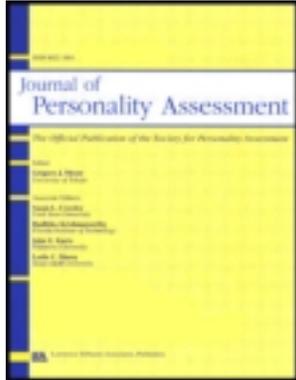


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Agentic and Communal Values: Their Scope and Measurement

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Agency is the meta-concept associated with self-advancement in social hierarchies; communion is the partner concept associated with maintenance of positive relationships. Despite the wealth of data documenting the conceptual utility of agency and communion (A & C) as superordinate metaconcepts, no direct measures of global A & C value dimensions are currently available. The first part of this article presents structural analyses of data from 4 diverse data sets (3 archival and 1 new): Each included a broad inventory of values or life goals. All 4 data sets revealed higher order A & C dimensions that were either apparent or implicit. The second part details the development of the ACV, a 24-item questionnaire measuring global A and C values, and documents its psychometric properties. Four studies support their joint construct validity by positioning the value measures within a nomological network of interpersonal traits, self-favorability biases, ideology dimensions, gender, socio-sexuality, and religious attitudes. Potential applications of the new instrument are discussed.

The goals of this article are to document the need for direct measures of agentic and communal values and to fulfill that need. After a brief introduction, the conceptual and empirical arguments are presented in two sections. The first part provides evidence that agency and communion value dimensions are already discernible in several available data sets—although not directly measured. The second part describes in detail the development and validation of our new bidimensional values measure.

THE ORGANIZATIONAL SWEEP OF AGENCY AND COMMUNION

The distinction between agency and communion (A & C) is among the most influential pairings of abstract psychological distinctions. Coined by Bakan (1966), those conceptual labels have provided an effective framework for distinguishing and organizing two broad aspects of human values, motives, traits, and behavior. During the same era as Bakan's conceptual work, psychometrically oriented psychologists had been developing the interpersonal circumplex model (e.g., Leary, 1957). Work on this model exploited a conceptually similar pair of axes but fleshed in the entire circle of constructs and applied them to practical issues in personality, clinical, and even I/O psychology.

A second generation of writers connected these two traditions, thereby setting the stage for the current prominence of A & C in contemporary individual differences research. Wiggins and colleagues developed practical sets of trait measures (Wiggins, 1979; Wiggins, Trapnell, & Phillips, 1988) as well as elaborating the theoretical parallels between A & C and the literatures on evolutionary theory, gender roles, language, and religion (Wiggins, 1991). Hogan (1982) framed his socioanalytic theory around A & C and captured the distinction felicitously in his labeling of the two primary human motives as “getting along” and “getting ahead.”

The successful application of A & C as a conceptual framework has accelerated in recent years. This framework has played a central role in recent work on narrative interpretation (McAdams, Hoffman, Mansfield, & Day, 1996), self-enhancement (Paulhus & John, 1998), sex roles (Lippa, 2001), behavior analysis (Gifford, 1991; Moskowitz & Zuroff, 2005), personality structure (Gurtman & Pincus, 2003; Tracey, 2000), cognitive complexity analysis (Woike, 1994), identity themes (McAdams, 1985; McGregor & Little, 1998), and self-presentation (Paulhus & Trapnell, 2008). Clinical applications include interpersonal problems (Alden, Wiggins, & Pincus, 1990) and interpersonal psychotherapy (Kiesler & Auerbach, 2003). National stereotypes have been fruitfully organized in a similar structure (Phalet & Poppe, 1997). Although preferring labels such as individualism–collectivism and independence–interdependence, recent work on dimensions of culture has referred directly to the A & C labels (Markus & Kitayama, 1991). Theoretical issues continue to be debated—especially complementarity (Markey, Funder, & Ozer, 2003; Orford, 1994; Tracey, Ryan, & Jaschik-Herman, 2001) and contextual influences (Moskowitz, Suh, & Desaulniers, 1994). Horowitz and colleagues (2006) have reworked several aspects of the dynamics of interpersonal circumplex. Finally, new ideas have been raised about the mutual interplay of A & C in person perception (Abele & Wojciszke, 2007; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005). Much of this newer work is reviewed in the recent volume by Horowitz and Strack (2010).

THE ROLE OF VALUES

It should be clear from our review that the sweep of the A & C framework is broad enough to subsume multiple levels of analysis including motives, values, life goals, traits, and behavior. In this article, our focus is on the value level. Values are here defined as cognitive representations of basic motives: They specify a culture's conception of what is important and socially desirable, and they guide goal strivings and the way events and people are evaluated (Kluckhohn, 1951; Schwartz & Bilsky, 1987). Those same implications hold for individual differences

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within a culture. Whereas people differ in their motivation to get ahead and get along, they also differ in the importance they place on those two metamotives (Locke, 2000).

Fortunately, measures are available for most of these levels of analysis. Unfortunately, no direct measures of global A & C values are currently available. Research on such fundamental questions (e.g., the causal order of traits and values) cannot proceed without validated measures of those value domains.

If A & C are fundamental to the value domain, there should be evidence for their role in previous research on values. To document this evidence, Part 1 of our report uncovers evidence for A & C values in extant data sets. In Part 2, the requisite direct measures of A & C values are developed.

PART 1: EVIDENCE FOR A & C VALUE FACTORS IN BROAD DATA SETS

Given their impact on other individual differences, A & C should already be implicit in previous instruments designed to measure values and related constructs such as life goals.¹ For confirmation, we exploit four sources of data on extant instruments. First is the published correlation matrix of life goals based on the extensive and influential research by Richards (1966). Second is the matrix of correlations among life goals published by Roberts and Robins (2000). Third is the case-level value data from the premier international database, the European Social Survey. Finally, we collected new data on the values of contemporary Canadian college students.

In analyzing all four data sets, we followed the same statistical procedure: Factors were extracted using principal components. Unless otherwise indicated, we chose direct oblique rotations to allow the possibility of correlated factors.

Source 1: Richards's (1966) Life Goals Data

Participants in Richards's (1966) large-scale study were 6,289 men and 6,143 women responding to the American College Survey (ACS; Abe, Holland, Lutz, & Richards, 1965). All were first-year students attending one of 31 American colleges. Richards described this sample as "a reasonable cross-section" of American college freshmen in 1964.

The ACS consisted of 1,004 items covering interests, life goals, values, aspirations, attitudes, and achievements broadly sampled to represent vocational, social, and personal life goal domains. Respondents rated the personal importance of each goal on a scale of 1 (*of little or no importance*) to 4 (*essential for you*).

Richards (1966) factored intercorrelations among the 35 goal importance ratings and found a similar eight-factor structure in men and women. Six of the factors paralleled the well-known sextet of domains assessed by the Allport, Vernon, and Lindzey (1960) Study of Values: political (influence and power goals), economic (e.g., wealth and enjoyment goals), social (e.g., altruistic goals), theoretical (e.g., science and inventing goals), aesthetic (e.g., musical, literary, artistic goals), and religious goals. Two additional goal factors were also identified: personal happiness and athletic success.

¹The complexity of differentiating values, motives, and life goals is acknowledged. Nonetheless, we argue that they should all bifurcate into the same A & C categories.

Roberts and Robins (2000) described the ACS goal inventory of Richards (1966) as "the only relatively comprehensive instrument [of life goals] we could find that was also assessed normatively rather than idiographically" (p. 1286). This appraisal combined with the impressive size and scope of Richards's sample suggested it might be useful to test our key hypothesis: A & C will appear as the superordinate distinctions underlying broadly defined human goal pursuits and basic values.

To test this hypothesis, we reanalyzed data for 23 of the 35 goals reported in Richards (1966): Excluded were seven narrowly academic goals that included two science goals (e.g., making a theoretical contribution to science), and five arts goals (e.g., writing good fiction; becoming an accomplished musician). Also excluded were two well-being goals (e.g., becoming happy and contented), one fitness goal (keeping in good physical condition), and one redundant family goal item (being a good parent), which correlated .81 with an included item (being a good husband or wife).

