

# Does Sociability Predict Civic Involvement and Political Participation?

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In contemporary history as well as in political science, a strong associational life known as *sociability* is thought to explain the roots of modern democracy by establishing a link between the increasing availability of free time to the middle classes, increasing willingness to gather with others in circles or associations, and increasing social capital. In personality psychology, sociability is related to prosocial behavior (i.e., the need for affiliation, agreeableness, openness, and extraversion), whose importance in different political behaviors is increasingly recognized. In the present article, we carried out 5 studies ( $N = 1,429$ ) that showed that political and associative sociability (a) can be reliably assessed, can have cross-cultural validity, and are properly associated with general social interest measures and personality domains and facets in the five-factor model; (b) do not overlap with similar concepts used in political psychology to account for political participation (political expertise, political interest, political self-efficacy); and (c) predicted political and nonpolitical group membership as well as observable choices in decision-making tasks with political and nonpolitical outcomes. The results are discussed, taking into consideration the extent to which specific facets of sociability can mediate between general personality traits and measures of civic involvement and political participation in a holistic model of political behavior.

**Keywords:** sociability, five-factor model, dictator game, political attitudes, social capital

Many people belong to various social groups to meet and interact with those who share particular interests. Some of these groups are centered around shared hobbies, such as bridge clubs and knitting circles, or shared identities and goals, such as singles clubs or parenting groups. Others involve political beliefs and goals. What separates those who join political groups from others? Why does one sociable person join a social club and another join a political organization? Identifying the characteristics that promote political involvement among people is a longstanding interest in the social sciences. In the present article, we examine the psychological concept of sociability and test, through a series of five studies, its role as a potentially useful mediator of the well-established personality–political participation relation in a holistic model of political behavior. Before presenting our empirical findings, we also discuss the link of sociability with political behavior in social science and humanities as well as in personality psychology.

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## Sociability in Political Behavior: A Brief History

In *Democracy in America*, Alexis de Tocqueville (1840/1875) noted the presence of many associations in America divided into two broad categories: political and nonpolitical. He remarked,

The political associations that exist in the United States are only a single feature in the midst of the immense assemblage of associations in that country. Americans of all ages, all conditions, and all dispositions constantly form associations. They have not only commercial and manufacturing companies, in which all take part, but associations of a thousand other kinds, religious, moral, serious, futile, general or restricted, enormous or diminutive. The Americans make associations to give entertainments, to found establishments for education, to build inns, to construct churches, to diffuse books, to send missionaries to the antipodes; in this manner they found hospitals, prisons, and schools. . . . I met with several kinds of associations in America of which I confess I had no previous notion. (de Tocqueville, 1840/1875, p. 98)

More recently, Agulhon (1977) started a historical framework of sociability by first discussing its foundations in the 19th century French and European “temperamental psychological tradition” and then illustrating its transformation into a new form of “cultural sociability,” which is noticeable in places such as cafés, clubs, Masonic and Para-Masonic lodges, and political associations (Agulhon, 1966, 1977; Van Damme, 1997; on temperamental tradition cf. Lombardo & Foschi, 2002, pp. 137–138). In his early work, Agulhon traced the rise of circles in which people found a convenient meeting place, where friends could play; smoke; drink; and, above all, discuss the events in their newspapers for a reasonable membership fee (Agulhon, 1977, p. 40). Agulhon also considered sociability to be a typically male aspect of the southern French society, which was engaged in intensive linguistic and cultural exchange, open

to novelty, and compressed into small towns with only a few places to socialize (taverns and coffee rooms). This context favored the formation of men's circles, associations, and lodges. These circles also served as a model for the women's associations that grew in the second half of the 19th century (Agulhon, 1977, p. 52). Consequently, Agulhon (1977, 1987, 1992) demonstrated not only that the wealthy bourgeoisie—driven by sociability—spent their free time in social activities, circles, and newly established associations but also that this particular form of gathering promoted successful political actions.

Since Agulhon's seminal writings (Agulhon, 1977, 1987, 1992), historians have used the notion of sociability to study the modes, behaviors, and ideologies of aggregations and particularly the formal associations with the aim to share free time, to enjoy oneself, and to exchange political ideas between different countries (Baker, 1999; Harrison, 1999; Hoffmann, 2007; Kale, 2004; O'Callaghan, 2006; Whyman, 1999). Similarly, behaviors relating to primarily living in circles based on consumer behavior—for example, the café as a place, as a “social drug,” and as a vehicle for promoting a particular ideology—were investigated (e.g., Grafe & Bollerey, 2007; Grevy, 2003; Haine, 1996; Lilti, 2005; Mager, 2010). An illuminating example is that, in American society, tea has assumed significance as a sociability drug that has mobilized movements and action for its free consumption (e.g., the Boston tea party and the Tea Party movement). The sociability construct is indeed used to comprehend and explain the roots of parliamentarianism in Western democracies by establishing a direct link between the increasing availability of free time to the middle classes, their increasing willingness to gather together with other people in social circles or associations, and their increasing desire to participate in politics to pursue specific goals.

Likewise, in political science, sociability has been a topic of long-standing interest. For instance, Putnam and his colleagues provided enough empirical support to the claim that a strong associational life influences one's level of civic engagement, which, in turn, contributes to the country's social capital—the notion Putnam and other social scientists use to measure levels of social connectedness—in Italy as well as in America (R. D. Putnam, 2000; R. D. Putnam, Leonardi, & Nanetti, 1993). In particular, he coined the “bowling alone” notion to illustrate a phenomenon by which the decline of associational life, political participation, and civic engagement in contemporary America continually deflates its social capital. Borrowing from Putnam, not only is “civic virtue . . . most powerful when embedded in a sense network of reciprocal social relations,” but also “a society of many virtuous but isolated individuals is not necessarily rich in social capital” (R. D. Putnam, 2000, p. 19). Therefore, decreasing civic engagement mines preconditions for democracy and democratization (R. D. Putnam, 1995, 2000). In sum, both social capital and a sense of connectedness are used in political science as cross-cultural predictors of education's welfare, safe and productive neighborhoods, economic prosperity, health, and happiness, as well as factors that shape political life and democratic rules (e.g., Bankoff, 2007; Bowman, 2011; Christakis & Fowler, 2009; Jain, Goyal, Fox, & Shrank, 2012; Lesage & Ha, 2012; R. D. Putnam, 2002; Sander & Putnam, 2010).

## Sociability in Psychology

In personality psychology, the term *sociability* refers to the tendency to seek and enjoy social interaction and being with other people rather than being alone. For example, more sociable individuals enjoy meetings, engage in intensive public relations, and prefer group work. Meanwhile, *social inhibition* and *shyness* are terms used to define the opposite pole of sociability in both children and adults (Buss & Plomin, 1984; Cheek & Buss, 1981; Ganiban, Saudino, Ulbricht, Neiderhiser, & Reiss, 2008; Ganiban, Ulbricht, Saudino, Reiss, & Neiderhiser, 2011; Janson & Mathiesen, 2008; Young & Brunet, 2011).

Although there is substantial agreement on the above descriptions, whether sociability is a core aspect of extraversion is less widely accepted. Recent reviews have indicated that sociability emerges later than other basic dimensions of a child's temperament related to extraversion (e.g., positive emotionality and activity) and that sociability typically loads on a general extraversion/surgency dimension in factor analyses of well-established temperament inventories (S. P. Putnam, Ellis, & Rothbart, 2001; Rothbart & Bates, 2006; Zentner & Bates, 2008). Notably, however, there is also recent evidence supporting the opposite view. For instance, a higher order sociability factor emerged in studies based on behavioral observations, which did not involve parent or self-ratings obtained from standard temperament inventories for children (Dyson, Olino, Durbin, Goldsmith, & Klein, 2012).

Moreover, the contemporary view of extraversion in adult personality studies has recognized that it encompasses different facets, such as activity, assertiveness, and positive emotionality, but there is no full agreement on the location of sociability. Two competing views are frequently debated. On the one hand, a number of authors have stressed the importance of sociability for defining extraversion based on similar arguments as those proposed by temperament scholars (i.e., empirical findings from factor analytic studies; De Raad & Perugini, 2002; John, Naumann, & Soto, 2008). For example, sociability is an independent scale in the Zuckerman–Kuhlman Personality Questionnaire (ZKPQ), but it is defined by items such as liking lively parties and being intolerant of social isolation (Zuckerman, Kuhlman, Joireman, Teta, & Kraft, 1993) and is strongly associated with extraversion as measured by both the Eysenck Personality Questionnaire (EPQ) and the Neuroticism–Extraversion–Openness Personality Inventory (NEO-PI; Zuckerman et al., 1993, p. 762; see also Aluja, García, & García, 2002, 2004).

On the other hand, others have maintained that an underlying positive incentive motivational system (i.e., reward sensitivity) is not only the core of extraversion but also accounts for individual differences in sociability, thus providing an alternative interpretation of factor analytic evidence. Specifically, the key concept is the rewarding value of social approval or affiliation with others that motivate extraverted individuals to seek social interaction (e.g., Depue & Fu, 2013; Lucas, Le, & Dyrenforth, 2008; Smillie, 2013; Smillie, Cooper, Wilt, & Revelle, 2012; Smillie, Geaney, Wilt, Cooper, & Revelle, 2013). Similarly, in personality psychology, behavioral characteristics such as being kind toward others, sympathetic, cooperative, and warm are encompassed in other seemingly overlapping concepts, like agreeableness, prosociality, humanitarianism, and the need for affiliation, acknowledged as one of the big-three motives and defined as the desire “to establish

and/or maintain warm and friendly interpersonal relations” (French & Chadwick, 1956, p. 296; see also Schönbrodt & Gerstenberg, 2012).

