interpersonal and intergroup goals, making the CSIG superfluous.

Future Directions

The current studies showed how—by slightly adjusting the instructions—the CSIG could be used to assess goals for interactions between nations (in Studies 1-4), organizations (in Study 5), or groups one belongs to more generally (in Study 6). However, people can identify with many other types of groups, including family and friendship groups, ethnic and religious groups, and neighborhoods and communities. Further research is needed to clarify to what extent the interpersonal circumplex is a useful framework—and the CSIG is a useful instrument—for understanding how people conceptualize and approach interactions among these myriads of groups.

Another important direction is determining to what extent findings from the circumplex literature on interpersonal interactions generalize to intergroup interactions. For example, the interpersonal circumplex literature suggests that having interpersonal dispositions that clearly point in only one direction (e.g., to be communal rather than uncommunal) may facilitate decision making but impede interpersonal flexibility (Locke & Adamic, 2012). Are people with clear, unambiguous intergroup goals also prone to make quick, confident, but inflexible decisions about how to handle intergroup interactions?

As another example, one of the most studied issues in the interpersonal circumplex literature is complementarity—responding to one interpersonal act with another act that is similar in communion but opposite in agency (Sadler, Ethier, & Woody, 2011). Extending the circumplex tradition to intergroup interactions raises the question: In what contexts do people want or expect their group representatives to respond to other groups in a complementary fashion (e.g., responding to friendly assertion with friendly accommodation) or a non-complementary fashion? A related question is whether intergroup interactions (which can require within-group coordination) are generally less nimble than dyadic interactions and consequently more prone to uncomfortable deviations from complementarity.

Conclusion

Similar to other circumplex inventories (Locke, 2011), the CSIG is simple yet comprehensive: It quickly assesses each region of the space of intergroup goals defined by agency and communion, but its multiple scales can be aggregated into overall dimension scores or a single point within the circumplex space. The CSIG was not designed to replace other attitude measures (such as the SDO, RWA, and IWAH scales) that provide targeted assessments of specific constructs. Instead, as I hope that the current studies demonstrate, the circumplex model and the CSIG based on that model—by efficiently sampling a broad spectrum of goals—provide a comprehensive framework for integrating findings spanning diverse instruments and constructs, thereby facilitating

cumulative progress and an integrative understanding of how people conceptualize relationships among groups such as organizations and nations.