Results. We factored the intercorrelations among 23 of the major life goals reported in Tables 2 and 3 of Richards (1966). In both samples, the two-factor solutions explained about 29% of the variance. The first five eigenvalues were 4.35, 2.67, 1.58, 1.36, and 1.1 for men, and 4.87, 2.21, 1.73, 1.45, 1.27, and 1.03 for women. Factor correlations in the direct oblimin-rotated solution were small—.16, and .23, for men and women, respectively. When rotated, the two factor-solutions were similar between women and men: They are displayed in Table 1.

As expected, broad factors corresponding to agency and communion were evident in both samples. The highest loading agentic life goals involved leadership, power, expertise, success, and economic interests. The highest loading communal life goals involved fulfilling relational and religious obligations and commitments, seeking "purpose" in life, and sacrificing for others. Both factors are remarkable for their exceptionally broad scope yet remarkably clear, simple structure. These results are consistent with our hypothesis that A & C are the superordinate axes implicit in broadly defined human goals and values.

Source 2: Roberts and Robins (2000) Life Goals Data

Participants were 672 sophomores from a large West Coast university. The median age was 19 and 59% were female. Participants rated the importance of the 38 life goals on a 5-point scale, ranging from 1 (*not important to me*) to 5 (*very important to me*). Twenty-seven life goals were taken directly from Richards (1966) and 11 new items were added to represent major contemporary life goals. Adequacy of their sampling of life goals was empirically evaluated by having judges rate the prototypicality of each life goal item with respect to the 10 hypothetical value domains identified in their review; internal consistencies of the life goal content clusters were then determined by the prototypicality ratings. Seven internally consistent life goal clusters were so identified.

Correlations among participants' importance ratings for 25 life goals were factor analyzed, resulting in seven factors corresponding to the seven clusters. The authors reported moderate intercorrelations among seven measures constructed to represent the seven life goal clusters, but did not investigate their higher order factor structure.

Given the breadth of these 25 life goal items, we hypothesized that A & C factors would be apparent in the superordinate

TABLE 1.—Agentic and communal dimensions of life goals in data reported by Richards (1966).

Goal Item	Men Factor		Women Factor	
	I	II	II	I
12. Becoming influential in public affairs	70		67	23
11. Becoming a community leader	63	31	62	31
32. Having executive responsibility for the work of others	61	20	61	24
20. Obtaining rewards or recognition	60		59	
25. Becoming expert in finance or commerce	57		62	
35. Being successful in a business of my own	54		48	
03. Inventing or developing a useful product or device	52	-21	39	
09. Becoming an outstanding athlete	47		38	
07. Becoming an authority on a special topic in my field	43	25	29	34
26. Keeping up to date on political affairs	34	30	43	27
33. Avoiding hard work	34	-27	39	-30
34. Engaging in exciting and stimulating activities	34	31	31	25
02. Becoming well-off financially	33		45	
21. Never being obligated to people	21		28	
30. Finding a real purpose in life		62		67
28. Being a good husband or wife	-24	57		66
31. Being active in religious affairs		55		59
08. Doing something that will make my parents proud of me		54	28	48
13. Following a formal religious code		53		58
10. Making sacrifices for the sake of happiness of others		53		55
27. Being well-liked		52	32	49
04. Helping others who are in difficulty		49		49
06. Developing a meaningful philosophy of life		47		45
14. Having the time and means to relax and enjoy life		46		37

Note. Results of reanalyses of life goal intercorrelations reported by Richards (1966, Tables 2 and 3).

Participants were 6,289 men and 6,143 women entering American colleges or universities in 1965. Tabled values are varimax-rotated component loadings; decimals and loadings less than 1.20 are omitted.

structure. To evaluate this hypothesis, we conducted an exploratory factor analysis on the intercorrelations among the seven life goal factor scales reported in their second table (p. 1289).

Results. Principal components analysis of the 7 × 7 correlation matrix revealed three eigenvalues above 1 (1.96, 1.45, 1.1) with the first two factors explaining 49.9% of the overall variance. The factor intercorrelation in the two-factor, direct oblimin solution was only .10.

Note from Figure 1 that the first two factors are readily interpretable as A & C: Social, religious and aesthetic life goals defined the first superordinate life goal factor, whereas economic, hedonistic, and political life goals defined the second factor. Unexpectedly, relationship goals loaded higher on the agentic than

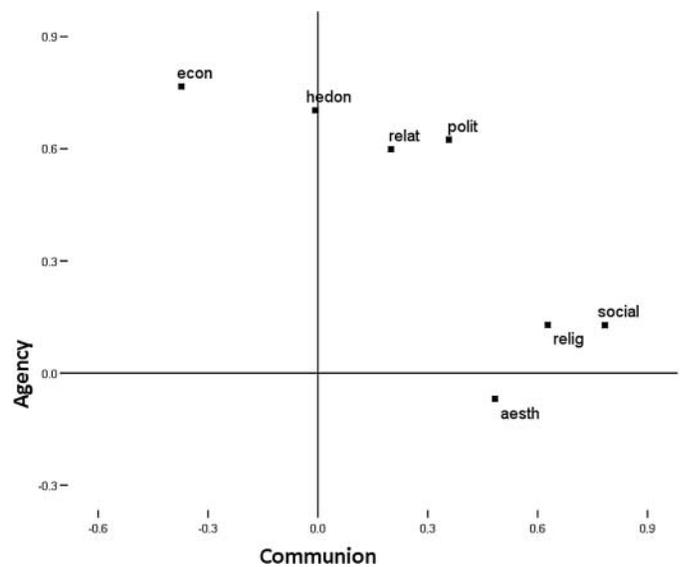


FIGURE 1.—Higher order agency and communion dimensions of life goals in factor intercorrelations reported by Roberts and Robins (2000, Table 2). Figure labels are Economic (econ), Hedonistic (hedon), Relationship (relat), Political (polit), Aesthetic (aes), Religious (relig), and Social (social).

on the communal factor. With that exception, convergence of social and religious goals on one factor, and economic, political, and hedonist life goals on a second orthogonal factor replicated the result earlier obtained with Richards’s (1966) ACS data collected 40 years previously.

Source 3: European Social Survey Data

The European Social Survey (ESS; Jowell and the Central Coordinating Team, 2005) is sponsored by Europe Commission and European Science Foundation. This biennial multicountry survey was initiated in 2002 to chart and explain trends in beliefs, attitudes, and values of European residents. Each ESS round involves a strict, random-probability sampling of participating country residents aged 15 and older. Administered face-to-face by trained interviewers at participants’ households, the survey includes a core module that remains constant from round to round.

The core module includes an abbreviated 21-item version of the Portrait of Values Questionnaire (PVQ; Schwartz, Melech, Lehmann, Burgess, & Harris, 2001). This instrument is based on the (currently) most influential taxonomy of individual differences in values, namely, Schwartz’s (1992) taxonomy: It distinguishes 10 value types according to their predominant motive content: power (PO), achievement (AC), hedonism (HE), stimulation (ST), self-direction (SD), universalism (UN), benevolence (BE), conformity (CF), tradition (TR), and security (SE). The PVQ assesses respondents’ value priorities indirectly via the magnitude of their self-rated similarity to hypothetical persons exemplifying prototypical value orientations. For example, the PVQ item “It is important to him/her to be rich. He/she wants to have a lot of money and expensive things” measures the power value type. For each descriptive statement, participants answer the question, “How much like you is this person?” on an asymmetric 6-point scale ranging from 6 (*very much like me*) to 1 (*not like me at all*). Third-person pronouns in PVQ item wordings are matched to respondents’ gender. For example, PVQ Item 2

is worded “It is important to *him* to be rich . . .” for male respondents, and “It is important to *her* to be rich . . .” for female respondents.

Schwartz (2003) regards the PVQ item format to be preferable to the Rokeach (1973) format used in his previous instrument, the Schwartz Value Survey (SVS; Schwartz, 1992)—especially for adolescent, elderly, and less educated respondents. He reports convergent correlations between the ESS version of the PVQ (henceforth referred to as PVQ–21) and corresponding SVS scales between .70 (ST) and .44 (CF), and alpha reliabilities ranging between .79 (HE) and .37 (TR). Relatively low alphas were tolerated in the design of the PVQ–21 to maximize the scales’ content bandwidth. In support, Schwartz (2003) reports high structural equivalence between the SVS and the PVQ–21 in multidimensional scaling analyses of intercorrelations among the value types.