### Predicting Political Behaviors: General Versus Specific Constructs

In recent decades, the study of personality and politics has stimulated a great deal of research according to which many personality characteristics may account for individual differences in political behavior (Duncan, Peterson, & Zurbriggen, 2010, p. 1596). More recently, the increasing agreement regarding the five-factor model (e.g., De Raad & Perugini, 2002; John et al., 2008) has renewed researchers’ interest in relating broad personality traits to political orientation and participation. Hence, the consistent use of the five-factor model has provided a hook on which to hang political participation based on individual differences. One of the most frequently debated hypotheses states that Extraversion and Openness to Experience—more than other personality factors—are most highly correlated with “virtually all aspects of group-based political participation” (Mondak & Halperin, 2008, p. 344; see also Bekkers, 2005; Gallego & Oberski, 2012; Mondak, 2010; Mondak, Hibbing, Canache, Seligson, & Anderson, 2010; Vecchione & Caprara, 2009).

In spite of this literature, none of the social aspects of Extraversion that are measured by existing personality inventories seem to capture any enjoyment or relational aspects of sociability as defined in contemporary political science. As noted above, not only has this specific aspect of sociability received little attention as a matter for empirical investigation but also a very limited number of items in existing personality inventories (e.g., ZKPQ, EPQ, NEO-PI, BFI, HEXACO) describe sociability in such terms. With this literature in mind, we hypothesized that not only may the energetic aspects of Extraversion (e.g., being an active person) dispose people to greater associative and political participation, but also—and perhaps more important—its social aspects may play a fundamental role in politics, as reinforced by Mondak and Halperin’s (2008) claim that “after all, social interaction is at once the defining characteristic of the extravert and an essential feature of many participatory political acts” (p. 344).

Notably, however, all of the above-mentioned instruments specified sociability at a very general level of analysis. By contrast, a long-standing debate was about behavior prediction based on general versus specific measures (e.g., Epstein & O’Brien, 1985). Because our aim is to locate sociability in a holistic model of political behavior, we noted the lack of a sociability notion that specifies associative and political actions, targets, contexts, and times, in keeping with the principle that the more specific and targeted the measure, the more likely it will predict a relevant behavior in a similar specific domain (i.e., principle of correspondence or compatibility; Ajzen, 2012, pp. 444–445).

On the basis of the above premises, we devised the present article to answer the following research questions: Which aspects of sociability are already encompassed in existing questionnaires used in personality and political psychology research and which are new aspects useful for understanding political and civic engagement? Can specific political and associative ratings be used to successfully separate people actively engaged in associations, both political and nonpolitical, from those are not involved in associations at all? Would a specific sociability measure predict political participation, while current general social interest scales would not? To what extent do the political and associative ratings assessed in this article attain cross-cultural validity? To provide a definite answer to these questions, we designed five studies, each presented in the following sections.

### Study 1

The first step was to narrow down a set of items targeted at two specific aspects of sociability (see Table 1). We refer to the first aspect as *political sociability*, while we named the second one *associative sociability*. Both of these meanings are in keeping with the evidence that people who spend their free time in associations had begun meeting with others in particular places as a consequence of their personality and then translated this habit into rituals and behaviors, which were finalized to pursue specific political, or associative, goals. In addition, we tried to generate questionnaire items as similar as possible to those of R. D. Putnam (2000, p. 291). In this study, eight of these items (see Table 1) were administered to a sample of students to explore the item

Table 1  
*Study 1: Maximum Likelihood Exploratory Factor Analysis of Political and Associative Sociability Items*

Item	Factor	
	I	II
3. I enjoy situations in which I can debate my political views.	.909	-.057
1. Spending my free time discussing politics is exciting.	.813	-.002
4. A person expressing political opinions draws my attention.	.800	-.072
2. I like participating in associations in which all the members may collaborate in order to attain political goals.	.695	.155
6. Thinking about meetings with others is very pleasant for me.	.008	.858
7. As soon as I have the chance, I find a way to share time with others in group activities.	-.035	.759
5. I like meeting with others to plan group activities.	.046	.758
8. During vacations, I enjoy doing things with other people.	-.029	.544

Note.  $N = 272$ ; PROMAX rotated factor loading matrix.



factorial structure and to evaluate the extent to which the extracted factors converged and diverged in relation to some well-established measures.

## Method

**Participants.** A total of 272 undergraduate students (64% women, 36% men;  $M_{\text{age}} = 21.13$  years,  $SD = 3.60$  years) taking introductory psychology ( $N = 170$ ; 78% women, 22% men;  $M_{\text{age}} = 20.6$  years,  $SD = 3.8$  years) and engineering ( $N = 102$ ; 40% women, 60% men;  $M_{\text{age}} = 22.0$  years,  $SD = 3.0$  years) courses participated in this study. After having received the students' informed consent, two trained interviewers collected the data after regular class hours. The overall completion time for the ZKPQ, the Prosocialness Scale, and the sociability items was about 25 min.<sup>1</sup> The research participants were then debriefed on the specific research hypotheses and informed that their data would be treated anonymously in accordance with Italian privacy law.

**Instruments.** All of the research participants responded to the sociability items reported in Table 1. The respondent's task was to evaluate the extent to which that item described his or her typical beliefs. Answers were provided on a 7-point scale (1 = *I disagree completely*, 7 = *I agree completely*). We also administered the ZKPQ (De Pascalis & Russo, 2003; see also Zuckerman et al., 1993), which is a 99-item personality inventory assessing individual differences in impulsive sensation seeking ( $\alpha = .80$ ), neuroticism–anxiety ( $\alpha = .84$ ), aggression–hostility ( $\alpha = .62$ ), and activity ( $\alpha = .70$ ), as well as temperamental sociability ( $\alpha = .71$ ). It is noteworthy that although the ZKPQ is not a popular Big-Five measure, its Sociability scale is a reliable proxy of PRF Need for Affiliation, JPI Social Participation, EASI Sociability, and EPQ and NEO Extraversion (De Raad & Perugini, 2002; see also Zuckerman, Kuhlman, & Camac, 1988). Participants also completed the Prosocialness Scale ( $\alpha = .89$ ), which is a short 16-item questionnaire specifically devised to assess adult prosocialness, operatively defined in terms of behaviors and feelings that can be traced back to sharing, helping, taking care of, and feeling emphatic toward others and their needs or requests (Caprara, Steca, Zelli, & Capanna, 2005).

## Results and Discussion

An exploratory factor analysis of the political and associative sociability items, with a respondent-to-item ratio of 10:1, was carried out using the maximum likelihood (ML) method. The Kaiser–Meyer–Olkin measure of sampling adequacy also attained a fairly high value (0.79), thus indicating that the analysis was useful in reducing the dimensionality of the data set. The eigenvalues resulting from the correlation matrix were 3.44 and 2.14 for the first two factors, whereas other eigenvalues all were less than .73. Two factors (accounting for about 70% of the variance) were retained and rotated to the simple structure (PROMAX method). As one can see from Table 1, all of the items devised to assess political sociability loaded onto the first factor (43% of the variance), whereas all items tapping into associative sociability loaded onto the second factor (26% of the variance). No item had meaningful secondary loadings. The component correlation matrix indicated that the political and associative factors were significantly correlated ( $r = .22$ ).

Two composite scores were computed (see the descriptive statistics in Table 2). Associative sociability ( $\alpha = .80$ ) moderately correlated with both prosocialness and ZKPQ sociability, whereas political sociability ( $\alpha = .88$ ) was correlated with prosocialness only (see Table 2). When multiple linear regressions were performed with all of the personality measures as predictors, they accounted for about 8%,  $F(6, 265) = 3.82$ ,  $p < .01$ , and 16%,  $F(6, 265) = 6.47$ ,  $p < .01$ , of the political and associative scores. This finding showed that our operative definition of sociability was only partially accounted for by other personality characteristics assessed in the present study.

This study provided two major findings. First, our item set showed a clear-cut two-factor structure. Second, regarding the relationship between composite sociability scores and measures of competing constructs, we were able to demonstrate that they were related to broad personality traits to a limited extent. This result showed that the kind of associative behaviors described by political and associative sociability items are linked to temperamental sociability and prosociality, but existing personality questionnaires rarely measure them in terms of enjoyment derived from spending one's free time in circles. In fact, both the associative and the political sociability item content seemed to only partially overlap with the temperamental sociability items that measure sociability by the size of the participant's network of friends, the participant's tendency to be outgoing at parties, the participant's predisposition to engage in solitary activities (i.e., shyness), and so forth (e.g., Gomà-i-Freixanet, Valero, Puntí, & Zuckerman, 2004, p. 136).

## Study 2

In this study, we used predefined group membership as a criterion to establish the validity of the political and associative sociability scales. Hence, the political and associative sociability items were administered to a selected sample of people who were actively engaged in political or nonpolitical associations. To study whether political and associative sociability ratings could predict group membership, we performed a multinomial logistic regression analysis using students who participated in Study 1 as a reference category. In addition, the regression approach allowed us to test the incremental validity hypothesis, which is supported if political and associative sociability still attain statistical significance after other covariates in the model were controlled for. Preliminarily, we also used structural equation modeling to confirm the measurement model of political and associative sociability on people actively engaged in political or nonpolitical associations.

<sup>1</sup> As we also intended this sample to be used as a control group for Study 2, we assessed the participants' level of active involvement in associations by single-item participation questions. When asked to provide their self-reported degree of political participation on a 4-point scale (1 = *I am not registered in any political associations*, 4 = *I am registered in a political association and I participate in group activities a lot*), the average rating was 1.20 ( $SD = 0.57$ ). Similarly, when asked for their self-reported degree of participation in nonpolitical associations on a 4-point scale (1 = *I am not registered with any nonpolitical associations*, 4 = *I am registered with a nonpolitical association and I participate in group activities a lot*), the average rating was 1.39 ( $SD = 0.85$ ).