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References

- Abele, A. E., Cuddy, A. J. C., Judd, C. M., & Yzerbyt, V. Y. (2008). Fundamental dimensions of social judgment. *European Journal of Social Psychology, 38*, 1063-1065.
- Alden, L. E., Wiggins, J. S., & Pincus, A. L. (1990). Construction of circumplex scales for the inventory of interpersonal problems. *Journal of Personality Assessment, 55*, 521-536.
- Altemeyer, B. (1996). *The authoritarian specter*. Cambridge, MA: Harvard University Press.
- Archer, J. (2006). Testosterone and human aggression: An evaluation of the challenge hypothesis. *Neuroscience & Biobehavioral Reviews, 30*, 319-345.
- Atkinson, J. W. (1964). *An introduction to motivation*. Princeton, NJ: Van Nostrand.
- Bartz, J. A., & Hollander, E. (2006). The neuroscience of affiliation: Forging links between basic and clinical research on neuropeptides and social behavior. *Hormones and Behavior, 50*, 518-528.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*, 475-482.
- Bugental, D. B. (2000). Acquisition of the algorithms of social life: A domain-based approach. *Psychological Bulletin, 26*, 187-209.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6*, 3-5.
- Cohen, T. R., Montoya, R. M., & Insko, C. A. (2006). Group morality and intergroup relations: Cross-cultural and experimental evidence. *Personality and Social Psychology Bulletin, 32*, 1559-1572.
- Cuddy, A. J., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 40, pp. 62-149). San Diego, CA: Academic.
- Derlega, V. J., Cukur, C. S., Kuang, J. C., & Forsyth, D. R. (2002). Interdependent construal of self and the endorsement of conflict resolution strategies in interpersonal, intergroup, and international disputes. *Journal of Cross-Cultural Psychology, 33*, 610-625.
- Fournier, M., Moskowitz, D. S., & Zuroff, D. (2011). Origins and applications of the interpersonal circumplex. In L. M. Horowitz & S. Strack (Eds.), *Handbook of interpersonal psychology: Theory, research, assessment and therapeutic interventions* (pp. 57-74). Hoboken, NJ: Wiley.
- Golec de Zavala, A., Cichocka, A., Eidelson, R., & Jayawickreme, N. (2009). Collective narcissism and its social consequences. *Journal of Personality and Social Psychology, 97*, 1074-1096.
- Gurtman, M. B. (2009). Exploring personality with the interpersonal circumplex. *Social and Personality Psychology Compass, 3/4*, 601-619.
- Halevy, N., Chou, E. Y., & Murnighan, J. K. (2012). Mind games: The mental representation of conflict. *Journal of Personality and Social Psychology, 102*, 132-148.
- Halevy, N., & Katz, J. J. (2013). Conflict templates: Thinking through interdependence. *Current Directions in Psychological Science, 22*, 217-224.
- Hogan, R. (1982). A socioanalytic theory of personality. In M. Page (Ed.), *Nebraska symposium on motivation* (Vol. 30, pp. 55-89). Lincoln: University of Nebraska Press.
- Hopwood, C. J., Ansell, E. B., Pincus, A. L., Wright, A. G. C., Lukowitsky, M. R., & Roche, M. J. (2011). The circumplex structure of interpersonal sensitivities. *Journal of Personality, 79*, 707-740.
- Insko, C. A., & Schopler, J. (1998). Differential distrust of groups and individuals. In C. Sedikides, J. Schopler, & C. A. Insko (Eds.), *Intergroup cognition and intergroup behavior* (pp. 75-107). Mahwah, NJ: Lawrence Erlbaum.
- Lalonde, R. N. (2002). Testing the social identity-intergroup differentiation hypothesis: We're not American eh! *British Journal of Social Psychology, 41*, 611-630.
- Le, B. M., Impett, E. A., Kogan, A., Webster, G. D., & Cheng, C. (2013). The personal and interpersonal rewards of communal orientation. *Journal of Social and Personal Relationships, 30*, 694-710.
- Leach, C. W., Zomeran, M. V., Zebel, S., Vliek, M. L., Ouerker, J. W., & Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology, 95*, 144-165.
- Leary, T. (1957). *Interpersonal diagnosis of personality*. New York, NY: Ronald Press.
- Lippa, R. (2001). On deconstructing and reconstructing masculinity-femininity. *Journal of Research in Personality, 35*, 168-207.
- Locke, K. D. (2000). Circumplex scales of interpersonal values: Reliability, validity, and applicability to interpersonal problems and personality disorders. *Journal of Personality Assessment, 75*, 249-267.
- Locke, K. D. (2003). Status and solidarity in social comparison: Agentic and communal values and vertical and horizontal directions. *Journal of Personality and Social Psychology, 84*, 619-631.
- Locke, K. D. (2011). Circumplex measures of interpersonal constructs. In L. M. Horowitz & S. Strack (Eds.), *Handbook of interpersonal psychology* (pp. 313-324). Hoboken, NJ: Wiley.
- Locke, K. D. (in press). Agency and communion in social comparisons. In Z. Krizan & F. X. Gibbons (Eds.), *Communal functions of social comparison*. Cambridge, UK: Cambridge University Press.
- Locke, K. D., & Adamic, E. (2012). Interpersonal circumplex vector length and interpersonal decision making. *Personality and Individual Differences, 53*, 764-769.
- Locke, K. D., & Sadler, P. (2007). Self-efficacy, values, and complementarity in dyadic interactions: Integrating interpersonal and social-cognitive theory. *Personality and Social Psychology Bulletin, 33*, 94-109.