At the time of this writing, cumulative data from four rounds of the ESS, Rounds 1–4 (2002, 2004, 2006, and 2008) were available on the ESS Web site (<http://www.europeansocialsurvey.org>). The ESS data are archived and distributed by the Norwegian Social Science Data Services. We selected PVQ–21 data from the first two waves. Respondents were aged 18 to 70 with complete PVQ–21 item data ($N = 136,592$, 54% of whom were female). This immense data set provided an ideal test of the hypothesis that superordinate axes corresponding to A & C can be readily identified in the higher order structure of Schwartz’s 10 value types. The results are detailed after we describe a parallel data set from college students.

Source 4: New Data on Canadian College Students

A limitation of the ESS values data for current purposes is the abbreviated nature of Schwartz’s PVQ–21. To expand the scope, we collected new data on a 42-item² version of the PVQ (PVQ–42), available in the appendix of Schwartz’s (2003) proposal to the ESS development committee.

The PVQ–42 was administered over the Internet to a large sample of undergraduate students at the University of Winnipeg. They participated in exchange for extra course marks. A total of 605 participants responded to all 42 PVQ items (425 women, 180 men).

Results. The same analytic procedure was applied to Samples 3 and 4. Principal components were extracted and the first two were varimax-rotated. Figure 2 presents the varimax-rotated two-factor structure of the intercorrelations among the 10 PVQ value types from both sources: The ESS PVQ–21 data are indicated by the dark symbols, and the student PVQ–42 data are indicated by the light symbols. In the ESS data, the first four eigenvalues from this principal components analysis were 3.31, 1.94, 1.21, and 0.67, with the first two components explaining 52.6% of the total variance. The corresponding eigenvalues in the PVQ–42 student data were 2.99, 1.91, 1.57, and .85, with the first two explaining 49.0% of the total variance.

²The current version included two items that Schwartz (2003) proposed as replacements for preliminary PVQ–21 items: one for the Security Type scale, and the other for the Power Type scale. We included both the preliminary and replacement items for these scales, bringing the total number of PVQ items administered here to 42.

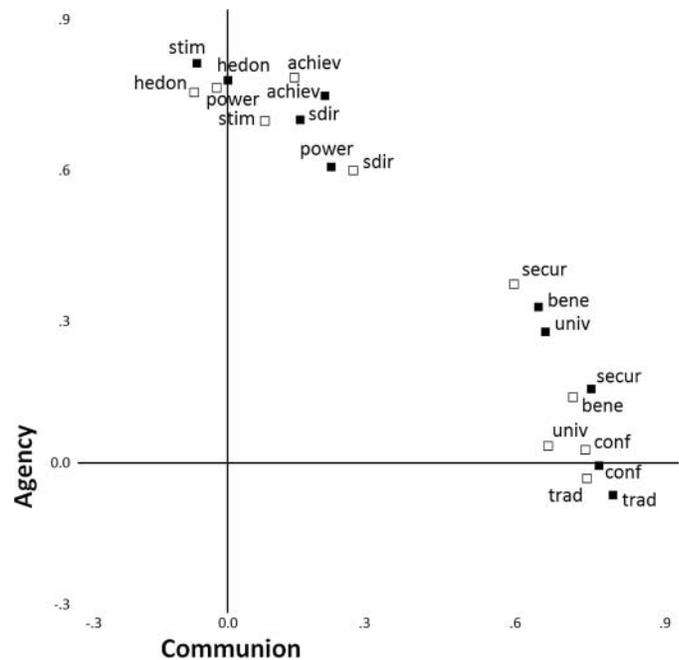


FIGURE 2.—Agentic and communal dimensions of value emerging from correlations among Schwartz’s (1992) 10 value types in two samples. Dark symbols refer to PVQ–21 data from the European Social Survey’s cumulative 2002–2008 data set ($N = 136,592$). White symbols refer to PVQ–42 data from Canadian Sample E ($N = 605$). Figure labels are Stimulation (stim), Hedonism (hedon), Achievement (achiev), Self-Direction (sdir), Power (power), Benevolence (bene), Universalism (univ), Security (secur), Conformity (conf), and Tradition (trad).

Note from Figure 2 that, in both samples, the first rotated factor was defined by high loadings for achievement, power, hedonism, and stimulation: This factor clearly represents a superordinate agentic dimension. The second rotated factor corresponds to a very broad communal dimension, combining vertical collectivist values such as conformity, tradition, and security, with horizontal collectivist values, such as universalism and benevolence. These results parallel the preceding findings for life goals by documenting superordinate A & C dimensions within the Schwartz value taxonomy.

Discussion

It is clear that agentic and communal dimensions are identifiable in the higher order structure of broadly defined human goals and values. A reanalysis of the Richards (1966) data revealed these factors in the life goals of both men and women: Altruistic, marital, family, religious, and existential life goals defined a broad communal factor, and political, economic, leadership, achievement, entrepreneurial, and hedonistic goals defined an equally broad agentic factor.

Newer data from Roberts and Robins (2000) involved a more systematic and representative sampling of life goals compared to the Richards (1966) study. Yet the same A & C factors emerged—with the interesting exception of relationship goals.³

³This apparent discrepancy warrants comment. Many relationship values and goals appear to be ambiguous with respect to A & C: This ambiguity might explain the erratic history of relationship value markers like sense of

The latter loaded on a communal factor in the Richards data but on an agentic factor for Roberts and Robins. This inconsistency underscores the motivational complexity of relationship values and goals: Locating them in individual difference taxonomies of values and goals has long been problematic.

Finally, the A & C factors emerged in contemporary values data sets collected from Canadian college students as well as a broader sample from the ESS. In both data sets, values were measured with the well-established inventories developed by Schwartz. Similar orthogonal agentic and communal dimensions were recently reported for nomothetic analyses of value surveys administered in German (Hinz, Braehler, Schmidt, & Albani, 2005), Spanish (Aluja & García, 2004), and Estonian (Aavik & Allik, 2002). Taken together, this constellation of data sets strongly supports the claim that, even when not directly measured, A & C values are implicit in comprehensive inventories of life goals and values.

Given the apparent ubiquity of A & C value dimensions, it is surprising that no direct measures have been developed. Closest in spirit is Locke's work on dyadic interaction values (Locke, 2000, 2003). His instrument, the Circumplex Scales of Interpersonal Values, measures the importance an individual places on performing various interpersonal behaviors in dyadic interactions. Structural analyses confirm that the 64 items display an eight-octant circumplex structure. Although the validity of Locke's measure is well supported, it is not designed to capture the broader scope of life values captured by the inventories previously reviewed.

Several other measures of closely related concepts have already proved fruitful. These include measures of interpersonal dispositions (e.g., Wiggins et al., 1988), implicit motives (e.g., McAdams et al., 1996), and interpersonal interaction goals (Dryer & Horowitz, 1997). Research on all these measures could be advanced by the inclusion of (a validated set of) direct measures of global A & C value dimensions. Especially if brief and efficient, such measures should prove useful in a wide variety of other applied and research contexts.

PART 2: DEVELOPMENT AND VALIDATION OF THE ACV

As noted earlier, we define values as cognitive representations of basic motives. Unlike the more comprehensive efforts of Allport et al. (1960), Rokeach (1973), and Schwartz (1992), our measurement goals are restricted to values associated with the A & C axes. This restriction should better serve the purposes of researchers working within that framework (e.g., Horowitz & Strack, 2010).

Results from Part 1 indicate that two-factor solutions of existing measures of values (e.g., Schwartz's PVQ) can generate markers of A & C value orientations. These results emerged consistently despite the fact that items for extant measures were not designed to target independent factors. In fact, items for the SVS and PVQ were selected to operationalize a model where A & C values define opposite ends of a bipolar value dimension,

belonging, mature love, and true friendship in the value taxonomy of Schwartz and colleagues (e.g., compare Schwartz, 1992, 2003; Schwartz & Bilsky, 1987, 1990; Schwartz & Boehnke, 2004). The difference between the Richards (1966) and Roberts and Robins (2000) data might derive from a different focus of the items. The relationship goal "having children" implicates prosperity or social status motives to a greater extent than the relationship goal "being a good husband or wife."

namely, self-enhancement versus self-transcendence (Schwartz & Bilsky, 1987).