Table 2

*Study 1: Correlations of Sociability Ratings With Personality Scales Related to Sociability and Prosociality (in Italics) and Temperamental Traits*

Measure (rating scale used)	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Political Sociability (1–7)	3.85	1.51	—							
2. Associative Sociability (1–7)	5.03	1.17	<b>.22</b>	—						
3. Prosocialness Scale (1–5)	3.64	0.58	<b>.20</b>	<b>.33</b>	—					
4. Sociability (0–17)	8.36	3.56	<b>.02</b>	<b>.27</b>	<b>.19</b>	—				
5. Impulsive Sensation Seeking (0–19)	9.22	4.01	<b>.18</b>	<b>.14</b>	<b>.09</b>	<b>.37</b>	—			
6. Aggression–Hostility (0–15)	7.16	2.43	<b>.07</b>	–.03	<b>–.15</b>	<b>.09</b>	<b>.20</b>	—		
7. Neuroticism–Anxiety (0–19)	10.03	4.27	–.01	–.08	–.04	–.10	–.09	<b>.21</b>	—	
8. Activity (0–16)	7.83	3.40	<b>.04</b>	<b>.13</b>	<b>.16</b>	<b>.12</b>	<b>.18</b>	–.04	<b>–.16</b>	—

Note. *N* = 272. Coefficients in bold are statistically significant at  $p < .05$ . Coefficients greater than |.15| are statistically significant at  $p < .01$ .

## Method

**Participants.** A total of 304 participants (43% women, 57% men;  $M_{\text{age}} = 24.89$  years,  $SD = 4.71$  years) were recruited from both political ( $n = 204$ ) and nonpolitical ( $n = 100$ ) associations. An approximately equal number of the political participants were recruited from among left-wing activists ( $n = 100$ ) and right-wing political associations ( $n = 104$ ), each with an informal but direct link to Italian center-left and center-right wing parties. Regarding the nonpolitical groups, the research participants were sampled from those actively involved in Catholic associations with philanthropic and/or prayer-related aims. The administration procedures for the political and nonpolitical activists differed slightly from those that were followed in the previous study. In particular, each of the interviewers first got in touch with the coordinator of each association to attain their agreement to contact its members. Each interviewer then gained access to each association's periodical meetings and administered the psychometric scales. The completion time was about the same as that in the previous study. The research participants were debriefed regarding the specific research hypotheses and informed that their data would be treated anonymously in accordance with Italian privacy law.

Research participants were asked for their active involvement in associations (see footnote 1). The average ratings for political participation were 3.12 ( $SD = 1.24$ ) and 1.35 ( $SD = 0.92$ ) for the political and nonpolitical groups, respectively. As expected, the political participants differed from both the nonpolitical participants and the students who participated in Study 1 ( $M = 1.20$ ,  $SD = 0.57$ ), whereas the latter two groups did not differ statistically. When the research participants were asked for their self-reported degree of participation in nonpolitical associations, the average ratings were 2.39 ( $SD = 1.41$ ) and 3.37 ( $SD = 1.15$ ) for the political and nonpolitical groups, respectively. These two groups differed statistically between themselves, as well as from the students ( $M = 1.36$ ,  $SD = 0.86$ ;  $p < .001$ ). Although neither political nor nonpolitical associations have an age limit, we sampled local political groups that mostly comprised young adults to facilitate the comparison with students. However, the nonpolitical group ( $M_{\text{age}} = 26.06$ ,  $SD = 5.64$ ) was significantly older than both the political ( $M_{\text{age}} = 24.35$ ,  $SD = 4.10$ ;  $p < .001$ ) and the student groups ( $M_{\text{age}} = 21.13$ ,  $SD = 3.60$ ,  $p < .001$ ), whereas these latter groups also differed significantly in terms of age ( $p < .01$ ). When we compared the between-group gender distribution, we found the following significant disproportion: 39%, 54%, and 64% female

participants in the political, nonpolitical, and student groups, respectively,  $\chi^2(2) = 31.75$ ,  $p < .01$ . On the basis of the descriptive analyses above, age and gender differences were controlled for in the data analysis to prevent artifacts due to demographic variables.

**Instruments.** All of the research participants received the Sociability items, the ZKPQ (De Pascalis & Russo, 2003), and the Prosocialness Scale (Caprara et al., 2005), as in the previous study.

## Results and Discussion

**Confirmatory factor analysis.** A two-factor model, with political and associative sociability factors as either correlated or uncorrelated latent variables, was tested using EQS 6.1 (Bentler, 2004). Each latent variable loaded onto four items (i.e., no items had path loadings on more than one factor). The ML robust method was used to estimate the model parameters, as the observed data significantly violated the assumption of multivariate normality (Mardia's normalized coefficient = 24.93). We evaluated the goodness of fit of each model considering both absolute (e.g., relative chi-square  $< 5$ ; root-mean-square error of approximation [RMSEA]  $< .08$ ) and comparative fit indexes (e.g., nonnormed fit index [NNFI] and comparative fit index [CFI]  $> .90$ ; Hu & Bentler, 1999; see also Byrne, 2006). In terms of assessing the change in model fit when comparing nested models,  $\Delta\text{SB}\chi^2$  is the most commonly used measure.<sup>2</sup> However, given that any chi-square statistic is greatly affected by sample size, this criterion is not considered to be ideal. On the basis of simulation studies, Cheung and Rensvold (2002) recommended considering the  $\Delta\text{CFI}$  in the process of comparing nested models, with a  $\Delta\text{CFI}$  value larger than .010 indicating that the null hypothesis of invariance should be rejected, regardless of the  $\Delta\text{SB}\chi^2$  value.

The overall  $\text{SB}\chi^2$  was statistically significant for all models, regardless of the number of factors and whether factors were correlated. However, the models with a two-factor structure outperformed the model with a single general sociability factor (see Table 3). In contrast, both of the two-factor models approached the recommended standards, although the fit of the model with corre-

<sup>2</sup> It is worth noting that when comparing nested models that have been estimated using the ML robust method, it is not correct to carry out the chi-square difference test by merely replacing the standard chi-square value with the Satorra–Bentler (SB) one. Instead, one should apply the appropriate correction factors devised by Satorra and Bentler (2001) themselves.

Table 3

Study 2: Exact and Close Fit Confirmatory Factor Analysis Statistics of Sociability Ratings

Model	SB $\chi^2$ (df)	SB $\chi^2/df$	NNFI	CFI	RMSEA	RMSEA CI
One factor, General Sociability	232.12 (20)	11.61	.674	.767	.187	[.165, .209]
Two factor, Political and Associative Sociability, uncorrelated	86.03 (20)	4.30	.899	.928	.104	[.082, .127]
Two factor, Political and Associative Sociability, correlated	59.49 (19)	3.13	.935	.956	.084	[.060, .108]

Note.  $N = 304$ . SB = Satorra–Bentler; NNFI = nonnormed fit index; CFI = comparative fit index; RMSEA = root-mean-square error of approximation; CI = confidence interval. All chi-square measures were statistically significant at the .00001 level.

lated factors was better. To formally test which of the two-factor models provided the best account of the collected data, we assessed both the chi-square difference and the CFI difference. This analysis yielded statistically significant values for  $\Delta SB\chi^2$  (49.96,  $df = 1$ ,  $p < .001$ ) as well as a  $\Delta CFI$  value equal to .022. Both of these findings led us to conclude that a correlated two-factor factor model was the best fitting one for a sample of people who were highly involved in associative activities. As one can see from Figure 1, all of the items had a significant factor loading on the expected latent variable. The coefficients were fairly high and mirrored those resulting from the exploratory factor analysis. The reliability coefficient  $\omega$ s were also in keeping with the psychometric standard (.85 and .72 for political and associative sociability, respectively) and replicated those obtained in the previous study.

**Incremental validity analysis.** One of our goals in this study was to demonstrate whether specific political and associative sociability ratings had better incremental validity than general personality factors in separating political and nonpolitical participants from students who were not involved either in political groups or in nonpolitical associations (reference category). We first tested a logistic model in which group membership was predicted by political and associative sociability only (Model 1; see Table 4). This analysis also served as a baseline for evaluating the adjusted contribution of sociability ratings controlling for other predictors in the equations (Models 2 and 3). It is worth noting that there were three types of tests associated with each analysis. First, the chi-square tested for the overall significance of the model. Second, the likelihood ratio (LR) assessed the significance of each single predictor on the group membership in general. Finally, the Wald test assessed which logits (e.g., political group vs. students) were significantly affected by each predictor.

Model 1 was overall statistically significant,  $\chi^2(4) = 211.26$ ,  $p < .0001$ , and the LR tests indicated that both sociability ratings had an effect on group membership, although the effect size was larger for political sociability (LR = 170.34,  $df = 2$ ,  $p < .001$ ) than for associative sociability (LR = 16.83,  $df = 2$ ,  $p < .001$ ). As one can see from Table 4, as political sociability score increased, the greater the likelihood of being a member of a political group; conversely, as associative sociability score increased, the greater the likelihood of being a member of a nonpolitical group. Note that Model 1 accounted for about 30% of group membership and it yielded a 63% classification accuracy rate, which satisfied the proportional by chance accuracy criteria of 48% (Bayaga, 2010).

Next, we tested a model in which political and associative sociability ratings were entered with prosocialness and ZKPQ personality factors (Model 2). The model was overall statistically significant,  $\chi^2(16) = 288.46$ ,  $p < .0001$ , and the LR tests for political (LR = 150.13,  $df = 2$ ,  $p < .001$ ) and associative socia-

bility (LR = 16.83,  $df = 2$ ,  $p < .001$ ) still were in keeping with those assessed for Model 1. Although statistically significant, the effect size for other predictors, as measured by the LR statistic, was lower than 16.00 for prosocialness, ZKPQ Anxiety, and Impulsive Sensation Seeking and lower than 9.00 for ZKPQ Sociability, Activity, and Aggression–Hostility. As one can see from Table 4, the exponentiated regression coefficients for political and associative sociability—now adjusted for other predictors—replicated those assessed for Model 1 quite well, thereby supporting the incremental validity hypothesis. As we inspected other predictors, we got significant coefficients for prosocialness and ZKPQ Neuroticism–Anxiety, showing that as the score on these scales decreases, the greater the likelihood of political membership. In contrast, ZKPQ Activity, Aggression–Hostility, and Impulsive Sensation Seeking significantly separated the nonpolitical group from students. As the Activity score increased and the Aggression–Hostility and the Impulsive Sensation Seeking scores decreased, the greater the likelihood of nonpolitical membership. Not surprisingly, Model 2 accounted for a relatively larger amount of group membership than Model 1 did, and it also yielded a 67% classification accuracy rate.