- Markey, P. M., & Markey, C. N. (2009). A brief assessment of the Interpersonal Circumplex: The IPIP-IPC. *Assessment, 16*, 352-361.
- McAdams, D. P., Hoffman, B. J., Mansfield, E. D., & Day, R. (1996). Themes of agency and communion in significant autobiographical scenes. *Journal of Personality, 64*, 339-377.
- McCrae, R. R., & Costa, P. T. (1989). The structure of interpersonal traits: Wiggins' circumplex and the five-factor model. *Journal of Personality and Social Psychology, 56*, 586-595.
- McFarland, S., Webb, M., & Brown, D. (2012). All humanity is my ingroup: A measure and studies of identification with all humanity. *Journal of Personality and Social Psychology, 103*, 830-853.
- Mischel, W. (1973). Toward a cognitive social learning reconceptualization of personality. *Psychological Review, 80*, 252-283.
- Nigbur, D., & Cinnirella, M. (2007). National identification, type and specificity of comparison and their effects on descriptions of national character. *European Journal of Social Psychology, 37*, 672-691.
- Nunnally, J., & Bernstein, I. (1994). *Psychometric theory*. New York, NY: McGraw-Hill.
- Paulhus, D. L., & John, O. P. (1998). Egoistic and moralistic biases in self-perception: The interplay of self-deceptive styles with basic traits and motives. *Journal of Personality, 66*, 1025-1060.
- Pinter, B., Insko, C. A., Wildschut, T., Kirchner, J. L., Montoya, R. M., & Wolf, S. T. (2007). Reduction of interindividual-intergroup discontinuity: The role of leader accountability and proneness to guilt. *Journal of Personality and Social Psychology, 93*, 250-265.
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741-763.
- Riketta, M. (2002). Intergroup comparisons within the context of nested self-categorisations: Effects of regional and national comparisons on the acceptance of the European Union. *Group Processes & Intergroup Relations, 5*, 119-131.
- Sadler, P., Ethier, N., & Woody, E. (2011). Interpersonal complementarity. In L. M. Horowitz & S. N. Strack (Eds.), *Handbook of interpersonal psychology: Theory, research, assessment, and therapeutic interventions* (pp. 123-142). New York, NY: Wiley.
- Tajfel, H., & Turner, J. (1986). The social identity theory of intergroup behavior. In S. Worchel (Ed.), *Psychology of intergroup relations* (pp. 7-24). Chicago, IL: Nelson Hall.
- Tracey, T. J. G. (1997). RANDALL: A Microsoft FORTRAN program for a randomization test of hypothesized order relations. *Educational and Psychological Measurement, 57*, 164-168.
- Tracey, T. J. G. (2000). Analysis of circumplex models. In H. E. A. Tinsley & S. D. Brown (Eds.), *Handbook of applied multivariate statistics and mathematical modeling* (pp. 641-664). San Diego, CA: Academic.
- Trapnell, P. D., & Paulhus, D. L. (2012). Agentic and communal values: Their scope and measurement. *Journal of Personality Assessment, 94*, 39-52.
- Wiggins, J. S. (1979). A psychological taxonomy of trait-descriptive terms: The interpersonal domain. *Journal of Personality and Social Psychology, 33*, 409-420.
- Wiggins, J. S. (2003). *Paradigms of personality assessment*. New York, NY: Guilford.
- Wiggins, J. S., Trapnell, P., & Phillips, N. (1988). Psychometric and geometric characteristics of the Revised Interpersonal Adjective Scales (IAS-R). *Multivariate Behavioral Research, 23*, 517-530.
- Wildschut, T., Pinter, B., Vevea, J. L., Insko, C. A., & Schopler, J. (2003). Beyond the group mind: A quantitative review of the interindividual-intergroup discontinuity effect. *Psychological Bulletin, 129*, 698-722.