Writers in the A & C tradition, however, have always rejected the assumption of mutual antagonism. Wiggins (1991) has stated this assumption unequivocally: "All combinations of A and C are possible in a society or in an individual: for example, an individual may be agentic but not communal, communal but not agentic, or strongly agentic and strongly communal. Development in one modality does not restrict development in the other; there is no inherent conflict between the two" (p. 98). Consistent with this tradition, we assume that A & C value dimensions entail no fundamental antagonism at the individual difference level.⁴ Hence, they will tend to be independently distributed among persons within a particular culture. This assumption is consistent with Bakan's (1966) "duality" notion and with orthogonal models of A & C proposed in the trait literature (e.g., Leary, 1957; Hogan, 1982; Wiggins, 1995).

Scale Development

Consistent with this assumption of independence, Part 2 describes the development of an orthogonal pair of marker scales. As with any scale development, this process required a series of refinement studies. Here we analyze a total of five large samples (A–E) to generate a reliable and valid pair of value measures.

Note that our approach was not motivated by a direct disagreement with Schwartz's measurement model. Instead, ours is a modest attempt to carve out a theoretically focused portion and capture it succinctly. The correlations among Schwartz's 10 values contain a wealth of information that might profitably be represented in more than one way. One approach is to set aside the first unrotated general factor and organize values with the two bipolar factors that frame Schwartz's circumplex model. Another model is four substantive factors representing the poles of the two bipolar factors (Stern, Dietz, & Guagnano, 1998). Our goal here is to isolate and refine an orthogonal representation of value axes that best correspond to the A & C measurement tradition.

Construct Validation

The second purpose of Part 2 was to initiate the process of construct validation for our proposed values measures. Of special importance was the evaluation of convergent and discriminant relations with markers of A & C dimensions in domains other than values, and with other theoretically relevant criteria. Next is an elaboration of each of these criterion measures and a specification of hypotheses relating them to A & C values.

Interpersonal traits. Individuals possessing the corresponding interpersonal traits should value A & C, respectively (Paulhus & John, 1998; Wojciszke, 1997). As noted earlier, the anchors of the trait circumplex are known as dominance and nurturance (Wiggins, 1991). Accordingly, we anticipated an association of agentic values with dominance and a corresponding association of communal values with nurturance.

Socially desirable responding. Dimensions of social desirability are considered to distinguish qualitatively different

⁴At the behavioral level, A & C might sometimes appear mutually exclusive because society often requires people to choose one over the other.

biases in self-evaluation. Paulhus's (1984) two-factor model of socially desirable responding is usually operationalized via the impression management (IM) and self-deceptive enhancement (SDE) scales of the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1991). The role of agentic and communal content in these measures was subsequently pointed out by Paulhus (2002). IM is positively correlated with communal traits, such as agreeableness and conscientiousness, and SDE with agentic traits such as dominance, self-esteem, and competence. That correspondence implies that SDE will show higher correlations with agentic values and IM with communal values.

Masculinity and femininity. When viewed as independent, masculinity and femininity are commonly operationalized with the M and F subscales of the Bem Sex-Role Inventory (BSRI; Bem, 1974). Follow-up research revealed that these M and F measures mapped very closely onto trait measures of dominance and nurturance (Wiggins & Holzmueller, 1978). In retrospect, this equivalence was unsurprising, given that masculine and feminine social roles have traditionally been associated with agentic and communal characteristics, respectively (Bakan, 1966). Therefore, we expected a clear-cut pattern of convergent and discriminant association between A & C values and M and F measures: That is, M and F should correlate positively with A & C, respectively. By contrast, we anticipated little in the way of cross-correlations.

The Dark Triad. A key theme of Bakan's (1966) essay on agency and communion was the destructive implications of unmitigated agency; that is, the phenomenon of agentic striving at the expense of (or untempered by) communal considerations. This second quadrant of the interpersonal circumplex subsumes narcissism, Machiavellianism, and psychopathy, a family of socially malevolent tendencies dubbed the *Dark Triad* by Paulhus and Williams (2002). Although they differ in other respects, these three dispositions epitomize unmitigated agency (Jones & Paulhus, 2010).

Value implications are inevitable given that traits associated with unmitigated agency fall at one pole of a circumplex axis associated with gender roles (see Lippa, 2001; Paulhus, 1987) and define major dimensions of sociopolitical ideology (Duckitt & Sibley, 2009; Eysenck, 1954; Saucier, 2000).⁵ That pole represents what Megargee (1997) called deviant values. Holding such values helps Dark Triad individuals justify their exploitation of others (Jones & Paulhus, 2010).

For these reasons, we examined the relation of Dark Triad dispositions to global A & C values. We anticipated positive associations with agentic values and negative associations with communal values for all three of the Dark Triad dispositions.

Sociosexuality. Simpson and Gangestad (1991) introduced the term *unrestricted sociosexuality* to describe relatively stable variation among individuals in willingness to pursue casual sex; that is, sex without relationship investment or commitment. Scores on their sociosexuality inventory (SOI) are reliably correlated with all of the Dark Triad dispositions (Jones & Paulhus, in press).

⁵The second political axis is associated with openness to experience (Trapnell, 1994; see also Lee, Ashton, Ogunfowora, Bourdage, & Shin, 2010).

Gender differences in unrestricted sociosexuality are pronounced, with men universally scoring higher than women (Schmitt, 2005). The impressive magnitude of those differences figures prominently in evolutionary accounts of psychological gender differences (Buss & Schmitt, 1993), and in explanations of A & C patterning of traits, values, and goals within sex (e.g., Paulhus, 1987; Simpson, Wilson, & Winterheld, 2004).

These considerations suggest that agentic and communal values should have opposing associations with sociosexuality. Agentic values should be associated with unrestricted sexuality whereas communal values should be associated with a restricted sociosexual orientation.

Religion. Although it serves numerous group, dyadic, and individual psychological functions (Altemeyer & Hunsberger, 1992), we argue that religiosity is more communal than agentic. Popular etymology of the English word *religion*, from the Latin verb *religare* ("to bind fast") via *ligare* ("to bind, tie") suggests mainly communal functions: Most obvious are the communal functions of attachment, morality or social obligation, and cultural conservation, all of which serve to "bind" individuals together in a concrete or symbolic manner. The communal emphasis of religion is suggested in numerous ways, including the moral proscription of selfishness in most religious creeds.

Robust gender differences exist in virtually all forms of spiritual and religious belief, with women tending to believe in a faith more often, and more strongly, than do men. Interestingly, Bakan's (1966) essay introducing A & C, which resembles a Christian commentary on the necessity of communion and the dangers of unmitigated agency, concludes with a chapter titled "Toward a Psycho-Theological Point of View." Bakan assumed an intimate link between religious belief and faith and the communal mode of human life.

Therefore, we hypothesized that, in general, religious self-identification, interest, and commitment would show positive associations with communal values, and null or negative associations with agentic values. This outcome pattern is suggested by the empirical location of tradition values near benevolence values in the Schwartz (1992) value circumplex.

We evaluated this communal hypothesis in a sample large enough to permit statistical comparisons between atheists and agnostics, and between adherents of new religious movements associated with the political left (e.g., Neo-pagan) as well as the right (e.g., fundamentalist). Regardless of the liberal or conservative nature of a particular faith, the more faithful will tend to be more communal.

Method

Participants. Participants consisted of five samples of first-year undergraduate volunteers (Samples A–E) who completed questionnaire measures in exchange for partial course credit. Sample sizes for A through E were 274, 307, 547, 629, and 832, respectively. Age and gender composition of the samples were similar, with 90% of participants in each sample aged at or between 17 and 25 years, and 70%–76% were female. Sample A and B participants were enrolled in a large Western university and Sample C, D, and E participants were from a large central Canadian university.