Recalling that there was a different proportion of men and women as well as a different mean age between the three groups used as criteria, Model 3 included gender and age as predictors. Again, the model was overall statistically significant,  $\chi^2(20) =$

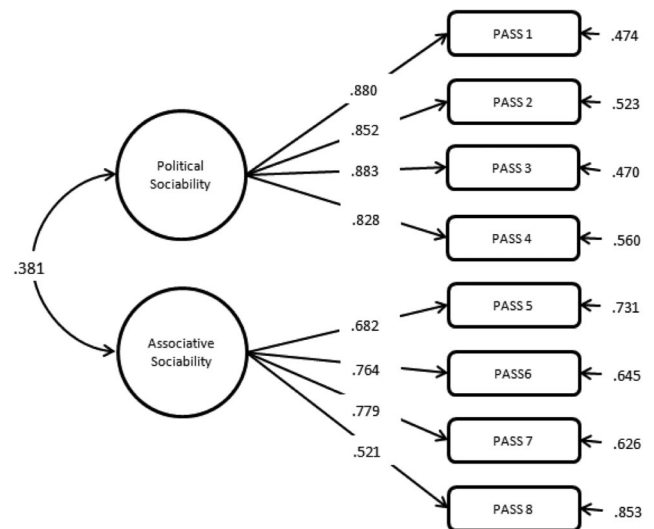


Figure 1. Standardized solution for the two-factor model of political and associative sociability items (PASS) with correlated factors.

Table 4

Study 2: Multinomial Logistic Regression Analysis of Membership in Political and Nonpolitical Associations

Predictors	Political membership			Nonpolitical membership		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
PASS Political Sociability	1.25***	1.25***	1.23***	0.97	0.96*	0.95*
PASS Associative Sociability	1.05	1.04	1.06*	1.12***	1.13***	1.14***
Prosocialness Scale		0.96**	0.97*		1.01	1.03
ZKPQ Sociability		1.06	1.07		0.94	0.95
ZKPQ Impulsive Sensation Seeking		1.00	1.01		0.89***	0.87**
ZKPQ Aggression–Hostility		1.01	1.03		0.87*	0.90
ZKPQ Neuroticism–Anxiety		0.91**	0.94		0.97	1.03
ZKPQ Activity		1.06	1.05		1.11**	1.09*
Age			1.24*			1.30***
Female gender			0.60*			0.53*

Note.  $N = 576$ . Reference category: Students. PASS = political and associative sociability items; ZKPQ = Zuckerman–Kuhlman Personality Questionnaire. Entries are exponentiated regression coefficients for  $z$ -standardized variables. Values below 1.00 indicate a negative relation; values above 1.00 indicate a positive relation. Cox-Snell  $R^2$  for Model 1 = .31; Model 2 = .39; Model 3 = .49.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

373.55,  $p < .0001$ , and the significant LR tests for age and gender supported their inclusion in the model (LR = 73.35,  $df = 2$ ,  $p < .001$ , and LR = 5.57,  $df = 2$ ,  $p = .06$ , respectively). In spite of this, political and associative sociability still predicted group membership (LR = 131.07,  $df = 2$ ,  $p < .001$ , and LR = 15.03,  $df = 2$ ,  $p < .001$ , respectively). In contrast, the inclusion of age and gender in the predictive model made the contribution of ZKPQ Activity and Aggression–Hostility no longer significant. Model 3 accounted for about half of the group membership and classified research participants with an accuracy rate of 73%.

**Sociability ratings versus single-item participation ratings.** The political and associative sociability ratings included items that may appear to measure political participation rather than how much someone enjoys spending free time in associative life, as a proxy of social capital (e.g., R. D. Putnam, 2000). Thus, a logical question is whether sociability ratings overlap with a single-item measure asking for self-reported participation in associations. Despite the fact that multi-item scales are commonly believed to outperform single items in terms of reliability and validity (e.g., Diamantopoulos, Sarstedt, Fuchs, Wilczynski, & Kaiser, 2012), we addressed this issue in two different ways. First, we examined the correlations of sociability ratings with a single-item participation question (see footnote 1). Second, we carried out an incremental validity analysis with single-item participation as a covariate variable. As for the association of political sociability with single-item political participation, we found a correlation of .48 ( $p < .01$ ), whereas associative sociability was correlated with the participant's self-reported degree of participation in nonpolitical associations ( $r = .23$ ,  $p < .01$ ). Next, we examined whether political and associative sociability predicted group membership while controlling for the single-item participation rating. Although the single-item political participation rating had a significant effect as a covariate (LR = 136.78,  $df = 2$ ,  $p < .001$ ), the main effect of political sociability on group membership still attained statistical significance (LR = 62.74,  $df = 2$ ,  $p < .001$ ). Likewise, the single-item nonpolitical participation rating had a significant effect as a covariate (LR = 172.17;  $df = 2$ ;  $p < .001$ ) and the main effect of the grouping variable on associative sociability remained (LR = 22.18,  $df = 2$ ,  $p < .001$ ).

Whereas confirmatory factor analysis strengthened the conclusions from Study 1 that specific political and associative aspects of sociability can be reliably assessed, the logistic regression analysis provided evidence for their incremental validity. Not only did sociability ratings have a gross effect on political and nonpolitical membership (Model 1), but also this effect still attained the conventional levels of statistical significance when controlling for ZKPQ personality factors, prosocialness, and demographics (Models 2 and 3, respectively; see Table 4).

Although the ZKPQ used in previous studies is considered as a proxy of classical general sociability measures as well as of the Big-Five personality factors (De Raad & Perugini, 2002), there might be other general social interest measures or specific facets of Extraversion and Agreeableness not directly assessed in this study that might threaten our conclusions. In addition, the behavioral criteria used in this study was somewhat retrospective (i.e., participants were already members of a group when they were interviewed about their personality factors). Thus, the next study was designed to specifically address both of these issues.

### Study 3

This study further expanded on the incremental validity of political and associative sociability ratings in the following two ways. First, we used an observable political behavior as criterion. Second, we enlarged the set of concurrent variables that may overlap with political and associative sociability. As to the behavioral criterion, we used allocations in the “dictator game” (Kahneman, Knetsch, & Thaler, 1986) to study the personal sociability aspects that motivated political participation under controlled experimental conditions. In the dictator game, the allocator is asked to split a  $T$  amount of money so that he or she would receive  $x$  and the recipient would receive  $T - x$ . The recipient has no reply in this game, so he or she must accept the split no matter what the allocator offered. Thus, from a game theory perspective, the allocator should offer the recipient nothing. However, experiments show noticeable individual differences (see Engel, 2011). Recently, Fowler and Kam (2007) showed that people who varied the amount they give depending on the partisan affiliation of the



recipient (i.e., Democrat vs. Republican) also participated more in politics than did those who gave the same amount to everyone (p. 825), thereby demonstrating that the dictator game is a reliable proxy of political participation. It is noteworthy that this latter variable has traditionally been assessed by self-report items drawn from a small number of landmark studies (e.g., European Social Survey [ESS], American National Election Studies [ANES]) and there is substantial agreement on the types of statements used to assess one's degree of political participation (Robinson, Shaver, & Wrightsman, 1999). Accordingly, we included the ESS items to validate our behavioral measure and to compare the incremental validity of sociability ratings in predicting behavioral as well as self-report outcomes.

Concerning the set of personality variables that may overlap with political and associative sociability, we directly assessed shyness and sociability (Cheek & Buss, 1981), need for affiliation (Schönbrodt & Gerstenberg, 2012; see also Jackson, 1967), humanitarianism (Feldman & Steenbergen, 2001), and Extraversion and Agreeableness facets (Goldberg, 1999). As in the earlier study, incremental validity is supported if political and associative sociability significantly account for allocations in the dictator game, taking into account individual differences in general measures of sociability in the personality literature.

## Method

**Participants.** Two hundred undergraduate students (55% women, 45% men), ages 18 to 31 years ( $M_{\text{age}} = 23.04$ ,  $SD = 2.61$ ), taking different introductory courses on campus, voluntarily participated in this study. After we received the students' informed consent, two trained interviewers collected the data after regular class hours. The procedure involved the administration of two dictator games in a counterbalanced presentation order and the completion of a self-report battery interspersed between the two tasks. The overall completion time was about 30 min. The research participants were then debriefed on the specific research hypotheses and informed that their data would be treated anonymously in accordance with Italian privacy law.

### Instruments.

**Dictator games.** In the dictator game, participants are typically given a small amount of money (i.e., \$10) and asked to give back a portion of the money that they choose to allocate to the recipient. Because this procedure can be very costly for large samples, we have introduced an element of uncertainty about the dictator's own payoff. In each game, participants were asked to draw 10 numbered raffle tickets from an urn, each of which had a 1 in 1,000 chance of winning €30. Fowler and Kam (2007) also used raffle ticket allocations instead of small amounts of money in a political participation study, and a recent meta-analysis confirmed that whether or not a lottery determined the implementation of the allocator's choice was not associated with the allocation size (Engel, 2011, p. 591). In contrast to Fowler and Kam (2007), who varied the partisan affiliation of the recipient (i.e., Democrat vs. Republican), we varied the political and nonpolitical nature of the recipient.