Ethnic composition of samples varied, with greater numbers of East and South Asian heritage participants in the western than the central Canadian samples: The proportion of non-European

heritage participants was approximately 40% in the former samples and 20% in the latter ones. Data from these samples are reported jointly in this study.

Measures

Agentic and Communal Values scale (ACV). We independently reviewed definitions of A & C provided by Bakan (1966) and Wiggins (1991), as well as closely related dual metamorphic concepts proposed by Hogan (1982) and McAdams (1985). We then independently rated the prototypicality of each of the 56 SVS item with respect to those descriptions and definitions. Differences in these ratings were resolved by discussion, and the final ratings were used to select a “seed set” of A & C value markers from the 56 SVS value items (e.g., ambitious, helpful). These seed items were modified where necessary so that all item stems were nouns (e.g., ambitious to ambition, helpful to altruism), and so that each item definition communicated its intended agentic or communal meaning as unambiguously as possible. These seed items were supplemented with additional, newly created items (e.g., status, compassion) to bring the total number of items to 10 for each scale.

These preliminary 20 items were administered to Samples A, B, and C interspersed with 6 neutral items (e.g., tranquility) using instructions similar to the SVS, and a 9-point rating scale with anchor words at the first, fifth, and last scale intervals: 1 (*not important to me*), 5 (*quite important to me*), and 9 (*highly important to me*). Factor analyses conducted on those samples (described later) led to rewording of some items, replacement of three A items and two C items, and the addition of two new items to each scale, for a final total of 12 items per scale. Six-item short form versions of the final scales were also constructed. Psychometric characteristics of the final 12-item and 6-item ACV scales were empirically evaluated in Sample E.

Balanced Inventory of Desirable Responding—Version 6. The BIDR-6 (Paulhus, 1991) measures the two forms of socially desirable responding (IM and SDE) proposed in Paulhus’s (1984) two-factor theory. Each subscale consists of 20 items rated on 7-point scales ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Data from Sample A yielded alpha reliabilities of .70 and .87, for SDE and IM, respectively.

Bem Sex Role Inventory. The BSRI (Bem, 1974) consists of two 20-item scales, the Masculinity (M) scale and the Femininity (F) scale. M includes traits rated as more normatively desirable for men to possess than for women; F includes the reverse set of traits. Each item is rated on a 7-point scale ranging from 1 (*never true of me*) to 7 (*always true of me*). In Sample A, alpha reliabilities were .77 and .79 for Masculinity and Femininity, respectively.

The Revised Interpersonal Adjective Scales (IAS-R; Wiggins, 1995). The IAS-R provides empirical markers of the circumplex model of interpersonal behavior (IPC) that depicts interpersonal dispositions as vectors in a two-dimensional circular array around the coordinate axes of dominance (DOM) and love (LOV). Wiggins (1979) originally developed adjective measures for 16 equally spaced locations around the IPC, alphabetically labeled counterclockwise as Scale A through Scale P. These 16 scales were subsequently collapsed to form eight octant measures of the IPC. The IAS-R scales consist of eight

TABLE 2.—Correlation of preliminary agency and communion value scales with self-favorability biases, gender-linked interpersonal dispositions, and unrestricted sociosexuality.

Measure	Agency (A)	Communion (C)	A–C
Self-favorability biases			
Self-deceptive enhancement (SDE; .70)	.35**	–.05	.36**
Impression management (IM; .87)	.11	.44**	–.39**
Gender-role-related interpersonal traits			
BSRI Masculinity (.85)	.43**	.03	.37**
BSRI Femininity (.78)	–.06	.48**	–.44**
Interpersonal circumplex traits			
IAS-R Assured-Dominant (90°; .80)	.42**	–.05	.40**
IAS-R Warm-Agreeable (00°; .88)	.00	.52**	–.42**
IAS-R Arrogant-Calculating (135°; .85)	.39**	–.17**	.47**
IPQ DOM (90°; .92)	.37**	.03	.30**
IPQ LOV (00°; .90)	–.12*	.49**	.50**
IPQ Potency (120°; .92)	.38**	–.23**	.52**
IPQ Closeness (30°; .93)	.11*	.43**	–.25**
IPQ Extraversion (60°; .94)	.26**	.24**	.04
IPQ Agreeableness (330°; .91)	–.30**	.41**	–.59**
Dark Triad traits			
Narcissism (.80)	.46**	–.19**	.55**
Machiavellianism (.71)	.13*	–.39**	.43**
Psychopathy (.80)	.29**	–.25**	.45**
Unrestricted sociosexuality (SOI; .69)	.17**	–.19**	.30**
Portrait of Values Questionnaire (PVQ)			
Value Types:			
Power (.69)	.57***	–.10**	.57***
Achievement (.78)	.59***	–.04	.53***
Hedonism (.73)	.30***	.01	.25***
Stimulation (.71)	.31***	.16***	.16***
Self-Direction (.63)	.21***	.15***	.09*
Universalism (.80)	–.03	.46***	–.35***
Benevolence (.68)	–.05	.48***	–.38***
Tradition (.49)	.12**	.36***	–.15***
Conformity (.73)	.15***	.32***	–.09*
Security (.65)	.34***	.25***	.12***

Note. SDE and IM data are from Sample A (n = 274). PVQ data were provided by a subsample of Sample D participants (n = 606). Data for the remaining measures are from Sample C (n = 547). Convergent correlations are shown in bold. Alphas for each scale are shown in parentheses. Angles in parentheses indicate the circumplex location of the trait relative to warm-agreeable (00°). A–C = Agency–Communion difference score; BSRI = Bem Sex-Role Inventory; IAS-R = Revised Interpersonal Adjective Scales; IPQ = Interpersonal Questionnaire.

*p < .05. **p < .01. ***p < .001.

adjectives each (e.g., dominant). Three of the eight IAS-R scales were used in this study: the Assured-Dominant (PA), Arrogant-Calculating (BC), and Warm-Agreeable (LM) scales. The 24 PA, LM, and DE adjectives were embedded in the BSRI items, and rated on the same 7-point BSRI response scale as the BSRI items instead of the IAS-R’s usual 8-point response format. Alpha reliabilities are listed in Table 2.

The Interpersonal Questionnaire. The Interpersonal Questionnaire (IPQ; Trapnell & Broughton, 2006) operationalizes a duodecant representation of the interpersonal circumplex model via 6-item scales consisting of brief phrases (e.g., “Likes to be top dog,” “Loves to mix socially, a born extravert”) that describe 12 different interpersonal behavior tendencies. Respondents indicate how accurately each phrase describes them on a 5-point scale. The 12 duodecant scales (along with associated alpha coefficients in the current Sample C of 556) are Assertive (.81), Dominant (.76), Manipulative (.82),

TABLE 3.—Factor loadings of the preliminary Agentic and Communal Values scale (ACV) items.

Preliminary ACV Item ^a	Sample					
	A		B		C	
	Factor		Factor		Factor	
	I	II	I	II	I	II
Compassion	.84	-.11	.75	-.04	.78	-.05
Honesty	.73	-.07	.69	-.08	.76	-.11
Altruism	.74	-.16	.61	-.15	.67	-.15
Forgiveness	.73	-.10	.60	-.12	.67	-.12
Loyalty	.64	.09	.61	.08	.61	.09
Politeness	.47	.25	.57	.05	.61	.17
Equality	.58	.14	.57	.07	.58	.08
Duty	.59	.20	.48	.24	.46	.37
Tradition	.47	.04	.47	.06	.36	.25
Belonging	.32	.35	.32	.19	.18	.35
Status	-.17	.79	-.23	.80	-.30	.84
Power	-.39	.74	-.30	.76	-.28	.74
Achievement	.14	.54	.01	.61	-.03	.62
Influence	.22	.53	.17	.44	-.01	.60
Ambition	.33	.43	.16	.64	.24	.56
Competence	.20	.52	.17	.55	.21	.55
Excitement	-.11	.61	.24	.31	.21	.49
Exploration	.06	.49	.28	.37	.32	.38
Independence	.32	.35	.11	.32	.25	.31
Freedom	.21	.43	.41	.25	.35	.27

Note. Principal components extraction, oblique rotation; decimals omitted; loadings are sorted in descending order with respect to Sample C. Factor intercorrelations were .30, .33, and .31, in Samples A, B, and C, respectively.

^aItem stem only; definition text is omitted.

Coldhearted (.73), Aloof (.74), Introverted (.87), Timid (.73), Deferent (.70), Agreeable (.65), Nurturant (.76), Affiliative (.71), and Extraverted (.84). The IPQ duodecant scores can be combined to yield two dimension scores, DOM and LOV, that are empirically interchangeable with the DOM and LOV dimension scores of Wiggins's (1995) IAS-R.

The 12 scales can be combined in two other ways to yield alternative alignments of the IPC axes. One of these alternative alignments corresponds to the Extraversion and Agreeableness dimensions of the Five-factor model of personality, and represents a 30° clockwise rotation of the DOM and LOV IPQ axes. The second alternative alignment corresponds to the social potency and social closeness factors of the Multidimensional Personality Questionnaire (Tellegen, 1982), and represents a 30° counterclockwise rotation of the DOM and LOV IPQ axes. The inclusion of the IPQ permitted an examination of ACV associations with these alternative alignments of IPC dimensions, and, by extension, the pattern of A & C value correlations with extraversion and agreeableness, and with social potency and social closeness.

Because each IPQ dimension score consists of responses to 36 items (6 duodecants × 6 items per duodecant) that define narrower scales possessing relatively high internal consistency, each possible dimension score tends to be highly reliable. Coefficient alphas for the IPQ dimension scores in the Sample C ranged from .90 (IPQ LOV) to .94 (IPQ Extraversion).

Dark Triad. The overlap among subclinical versions of narcissism, psychopathy, and Machiavellianism led Paulhus and Williams (2002) to argue that they should be studied in tan-

dem. They followed Raskin and Hall's (1979) conception of narcissism as a subclinical or "normal" range variant of DSM-defined narcissistic personality disorder: Therefore it included such features as grandiosity, superiority, dominance, and entitlement. Machiavellianism was operationalized as a personality variable in work by Richard Christie and colleagues. Research summarized by Christie and Geis (1970) yielded the Mach-IV, an internally consistent questionnaire capturing cynical worldview and manipulative interpersonal tendencies. Finally, clinical psychopathy is associated with a profound lack of empathy and anxiety, and impulsive, thrill-seeking, exploitive, sadistic, antisocial tendencies, including proneness to criminality (Hare, 1970). The subclinical version has only recently been introduced to the psychology research literature (LeBreton, Binning, & Adorno, 2006).

In Sample C, narcissism was measured with the 40-item Narcissistic Personality Inventory (Raskin & Hall, 1979). This forced-choice instrument showed an alpha of .80 in this study. Machiavellianism was measured with the Mach-IV questionnaire (Christie & Geis, 1970): It contains 20 statements rated for self-applicability on 5-point items. Alpha was .71 in this study.

Subclinical psychopathy was measured with the Self-Report Psychopathy (SRP-III) scale (Paulhus, Neumann, & Hare, in press). Only 30 items were used in this study: Items that involve sensitive disclosures (e.g., commission of criminal acts) were omitted for ethical reasons. Coefficient alpha in this sample was .80 (see Table 2).

Sociosexuality. The SOI (Simpson & Gangestad, 1991) was used to measure unrestricted sociosexual orientation, or relative openness to having sex in the absence of emotional investment or relationship commitment. The SOI is the unweighted sum of five Z-scored scales, four of which are represented by single items (number of sexual partners in the past, lifetime number of one-night stands, ideal number of sexual partners over the next 5 years), and frequency of other-partner fantasy during sex with a partner. The fifth subscale measures unrestricted sociosexual attitudes with three items. In this study, intercorrelation of these five SOI component scales yielded an alpha reliability estimate of .69 (see Table 2).

Religious affiliation. Participants in Sample D indicated their current religious affiliation, if any, by selecting from a list of 33 different religions or religious denominations. These included a fairly wide range of affiliations designed to cover a broad span of liberal and conservative spiritual or religious movements (e.g., Pentecostal, Mennonite, Unitarian, New Age, Wicca). Affiliations were grouped into five categories to represent mainstream, ultraconservative, ultraliberal, atheist, and agnostic orientations to religion and spirituality. The option "Don't Know/No answer" appeared first in the list of possible affiliations, followed by atheist, agnostic, and 29 additional affiliation options, listed alphabetically, with the last affiliation listed, yoga/meditation, followed by "Other (please specify)."

Smith's (1990) classification was used to group Protestant denominations into moderate (which were combined with Catholic) versus fundamentalist. Classification of ultraleft or unorthodox forms of spirituality was effected by consulting sources on new religious movements (e.g., Lewis, 2004). This category included, for example, those who endorsed New Age,

TABLE 4.—Factor loadings and descriptive statistics of revised Agentic and Communal Values (ACV) scale, Sample E.

	Factor		<i>M</i>	<i>SD</i>	Gender Differences	
	I	II			<i>t</i> Ratio	<i>d</i>
18. Status	.77	-.02	4.75	2.26	4.3**	.33
13. Power	.75	-.09	3.59	2.10	4.0**	.31
24. Superiority	.73	-.16	4.43	2.32	8.0**	.62
22. Recognition	.72	.01	4.37	2.38	4.0**	.31
01. Wealth	.62	-.09	6.27	1.79	2.3*	.18
10. Ambition	.61	.26	6.88	1.67	< 1	.08
08. Achievement	.58	.13	7.11	1.74	< 1	-.05
15. Excitement	.49	.17	6.36	2.05	2.5*	.18
20. Autonomy	.44	.12	6.66	1.94	1.9	.14
04. Influence	.44	.31	6.17	1.86	2.3*	.17
06. Competence	.42	.21	6.83	1.64	5.1**	.37
02. Pleasure	.41	.04	7.69	1.42	2.9*	.22
17. Compassion	-.05	.72	7.71	1.36	-5.6**	-.46
19. Civility	.08	.72	7.31	1.43	-1.8	-.15
09. Altruism	-.05	.65	7.09	1.68	-4.4**	-.35
16. Honesty	.01	.62	7.89	1.21	-2.2*	-.16
03. Forgiveness	-.01	.57	6.97	1.61	-1.8	-.14
14. Harmony	.13	.57	6.98	1.65	-1.3	-.11
12. Politeness	.14	.55	7.26	1.70	< 1	-.08
07. Humility	.12	.54	6.83	1.63	1.1	.09
21. Equality	.04	.52	7.29	1.79	-2.0*	-.16
11. Loyalty	.04	.50	8.28	1.09	-1.3	-.10
05. Trust	.09	.48	8.03	1.26	-1.3	-.10
23. Tradition	.18	.47	6.41	2.15	-2.2*	-.17

Note. *N* = 848. Principal components extraction; varimax rotation. Decimals are omitted from loadings and those > 1.401 are presented in bold. The definition text for each value is omitted. The item numbers indicate the order of administration.
p* < .05. *p* < .001 (pairwise).

Pagan/Neo-Pagan, Wiccan, Spiritual Yoga/Meditation, Spiritualism, Pantheist, and Astrology (the latter was listed by a respondent in the open-ended response field next to the “other” option). Excluding participants whose affiliation did not fall into one of these five categories, such as Don’t Know/No answer (22%), and other denominations, including Judaism, Hinduism, Buddhism, Islamic, Baha’i, and others, which together accounted for about 15% of participants, left 1,072 included cases across Samples D and E: 674 moderate Protestant or Catholic, 218 fundamentalist Protestant, 99 atheist, 45 agnostic, and 36 new religions (i.e., New Age and other unorthodox spiritualities).

Results

Preliminary ACV scales. Factor analyses were conducted on the 20 preliminary ACV items administered in Samples A, B, and C. The first two factors explained approximately 40% of the item variance in all three samples. Results of these analyses are presented in Table 3.

With the exception of belonging and freedom, each item loaded most highly on the expected factor. In each sample, the highest loading items on Factor I were compassion, honesty, altruism, and forgiveness. The highest loading items on Factor II were status and power, with ambition performing well in Samples B and C, but less well in Sample A. The factor intercorrelations in the obliquely rotated solution (direct oblimin criterion, delta = 0) were very similar across samples; that is, .30, .33, and .31, in Samples A, B, and C, respectively.