More important for the present study, each participant played two games. In each game, the participant was first asked to state a winning ticket, designated by a code comprising a letter from A to J and a number from 1 to 100 (e.g., A001). Hence, there were

1,000 precoded tickets in the urn, each folded into four parts so that no one could see the code number. Before drawing the 10 tickets, the allocator was asked how many tickets he or she would keep for him- or herself and how many tickets he or she would donate to the recipient. In the nonpolitical game, the recipient would have been an unknown other, such as a person from the building, randomly chosen with the experimenter's assistance. The allocator was informed that he or she could not donate to a family member or a friend. By contrast, in the political game, the allocator was informed that the recipient would have been his or her own favorite political character or candidate, if any, or his or her preferred political cause. To prevent carryover effects, both retained and donated tickets resulting from each game were opened at the end of the experimental procedure. Three times out of 400 games played, a research participant won the €30 and claimed the prize. The number of tickets that the allocator gave to the recipient in each game was used as the dependent variable in the analyses.

**Sociability measures.** Besides political and associative sociability scales ( $\alpha_s = .86$  and  $.82$ , respectively, in this study), the following instruments were used.

Shyness and sociability were measured with 14 items, nine measuring shyness and five measuring sociability, were administered according to standard procedures. Items were rated on a scale ranging from 0 (*extremely uncharacteristic*) to 4 (*extremely characteristic*; Cheek & Buss, 1981). Two average ratings were obtained for shyness and sociability ( $\alpha_s = .85$  and  $.75$ , respectively).

The Need for Affiliation Scale comprised 10 items, eight of which were selected from existing inventories. Five were from the Personality Research Form ("I try to be in the company of friends as much as possible," "I spend a lot of time visiting friends," "Often I would rather be alone than with a group of friends" [reverse scored], "I go out of my way to meet people," "I choose hobbies that I can share with other people"), one was from the Mehrabian Affiliation Scale ("I like to make as many friends as I can"), two were new items ("Encounters with other people make me happy," "I feel a rush of energy when I get to know new people") and two were from the Goals Inventory ("Engage in a lot of activities with other people," "Have a wide circle of friends"). This was the best selection of items that maximized reliability and validity indexes of need for affiliation in a recent study of unified motives (see Schönbrodt & Gerstenberg, 2012). In keeping with that study, all items were rated on a 6-point agree-disagree scale (0 = *strongly disagree*, 5 = *strongly agree*), except for goals items whose scale stated importance (0 = *not important to me*, 5 = *extremely important to me*). A single average rating was obtained with  $\alpha = .79$ .

Eight humanitarianism items were administered as a measure of core characteristics of prosocial orientation in political science. Items were rated on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The humanitarianism items formed a reliable scale ( $\alpha = .73$ ; Feldman & Steenbergen, 2001).

Extraversion and Agreeableness facets were assessed following the 12 NEO PI-R facets based on 120 items freely available in the International Personality Item Pool (<http://ipip.ori.org/>). More specifically, participants rated how well they believed each item described them on a 5-point scale (*very inaccurate* to *very accurate*; Goldberg, 1999; Goldberg et al., 2006). Total scores were obtained for E1 Friendliness ( $\alpha = .84$ ), E2 Gregariousness ( $\alpha = .83$ ), E3 Assertiveness ( $\alpha = .66$ ), E4 Activity Level ( $\alpha = .74$ ), E5



Excitement Seeking ( $\alpha = .84$ ), E6 Cheerfulness ( $\alpha = .85$ ), A1 Trust ( $\alpha = .85$ ), A2 Morality ( $\alpha = .80$ ), A3 Altruism ( $\alpha = .63$ ), A4 Cooperation ( $\alpha = .69$ ), A5 Modesty ( $\alpha = .77$ ), and A6 Sympathy ( $\alpha = .70$ ).

Political engagement was measured by ESS Political Participation items (Jowell & the Central Co-ordinating Team, 2003, 2005). More specifically, participants were asked to report the frequency of the following conventional or unconventional low-cost/high-cost acts during the past 12 months (de Rooij, 2012). High-cost conventional acts were "contacted a politician, government or local government official," "worked in a political party or action group," and "worked in another organization or association"; "wore or displayed a campaign badge/sticker" was a low-cost item. Low-cost unconventional acts were "signed a petition" and "boycotted certain products," whereas "taken part in a lawful public demonstration" was a high-cost item. For each item, participants had to evaluate the frequency with which they have carried out each of the listed activities on a Likert-type scale that ranged from 1 (*never*) to 5 (*frequently*). An average rating of political participation was obtained with  $\alpha = .70$ .

## Results and Discussion

**Relations among scales.** Because one of the goals of this study was to examine how political and associative sociability ratings overlapped with a relatively large set of personality variables in the sociability domain, it was logical to inspect the correlations among all personality scales before addressing the incremental validity issue (see Table 5). As predicted by personality theory, Extraversion facets (E1–E6) were all positively correlated with values ranging from .21 for activity with friendliness to .73 for friendliness with gregariousness. Likewise, with regard to Agreeableness facets, the correlation coefficients ranged from .13 for trust with modesty to .50 for cooperation with morality. As expected, not only were sociability and

shyness (Cheek & Buss, 1981) negatively correlated but also, although sociability had positive correlations with all of the Extraversion and Agreeableness facets (except modesty), shyness was negatively correlated with all of the Extraversion facets and positively correlated with the modesty facet only. The Need for Affiliation Scale also resulted in positive correlations with Extraversion facets, with a large effect size for coefficients with friendliness and gregariousness ( $r_s > .58$ ). On the contrary, humanitarianism was positively correlated with all of the Agreeableness facets, although no significant correlation was detected with those in the extraversion domain.

To conclude our descriptive analysis, we examined how political and associative sociability ratings were related to personality scales. First, political sociability was correlated with humanitarianism and sympathy on the general social interest side and with assertiveness and excitement seeking on the extraversion side. The effect sizes were, however, small to moderate, thereby replicating those obtained with impulsive sensation seeking and prosocialness in Study 1 (see also Table 2). Associative sociability was positively correlated with all of the Extraversion facets ( $r_s$  up to .35 with gregariousness and cheerfulness) and with sociability ( $r = .37$ ), whereas there were lower significant correlations with Agreeableness facets. Also in this case, the patterns of correlations as well as the moderate effect sizes were in keeping with those reported earlier (see Table 2). In sum, political and associative sociability ratings shared some common variance with established personality measures, but the coefficients were not so large as to support a full overlap of the sociability constructs. Next, we tackled the incremental validity issue with political and nonpolitical allocations in the dictator game.

**Does political sociability predict outcomes controlling for general sociability?** More than a half of the sample donated at least one ticket to the recipient both in the political and in the nonpolitical game (52% and 56%, respectively). In the political

Table 5  
Study 3: Intercorrelations of Sociability Related Measures

Measure (rating scale used)	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Political Sociability (1–7)	4.67	1.39	—																	
2. Associative Sociability (1–7)	5.08	1.29	<b>.25</b>	—																
3. Cheek & Buss (1981) Sociability (0–4)	3.76	0.74	.06	<b>.37</b>	—															
4. Cheek & Buss (1981) Shyness (0–4)	2.34	0.78	–.02	–.25	–.53	—														
5. Need for Affiliation (0–5)	3.42	0.72	.02	<b>.30</b>	<b>.58</b>	–.48	—													
6. Humanitarianism (1–5)	3.66	0.62	<b>.29</b>	.10	<b>.21</b>	–.04	.13	—												
7. E1 Friendliness (1–5)	3.72	0.66	–.07	<b>.28</b>	<b>.58</b>	–.69	<b>.56</b>	.12	—											
8. E2 Gregariousness (1–5)	3.40	0.74	–.10	<b>.35</b>	<b>.61</b>	–.63	<b>.63</b>	.07	<b>.73</b>	—										
9. E3 Assertiveness (1–5)	3.47	0.54	<b>.18</b>	<b>.19</b>	<b>.30</b>	–.35	<b>.27</b>	.01	<b>.26</b>	<b>.29</b>	—									
10. E4 Activity Level (1–5)	3.12	0.61	.10	<b>.17</b>	<b>.15</b>	–.25	<b>.17</b>	.03	<b>.21</b>	<b>.26</b>	<b>.38</b>	—								
11. E5 Excitement Seeking (1–5)	3.28	0.77	<b>.15</b>	<b>.21</b>	<b>.30</b>	–.35	<b>.35</b>	.01	<b>.34</b>	<b>.43</b>	<b>.30</b>	<b>.28</b>	—							
12. E6 Cheerfulness (1–5)	3.82	0.69	–.01	<b>.35</b>	<b>.49</b>	–.39	<b>.46</b>	.10	<b>.55</b>	<b>.52</b>	<b>.32</b>	<b>.41</b>	<b>.26</b>	—						
13. A1 Trust (1–5)	3.20	0.72	.11	<b>.29</b>	<b>.36</b>	–.19	<b>.36</b>	<b>.30</b>	<b>.34</b>	<b>.40</b>	–.00	.11	.10	<b>.44</b>	—					
14. A2 Morality (1–5)	4.10	0.65	.05	.11	.11	–.01	–.01	<b>.41</b>	.08	.02	–.23	.02	–.20	<b>.20</b>	<b>.22</b>	—				
15. A3 Altruism (1–5)	4.00	0.62	.04	<b>.30</b>	<b>.30</b>	–.13	<b>.21</b>	<b>.31</b>	<b>.29</b>	<b>.22</b>	–.03	<b>.16</b>	–.01	<b>.38</b>	<b>.31</b>	<b>.47</b>	—			
16. A4 Cooperation (1–5)	3.50	0.63	–.09	–.04	.14	–.02	.09	<b>.25</b>	<b>.22</b>	.08	–.35	–.16	–.20	.11	<b>.23</b>	<b>.50</b>	<b>.32</b>	—		
17. A5 Modesty (1–5)	3.24	0.80	.02	–.12	–.12	<b>.30</b>	–.12	<b>.17</b>	–.15	–.18	–.52	–.19	–.25	–.19	.13	<b>.41</b>	<b>.27</b>	<b>.29</b>	—	
18. A6 Sympathy (1–5)	3.60	0.59	<b>.25</b>	<b>.22</b>	<b>.32</b>	–.13	<b>.21</b>	<b>.54</b>	<b>.16</b>	.14	–.01	–.00	.01	<b>.18</b>	<b>.29</b>	<b>.43</b>	<b>.48</b>	<b>.34</b>	<b>.26</b>	—

Note.  $N = 200$ . Coefficients in bold are statistically significant at  $p < .05$ . Coefficients greater than |.18| are statistically significant at  $p < .01$ . E = Extraversion; A = Agreeableness.

game, the majority of participants designated an association (43%), a character or candidate (36%), a party (12%), or a cause (9%). The political orientation of designated parties or candidates varied from extremely liberal to conservative, whereas the types of association varied from informal organizations (e.g., local Occupy movement groups) to secular humanitarian-aid nongovernmental organizations (e.g., Emergency, Médecins Sans Frontières, Greenpeace, WWF).

The average number of tickets that the allocator gave to the political and to the unknown recipients were 2.51 ( $SD = 2.95$ ) and 2.36 ( $SD = 2.77$ ), respectively. These values were in keeping with the average allocations for age and student conditions in a recent dictator game metastudy (Engel, 2011). The two types of allocation were positively correlated one with the other, with a large effect size ( $r = .52, p < .01$ ), whereas the coefficients with the ESS political participation index were medium ( $r = .26, p < .01$ ) and small ( $r = .15, p < .05$ ) for political and nonpolitical allocations, respectively.

Next, we examined the correlation pattern that linked personality characteristics to behavioral outcomes in the dictator game. Political allocations were associated with political sociability, humanitarianism, trust, and sympathy. Nonpolitical allocations were associated with political and associative sociability, humanitarianism, trust, morality, and sympathy. Notably, partial correlations for political sociability with political allocations and for associative sociability with nonpolitical allocations were not statistically different from zero-order correlations. By contrast, the partial correlations for political and associative sociability with other-type allocations were no longer significant (zero-order and partial correlations controlling for other-type of allocation are reported in Table 6).

Other variables, such as humanitarianism, trust, and sympathy, were significantly correlated with political allocations, but these effects disappeared when controlling for nonpolitical allocations. By contrast, the correlations of humanitarianism, trust, and morality with nonpolitical associations remained significant when controlling for political allocations. On the one hand, none of the Extraversion facets were correlated with any behavioral outcome. On the other hand, Extraversion facets were correlated with self-reported political participation, which, in turn, had a large correlation with political sociability (see Table 6).

In a nutshell, our analysis demonstrated that political and associative sociability ratings predicted behavioral choices related to political participation. In addition, it showed that the relations between each type of sociability and each type of allocation can be attributed to domain specificity. However, because political and associative ratings had some overlap with other personality variables (see Table 5), we have carried out a follow-up analysis to disentangle specific predictive effects based on hierarchical multiple regression analyses with each type of allocation as dependent variable. Personality scales, age, and gender differences were entered in Step 1. Next, other-type allocation was controlled for. Finally, political and associative sociability were entered in Step 3 to test their incremental validity. Also, a separate analysis with self-reported political participation as dependent variable was presented (see Table 7).

The regression equations for political and nonpolitical allocations were statistically significant after each step, and both accounted for about 40% of the variance after Step 3. With regard to incremental validity, political sociability still provided a significant unique contribution to the explanation of political allocations after the shared variance with other predictors was partialled out.

Table 6  
Study 3: Multiple Regression Analysis of Political, Nonpolitical Allocations in the Dictator Game and Self-Reported Political Participation

Predictor	Political allocations			Nonpolitical allocations			ESS political participation ( $r$ )
	$r$	$pr$	$z$ diff	$r$	$pr$	$z$ diff	
1. Political Sociability	<b>.28</b>	<b>.21</b>	1.83	<b>.20</b>	.06	3.46**	<b>.46</b>
2. Associative Sociability	.07	-.08	3.65**	<b>.25</b>	<b>.26</b>	.08	.11
3. Cheek & Buss (1981) Sociability	.01	-.07	-1.52	.12	.13	-.42	.08
4. Cheek & Buss (1981) Shyness	.13	.12	.26	.05	-.02	1.74	-.11
5. Need for Affiliation	-.02	-.04	.57	.03	.05	-.50	.07
6. Humanitarianism	<b>.17</b>	.06	2.92**	<b>.24</b>	<b>.18</b>	1.63	<b>.21</b>
7. E1 Friendliness	-.04	-.05	.26	.01	.03	-.63	.09
8. E2 Gregariousness	-.10	<b>-.15</b>	1.45	.07	.14	-1.80	.01
9. E3 Assertiveness	-.06	-.10	1.04	.05	.10	-1.18	<b>.15</b>
10. E4 Activity Level	.04	-.01	1.29	.09	.09	.18	<b>.14</b>
11. E5 Excitement-Seeking	-.04	.00	1.06	-.09	-.08	-.29	.11
12. E6 Cheerfulness	-.07	-.13	1.55	.07	.13	-1.47	.07
13. A1 Trust	<b>.16</b>	.04	2.99**	<b>.24</b>	<b>.19</b>	1.36	.12
14. A2 Morality	.07	-.04	.78	<b>.20</b>	<b>.19</b>	.24	.01
15. A3 Altruism	-.04	-.14	-.80	.14	<b>.19</b>	-1.32	-.04
16. A4 Cooperation	.10	.02	1.93	.15	.12	.87	-.07
17. A5 Modesty	.07	.02	1.29	.09	.07	.63	.02
18. A6 Sympathy	<b>.22</b>	.13	2.34*	<b>.21</b>	.12	2.39*	<b>.16</b>

Note.  $N = 200$ .  $r$  = Pearson correlation (zero-order);  $pr$  = partial correlation controlling for other type allocation;  $z$  diff =  $z$  score according to Steiger (1980), Equation 14; ESS = European Social Survey; E = Extraversion; A = Agreeableness. Coefficients in bold are statistically significant at  $p < .05$ . Coefficients greater than  $|.18|$  are statistically significant at  $p < .01$ .

\*  $p < .05$ . \*\*  $p < .01$  (two-tailed hypothesis testing).

Table 7  
Study 3: Hierarchical Multiple Regression Analysis of Political, Nonpolitical Allocations in the Dictator Game and Self-Reported Political Participation

Predictor	Political allocations			Nonpolitical allocations			ESS political participation	
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3	Step 1	Step 2
1. Age	.14*	.12	.12	.04	-.03	-.03	-.03	-.04
2. Female gender	-.02	-.06	-.05	.09	.10	.11	-.10	-.07
3. Cheek & Buss (1981) Sociability	.09	.04	.04	.11	.06	.03	-.01	-.02
4. Cheek & Buss (1981) Shyness	.23*	.16	.18	.14	.02	.02	-.08	-.04
5. Need for Affiliation	.01	.04	.04	-.06	-.07	-.07	.00	.00
6. Humanitarianism	.04	-.01	-.05	.10	.08	.10	.18*	.09
7. E1 Friendliness	.20	.24*	.26*	-.08	-.18	-.18	.14	.18
8. E2 Gregariousness	-.18	-.24*	-.17	.12	.21*	.18	-.24*	-.11
9. E3 Assertiveness	-.05	-.12	-.15	.13	.16	.17*	.12	.04
10. E4 Activity Level	.19*	.13	.12	.12	.02	.02	.12	.09
11. E5 Excitement-Seeking	.01	.06	.03	-.10	-.10	-.11	.05	-.02
12. E6 Cheerfulness	-.18	-.13	-.12	-.09	.00	-.01	.00	.03
13. A1 Trust	.20*	.11	.10	.18*	.08	.05	.13	.07
14. A2 Morality	.04	.01	.02	.06	.04	.01	-.01	-.01
15. A3 Altruism	-.22*	-.20*	-.18*	-.05	.07	.02	-.18	-.16
16. A4 Cooperation	-.01	-.06	-.06	.10	.10	.15	-.11	-.08
17. A5 Modesty	-.07	-.07	-.10	.00	.04	.07	.13	.10
18. A6 Sympathy	.27**	.24**	.22**	.07	-.07	-.08	.14	.07
19. Other type allocation		.50***	.49***		.51***	.49***		
20. Political Sociability			.17*			-.01		.41***
20. Associative Sociability			-.08			.21**		-.02
$\Delta R^2$		.21***	.02*		.21***	.03**		.12***
Model $R^2$	.19**	.39***	.41***	.17*	.38***	.41**	.16*	.28***

Note.  $N = 200$ . ESS = European Social Survey; E = Extraversion; A = Agreeableness. Entries are standardized regression coefficients.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Likewise, the incremental validity of associative sociability was supported in the model predicting nonpolitical allocations (see Table 7). The regression equation for self-reported political participation was also statistically significant and accounted for about 30% of the variance. Political sociability provided a significant unique contribution controlling for other individual difference variables, both personality and demographics.

Our findings supported the incremental validity hypothesis. We were able to show that political and associative ratings predicted an observable political behavior, under controlled experimental circumstances, after the shared variance with general social interest measures and well-established personality facets were controlled for. The present study also revealed that both types of sociability have some common aspects with the five-factor model facets, such as the tendency to be sympathetic toward others, especially those who are worse off than oneself; the tendency to be assertive, especially in talking others into doing things or just seeking to influence them; and the tendency to love action and excitement. Moreover, while associative sociability was also characterized by higher sociability, need for affiliation, friendliness, cheerfulness, and gregariousness, political sociability was more akin to humanitarianism, which is a core characteristic of a prosocial orientation. It is interesting that our study also revealed that shyness was never a negative significant predictor of political participation. One may indeed think that political organizations are not necessarily made up almost exclusively of extraverts, although more sociable individuals are more comfortable in group activities.