The worst performing items in all samples were three agency items—exploration, independence, and freedom—and

two communion items—belonging and duty: The latter showed nontrivial cross-loading in all three samples. Nonetheless, these results generally support the structural validity of the ACV.

Correlates of preliminary ACV scales. Responses to the seven highest items on each value factor were summed to form interim A & C value subscales for the purposes of investigating the relation of agentic and communal values with self-favorability biases, in Sample A, and with personality and sexuality, in Sample C. Alpha reliabilities of these abbreviated measures were virtually identical in the two samples; that is, .78 and .84, for agentic and communal values, respectively.

As can be seen in Table 2, the hypothesized pattern of convergent and discriminant associations was confirmed. Agentic values correlated positively with self-deceptive enhancement, and with the other trait measures commonly viewed as agentic: the BSRI Masculinity scale, the dominance axis of the interpersonal circumplex (e.g., IAS-R Assured-Dominant, and IPQ DOM), and an array of trait exemplars of unmitigated agency, including Wiggins’s Arrogant-Calculating scale, IPQ Potency, and (Dis)Agreeableness. Also associated were all three of the Dark Triad—narcissism, Machiavellianism, and psychopathy.

As predicted, ACV communion correlated significantly positively with IM, as well as the other traits of a communal flavor: the BSRI Femininity scales, Wiggins’s Warm-Agreeable scale, IPQ LOV, Closeness, and Agreeableness, and inversely with the Dark Triad traits. Finally, as hypothesized, an unrestricted sexual orientation was significantly positively correlated with agentic values, and significantly negatively correlated with communal values.

Revision of ACV Scales

Candidate replacement items for the few poorly performing ACV items identified in Samples A, B, and C were piloted in Sample D: Results led to the replacement of two C items, three A items, and the addition of two items each to the final ACV A and C scales. These 24 items were administered in Sample E, the same sample that provided the PVQ-42 data described earlier (Figure 2).

Exploratory factor analyses of the final ACV items were conducted separately for women and men participants in Sample E. Parallel analysis was applied using both SPSS syntax (O’Connor, 2000) and tabled values (Cota, Longman, Holden, Fekken, & Xinaris, 1993). For both genders, the two methods indicated a two-factor solution.

Results of these analyses, and item descriptive statistics, including mean gender differences on each item, are presented in Table 4. Without exception, all 24 ACV items loaded most highly on their intended factor.⁶ The ACV items demonstrating the largest mean gender differences (with positive *d* values indicating higher means for women than for men) were the C item compassion (*d* = .44), and the A item superiority (*d* = -.63).

Out of a possible 9, item means for the Agency and Communal subscales were 5.93 (1.23) and 7.34 (1.30), respectively. Alpha reliabilities of the Agency scale were .83 for both men and women, and for the Communal scale were .85 and .81, for

⁶The few items evidencing substantial cross-loadings (competence, influence) share a conscientious flavor, along with its dutifulness connotation. This overlap might account for secondary associations with communion.

men and women, respectively. In the Appendix, the final item questionnaire is presented in a format ready for administration. Also included are instructions for scoring the two subscales.

Relation of ACV Scales to Schwartz's Value Types

Inclusion of the PVQ in Sample E permitted evaluation of the relative scope of the ACV scales, in that the PVQ provides scores for all 10 value types specified in Schwartz's (1992) taxonomy of values. This issue was examined via correlation and regression analyses. Correlation between the ACV and PVQ-42 scales are presented in the bottom portion of Table 2. The strongest correlations were expected and found between ACV scales and value types associated with the bipolar self-enhancement versus self-transcendence axis of the Schwartz (2002) value circumplex: Power and achievement value types were the strongest correlates of ACV agency, and benevolence and universalism value types were the strongest correlates of ACV communion.

To evaluate the scope of content coverage in the ACV scales with respect to the entire Schwartz value taxonomy, the 10 PVQ value type scale scores were regressed on each of the ACV scales. Despite the relative unidimensionality of the ACV scales, each appears to span about 80% of the content specified in Schwartz's (2002) value circumplex. Only 2 of the 10 value types, hedonism and self-direction, failed to show significant unique associations with one of the ACV scales in these regression analyses.

The pattern and magnitude of betas was very similar between women and men. In the combined-sex sample, about 45% of the variance in ACV Agency and 36% of ACV Communion was predicted by the set of 10 PVQ value type scales: These values suggest moderate overlap but not redundancy between the PVQ and ACV scales. In summary, these results lend support to the claim that the short ACV scales tap very broad value dimensions that correspond to A & C.

Agency, Communion, and Religion

To control for gender differences in religious affiliation, ACV data were standardized within gender prior to statistical comparisons among religious affiliation groups. To simplify the data presentation, a relative communion score (C-A) was calculated.

Figure 3 presents the ACV findings with respect to religious affiliations. As predicted, relative communal scores were significantly lower in atheists ($p < .05$, one-tailed) than in any other group shown, including agnostics. Respondents affiliated with fundamentalist Protestant denominations were significantly higher in relative communion than were respondents affiliated with moderate, mainstream Protestant denominations ($p < .05$). Note that those at the far ideological left were more similar to persons on the far right than to persons in the middle of the spectrum, or to atheists. Each of these findings is consistent with the claim that, in general, greater spiritual or religious interest, investment, and commitment is positively associated with a communal value orientation.

GENERAL DISCUSSION

For 50 years or so, the pairing of A & C as superordinate metaconcepts has proved invaluable in the study of traits, motives, goals, identity themes, and cultural differences. At the value level, however, no direct global measures are currently available. The research presented here was designed to high-

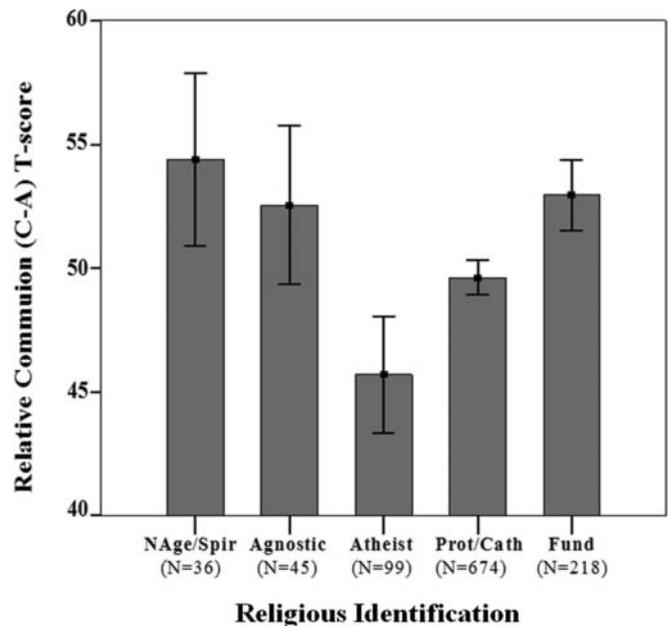


FIGURE 3.—Relative communal value orientation by religious self-identification. Data are from combined college student Samples D and E.

light the need for such an instrument and fulfill that need. The two parts of this report indicate that we met those two goals.

Part 1 presented indirect evidence from one new sample and three archival samples containing broad inventories of values and life goals. All four sources showed that higher order dimensions corresponding to A and C were either apparent or implicit. Part 2 detailed the development of the ACV, a 24-item inventory measuring global A & C values. Norms and other psychometric properties were supplied. Also detailed were four studies supporting the construct validity of the ACV subscales by locating them within a nomological network of interpersonal traits, self-favorability biases, ideology dimensions, gender, sexuality, and religious attitudes.

Potential Applications of the ACV

The potential applications of the ACV include an almost unlimited variety of theoretical and practical issues. Here we focus only on two key theoretical issues (the relation of A & C values to trait structure and to evaluative dimensions) and one key methodological issue (whether to ipsatize these values).

A & C values and trait structure. To date, there is little consensus on the interplay between levels of analysis. Some argue that values might arise from fundamental personality traits, especially genetically endowed differences (McCrae, 1994; Olver & Mooradian, 2003; Tesser, 1993). Thus people come to place value on the cardinal individual differences they observe in themselves and others. Others argue for bidirectional effects (Caprara, Schwartz, Capanna, Vecchione, & Barbaranelli, 2006).

There is a growing consensus regarding the value of two-dimensional representations of personality (DeYoung, Peterson, & Higgins, 2002; Digman 1997; Paulhus & John, 1998; Saucier & Goldberg, 2001). These models stand in stark contrast to the currently predominant five-factor organization (e.g., Costa

& McCrae, 1992; John & Srivastava, 1999). Despite the use of different labels, a close examination reveals that the four models are remarkably similar in structure and content.

The reason for this similarity, we argue, is that they all reflect the influence of agentic and communal values. Of course, personality structure begins with (relatively orthogonal) genetic contributions from the Big Five traits (e.g., McCrae, Jang, Livesley, Riemann, & Angleitner, 2001). Superimposed is the influence of socialization driven by two preeminent values—A & C. Over the course of development, this socialization process induces correlations among the Big Five (Paulhus & John, 1998). Their argument rests on the assumption that the predominant values of getting ahead and getting along are conveyed early and often in the socialization process (Bakan, 1966; Hogan, 1982).

In sum, a similar two-factor structure of phenotypic traits emerges in higher order factor analyses of a variety of trait models. Rather than coincidence, we see that ubiquitous two-factor structure emanating from two socialized values, namely, A & C. Confirmation of this speculation might require multiwave longitudinal research. It will most certainly require a practical and validated research instrument such as the ACV.

Relation of A & C values to evaluation. People tend to focus their evaluations of themselves and others on the dimensions they most value. Given the arguments in this article about their importance, A & C values should predominate in evaluative structures. Although the labels might vary, this correspondence appears to hold. The fact that two dimensions predominate in comprehensive studies of trait evaluations was revealed some time ago by Rosenberg and Sedlak (1972). Those writers chose the terms *intellectual goodness* and *social goodness*. However, the content of the highest loading items for Factor 1 (determined, skillful, industrious, intelligent) and Factor 2 (warm, helpful, sociable, sincere) suggest that A & C would have been even better labels. Under the labels agency and communion, contemporary research continues to substantiate those results (Abele & Wojciszke, 2007). Although similar structures emerge in both cases, agency looms larger for self-perception and communion looms larger in other perceptions (Wojciszke, 1997). Under the labels competence and warmth, similar dimensions have emerged in the context of stereotype research (Cuddy, Fiske, & Glick, 2008; Judd et al., 2005).

All the preceding research is consistent with our results in Part 2. A & C values lined up with the two factors found in comprehensive studies of social desirability. That pattern was anticipated by Paulhus (2002), who argued that A & C provide good summary labels for the content distinction of the two ways in which people try to appear desirable while responding to questionnaire items. Note that the same A & C structure appears in comprehensive analyses of self-enhancement variables (Paulhus & John, 1998) and self-presentation of personality (Paulhus & Trapnell, 2008).

In sum, the influence of A & C is evident in structural analyses of evaluative judgments of self and others. These dimensions appear to organize judgments whether the level of analysis is construed as values, evaluations, or conceptions of goodness. The ACV should prove useful in studying the interplay between these levels of human judgment.

Are A & C values bidimensional or bipolar? Given that all human societies promote both personal striving as well as in-group harmony, functioning adults must show some respect for both A & C. Yet, as far back as Allport et al. (1960), many value researchers have argued that values should be measured in terms of their relative (rather than their absolute) importance. Otherwise, some respondents give high importance ratings to every value they are asked about: Survey researchers might view this tendency as an acquiescent response style (Paulhus, 1991).

Even if such extravagant value claims were seen as legitimate, limitations in life choices act to differentiate value pursuits. Social and situational demands often force people to choose one of their values over another (e.g., work vs. relationships). Real-world decisions might set up the approach–avoidance dilemma inherent in unmitigated agency or unmitigated communion (Helgeson, 1994). Fortunately, most well-adjusted adults manage to alternate between the two values in an appropriate fashion.

Indeed, this relative emphasis might be especially revealing about individual differences in character. For example, darker traits such as psychopathy, narcissism, and Machiavellianism might rest on the relative value that those individuals place on agency compared to communion (Jones & Paulhus, 2010).

This frequent trade-off of the two fundamental human values helps explain why a number of other value measures continue to construe agentic and communal values as bipolar opposites. For example, the influential Schwartz model places A & C in opposition under the labels self-enhancement versus self-transcendence. Other important value configurations show a similar bipolar configuration (e.g., Grouzet et al., 2005; Kasser & Ryan, 2001).

Nonetheless, the broad set of studies presented here indicates that those two values are orthogonal unless some form of ipsatization is applied.⁷ Our two ACV components can easily be rendered bipolar by ipsatization. However, leaving the A & C values in their original orthogonal position has advantages for individual difference assessment. One could conduct an independent analysis of one value without contamination from the other. Inclusion as joint predictors in a regression equation will reveal whether only one or both values contribute to an outcome. Moreover, possible interactions between the two values can be studied. One can pose and investigate such questions such as this: Is the combination of high agentic and low communal values additive or interactive in creating a narcissistic character?

CONCLUSION

The research in this report was designed to demonstrate and resolve the need for a measure of global A & C value dimensions—an instrument that is notably absent from the A & C literature. Given its reliability, validity, and efficiency, the ACV appears to fulfill that need.

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⁷Use of multidimensional scaling, as preferred by Schwartz, has this effect: Compared to factor analysis, one less factor emerges (Davison, 1985).

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APPENDIX

ACV

Below are 24 different values that people rate of different importance in their lives. **FIRST READ THROUGH THE LIST** to familiarize yourself with all the values. While reading over the list, consider which ones tend to be most important to you and which tend to be least important to you. After familiarizing yourself with the list, rate the relative importance of each value to you as “A GUIDING PRINCIPLE IN MY LIFE.”

It is important to spread your ratings out as best you can—be sure to use some numbers in the lower range, some in the middle range, and some in the higher range. Avoid using too many similar numbers. Work fairly quickly.

Not Important to me	Quite Important to me	Highly Important to me
1-----2-----3-----4-----5-----6-----7-----8-----9		

- (01) WEALTH (financially successful, prosperous)
- (02) PLEASURE (having one’s fill of life’s pleasures and enjoyments)
- (03) FORGIVENESS (pardoning others’ faults, being merciful)
- (04) INFLUENCE (having impact, influencing people and events)
- (05) TRUST (being true to one’s word, assuming good in others)

- (06) COMPETENCE (displaying mastery, being capable, effective)
- (07) HUMILITY (appreciating others, being modest about oneself)
- (08) ACHIEVEMENT (reaching lofty goals)
- (09) ALTRUISM (helping others in need)
- (10) AMBITION (high aspirations, seizing opportunities)
- (11) LOYALTY (being faithful to friends, family, and group)
- (12) POLITENESS (courtesy, good manners)
- (13) POWER (control over others, dominance)
- (14) HARMONY (good relations, balance, wholeness)
- (15) EXCITEMENT (seeking adventure, risk, an exciting lifestyle)
- (16) HONESTY (being genuine, sincere)
- (17) COMPASSION (caring for others, displaying kindness)
- (18) STATUS (high rank, wide respect)
- (19) CIVILITY (being considerate and respectful toward others)
- (20) AUTONOMY (independent, free of others’ control)
- (21) EQUALITY (human rights and equal opportunity for all)
- (22) RECOGNITION (becoming notable, famous, or admired)
- (23) TRADITION (showing respect for family and cultural values)
- (24) SUPERIORITY (defeating the competition, standing on top)

Scoring Procedure

Calculate item means separately for the agentic and communal value scales.

12-item scales:

- Agency: 1, 2, 4, 6, 8, 10, 13, 15, 18, 20, 22, 24
- Communion: 3, 5, 7, 9, 11, 12, 14, 16, 17, 19, 21, 23

6-item scales:

- Agency: 6, 8, 13, 18, 22, 24
- Communion: 3, 9, 11, 16, 17, 19