However, the features of political and associative sociability, which are not encompassed in existing personality scales, describe a strong sense of enjoyment derived from spending free time with others in associations to attain diverse goals, including political ones. These characteristics may capture an emotional attitude toward politics that can be measured separately from other political attitudes. Therefore, we designed the next study to appraise how political and associative sociability work in the context of the larger set of psychometric measures, both traits and attitudes, used in studies of political participation.

## Study 4

The findings reported above showed that political and associative sociability were correlated with associative life as well as with preferences in a decision-making task related to politics. In addition, political sociability predicted political participation as measured by the ESS. In this study, we attempt to frame both aspects of sociability within the context of the interplay of other political attitudes and broad personality traits. More specifically, there is plenty of political psychology literature showing that political interest and political expertise are two basic attitudes that influence one's degree of political participation and civic engagement, both directly and indirectly (e.g., Federico, Hunt, & Ergun, 2009; Gallego & Oberski, 2012; Klemmensen, Hatemi, Hobolt, Skytthe, & Nørgaard, 2012; Leone, Desimoni, & Chirumbolo, 2012; Prior, 2010). Likewise, on the personality side, there is also evidence that

not only do Extraversion and Openness to Experience play a more prominent role than other traits, but it also seems very likely that their effect on political participation is mediated by political self-efficacy (Vecchione & Caprara, 2009). In keeping with this literature, we considered expertise, interest, Openness to Experience, and Extraversion as exogenous variables in a structural model of political participation. In this same model, we have also posited self-efficacy and political and associative sociability as endogenous variables, and we tested their role as mediators of the causal paths linking the above-mentioned exogenous variables with political participation.

## Method

**Participants.** Two hundred eighty-seven Italian adults (52% women, 48% men), ranging in age from 18 to 68 years ( $M_{\text{age}} = 37.84$  years,  $SD = 14.99$ ), living in metropolitan, urban, and rural zones (47%, 38%, 15%, respectively) in the north, center, and south of Italy (20%, 43%, 37%, respectively) voluntarily participated in this study. The sample was based on convenience. Participants were recruited by a number of undergraduate psychology students among their acquaintances. Students were trained in how to approach people and how to administer self-report questionnaires. Moreover, they were instructed to recruit neither psychology students nor their parents or family members.

**Instruments.** The following materials were used for assessing individual differences in political attitudes: the political and associative sociability ratings ( $\alpha s = .87$  and  $.81$ , respectively); the Perceived Political Self-Efficacy Scale ( $\alpha = .90$ ; Caprara, Vecchione, Capanna, & Mebane, 2009; Vecchione & Caprara, 2009), the 2006 ANES Political Interest items ( $\alpha = .94$ ; Shani, 2012), and the Political Expertise Scale ( $\alpha = .88$ ; Federico et al., 2009; Leone et al., 2012). The Big Five Inventory (Fossati, Borroni, Marchione, & Maffei, 2011) was used to assess Extraversion ( $\alpha = .80$ ), Neuroticism ( $\alpha = .78$ ), Conscientiousness ( $\alpha = .78$ ), Agreeableness ( $\alpha = .72$ ), and Openness to Experience ( $\alpha = .77$ ). Other scales unrelated to the purpose of this study as well as a form used to collect sociodemographic information (age, gender, education, urbanization, income, and geographic area of each participant) were also administered. Political participation was again measured by ESS items (see also Study 3, Method section; Jowell & the Central Co-ordinating Team, 2003, 2005).

## Results and Discussion

**Relations among scales.** We carried out a correlation analysis to reinforce the theoretical expectations that drove the construction of the hypothesized structural model of political participation. We first examined to what extent the presumed exogenous variables (i.e., political expertise, political interest, Openness and Extraversion) were associated with each of the presumed endogenous variables (i.e., political self-efficacy, political sociability, associative sociability). As predicted by the literature, Openness to Experience and Extraversion were associated with political self-efficacy, whereas none of the five-factor model personality factors except Openness to Experience were associated with political participation (see Table 8; Gallego & Oberski, 2012; Vecchione & Caprara, 2009). These findings supported the choice to consider self-efficacy as a mediator of the effect of personality on political participation in our structural model. In addition, political interest and expertise also predicted political self-efficacy, thus strengthening its central role in studies of political participation. Concerning the relations of political sociability with the posited exogenous variables, we found high coefficients with political interest and expertise and no significant ones with Openness to Experience and Extraversion. These results, coupled with the finding that political sociability was also largely correlated with political participation, showed that this specific aspect of sociability can mediate the effect of political specific exogenous variables but not the effect of the personality traits. Consistent with earlier studies reported in this article, associative sociability was related to personality traits, like Openness and Extraversion, as well as to political attitudes (see Table 8). In addition to data reported in Table 8, there was also an effect of sociodemographic variables, like younger age, higher urbanization, and southern latitude, which were all positively correlated with political attitudes and political participation, but their effect size was in the small to moderate range.

A structural model with four exogenous latent variables (political expertise, political interest, Openness, and Extraversion) and four endogenous ones (i.e., political self-efficacy, political sociability, associative sociability, and political participation) was fitted to the collected data using EQS 6.1 (Bentler, 2004; see Figure 2). Each latent variable was defined by item parcels, which were derived according to Little, Cunningham, Shahar, and Widaman

Table 8

Study 4: Intercorrelations of Big Five Personality, Political Attitudes, Sociability Ratings, and Self-Reported Political Participation

Measure (rating scale used)	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Extraversion (1–5)	3.30	0.74	—										
2. Neuroticism (1–5)	3.00	0.74	<b>-.30</b>	—									
3. Conscientiousness (1–5)	3.80	0.66	<b>.29</b>	<b>-.35</b>	—								
4. Agreeableness (1–5)	3.69	0.63	<b>.19</b>	<b>-.30</b>	<b>.39</b>	—							
5. Openness to Experience (1–5)	3.70	0.63	<b>.28</b>	<b>-.16</b>	<b>.18</b>	.11	—						
6. P. Self-efficacy (1–5)	2.44	0.85	<b>.22</b>	<b>-.20</b>	.11	.07	<b>.24</b>	—					
7. P. Interest (1–5)	3.26	1.01	.05	<b>-.12</b>	<b>.13</b>	<b>.20</b>	.10	<b>.49</b>	—				
8. P. Knowledge (0–11)	7.00	3.00	-.06	-.11	.03	.08	-.02	<b>.25</b>	<b>.51</b>	—			
9. P. Sociability (1–7)	4.34	1.57	.06	.00	.00	.09	<b>.12</b>	<b>.51</b>	<b>.62</b>	<b>.34</b>	—		
10. A. Sociability (1–7)	5.04	1.26	<b>.23</b>	.01	<b>.18</b>	<b>.12</b>	<b>.18</b>	<b>.21</b>	<b>.15</b>	.01	<b>.28</b>	—	
11. P. Participation (1–5)	2.03	0.93	.10	-.10	.00	.10	<b>.24</b>	<b>.61</b>	<b>.51</b>	<b>.18</b>	<b>.52</b>	<b>.24</b>	—

Note.  $N = 287$ . P. = Political; A. = Associative. Coefficients in bold are statistically significant at  $p < .05$ . Coefficients greater than  $|.15|$  are statistically significant at  $p < .01$ .



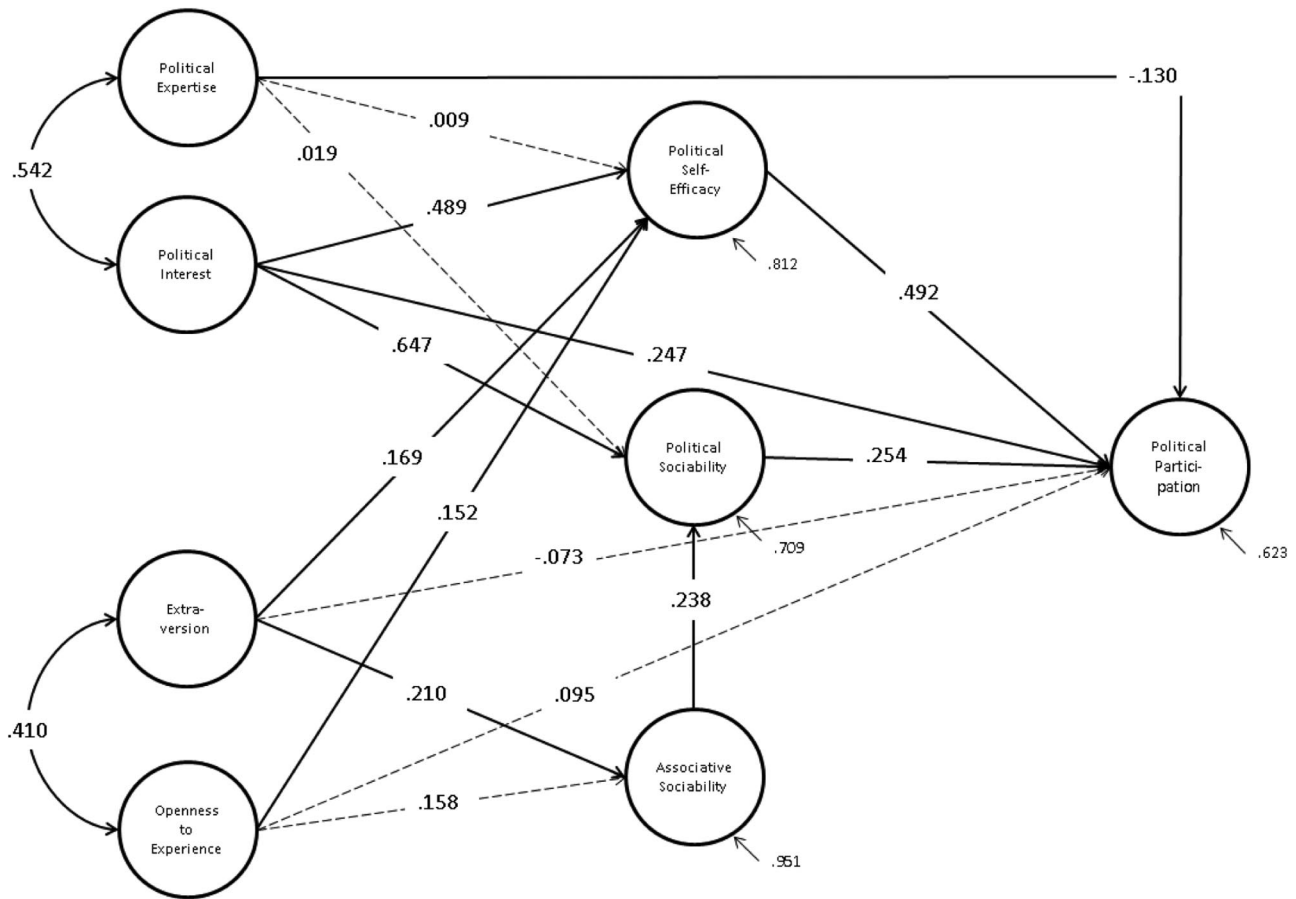


Figure 2. Structural model of political participation. Observed variables have been omitted. Solid lines represent statistically significant paths ( $p < .05$ ).

(2002), to obtain more stable parameter estimates and proper solutions of model fit. As in Study 1, the ML robust method was used to estimate the model parameters (Mardia's coefficient = 6.29). Although the model was statistically significant ( $SB\chi^2 = 188.23$ ,  $df = 98$ ,  $p < .001$ ), the inspection of both the absolute and the comparative indexes revealed that there was a good fit between the model and the data, NNFI = .956, CFI = .968, RMSEA = .057, RMSEA CI [.044, .069]. The inspection of model parameters revealed that all the parcels had a high and significant loading on the latent variables that they were supposed to measure (all  $\lambda$ s were  $> .72$  except for Openness to Experience, which had  $\lambda > .59$ ). As one can see from Figure 2, both political self-efficacy and political sociability had a significant path with political participation. Political interest also predicted both variables, while the effect of political expertise did not attain statistical significance. Unlike political sociability, Openness and Extraversion had an effect on political self-efficacy. It is interesting, however, that political sociability was affected by associative sociability, which, in turn, was also affected by Extraversion. These significant paths suggest an indirect effect of personality traits on political participation mediated by both forms of sociability.

This hypothesis as well as other mediation hypotheses were tested by assessing the statistical significance of indirect effects

based on the product of the coefficients method as well as on the joint significance method (MacKinnon, 2000; Taylor, MacKinnon, & Tein, 2008). Consistent with the literature, political self-efficacy mediated the effect of both Extraversion (Wald's  $Z = 2.28$ ,  $p < .05$ ) and Openness to Experience ( $Z = 1.87$ ,  $p < .05$ , one-tailed test) on political participation as well as the effect of political interest ( $Z = 4.55$ ,  $p < .01$ ). Conversely, political sociability mediated the effect of political interest ( $Z = 3.28$ ,  $p < .01$ ) but not the effect of personality traits. Political sociability mediated the effect of associative sociability on political participation ( $Z = 2.72$ ,  $p < .01$ ). As associative sociability also mediated the effect of Extraversion on political sociability ( $Z = 2.31$ ,  $p < .05$ ), one can think of associative and political sociability as intermediate mediators of the extraversion-political participation relation. The statistical significance of this effect ( $Z = 1.97$ ,  $p < .05$ ) supported the meaningfulness of the hypothesized causal chain.<sup>3</sup>

<sup>3</sup> To this point, it is worth noting that although different methods adequately control for Type I error, the versatile and computationally easy joint significance test (i.e., testing the statistical significance of each path relating the independent to the dependent variable via mediators) is considered just appropriate enough when only a hypothesis test is of interest, such as in the case of our study (Taylor et al., 2008).

In this study, we focused on political participation and framed political and associative sociability within the context of the interplay of other political attitudes and personality traits (Gallego & Oberski, 2012; Mondak et al., 2010). In keeping with this literature, we demonstrated that personality traits, such as Extraversion and Openness to Experience, and political interest were distal variables, which had an effect on political participation through a chain of mediators such as political self-efficacy and sociability. Although all political attitude measures shared some common variance with each other, it was possible to disentangle specific direct and indirect effects on the basis of state-of-the-art multivariate analyses, which also revealed the specific contribution of different forms of sociability in keeping with earlier studies.

### Study 5

One of the challenges for political psychology researchers is showing that reliable findings in one country can be generalized to other countries. We devised this study as a corollary study in which we tested (a) the appropriateness of the measurement model of political and associative sociability and (b) the effects of sociability on civic and political involvement in a large sample of native English speakers.

### Method

**Participants.** A total of 366 tourists (59% women, 41% men;  $M_{\text{age}} = 40.61$  years,  $SD = 15.38$  years) visiting the city of Rome voluntarily participated in this study. The distribution by country was as follows: 176 Americans, 75 British, 54 Canadians, 35 Australians, and 26 from other English-speaking countries. Participants were contacted by trained interviewers during their leisure time in the city center. After having received the informed consent,

a brief questionnaire was administered. The average completion time was about 15 min.

**Instruments.** Along with the English translation of political and associative sociability items ( $\alpha = .84$  and  $.74$  for political and associative sociability, respectively), we administered the Civic and Political Involvement Scale (used in the Pew Internet & American Life Project 2008 Survey), which asked about engagement in 11 political and civic activities (Smith, Schlozman, Verba, & Brady, 2009; see Christakis & Fowler, 2009). Political acts were “Attend a political meeting on local, town, or school affairs,” “Contribute money to a political candidate or party or any other political organization or cause,” “Attend a political rally or speech,” “Work or volunteer for a political party or candidate,” and “Attend an organized protest” ( $\alpha = .79$ ). Civic acts were “Sign a petition,” “Contact a national, state or local government official about an issue,” “Work with fellow citizens to solve a problem in community,” “Be an active member of a group that tries to influence public policy or government,” “Send a letter to the editor of a newspaper or magazine,” and “Make a speech about a community or local issue” ( $\alpha = .77$ ). For each item, participants had to evaluate the frequency with which—during the last 12 months—they have carried out each of the listed activities on a Likert-type scale that ranged from 1 (*never*) to 5 (*frequently*).

### Results and Discussion

A structural model with associative sociability as an exogenous latent variable and both political sociability and civic and political involvement as endogenous ones was fitted to the collected data using EQS 6.1 (Bentler, 2004; see Figure 3). The measurement model for political and associative sociability mirrored that tested in Study 2 (see Figure 1). Contrary to Study 2, political sociability was specified as an endogenous variable to test for the mediation

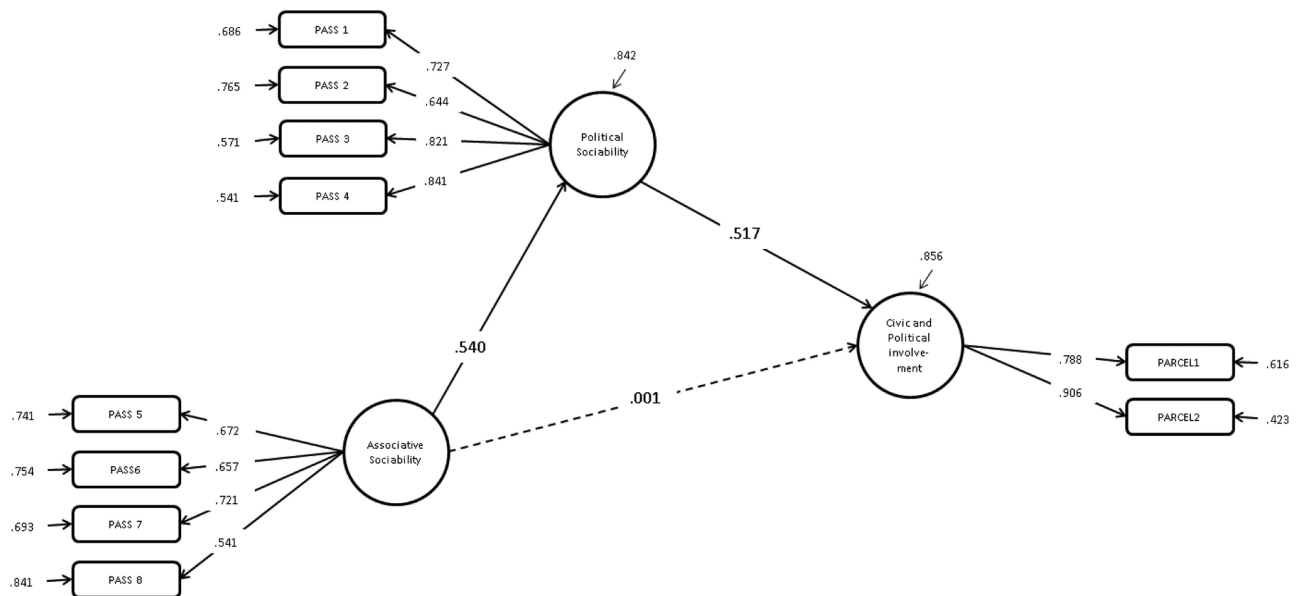


Figure 3. Structural model of civic and political involvement. Solid lines represent statistically significant paths ( $p < .05$ ). PASS = political and associative sociability items.

hypothesis disclosed in Study 4 for associative sociability on political participation via political sociability. Civic and political involvement was measured by two item parcels (Little et al., 2002). The ML robust method was used to estimate the model parameters (Mardia's coefficient = 7.88).

Although the model was statistically significant ( $SB\chi^2 = 73.87$ ,  $df = 32$ ,  $p < .001$ ), there was a good fit between the model and the data, NNFI = .953, CFI = .967, RMSEA = .060, RMSEA CI [.042, .078]. The inspection of model parameters revealed that all of the items had a high and significant loading on the latent variables that they were supposed to measure, thereby showing that the political and associative sociability measurement model was congruent with that obtained for Study 2. As one can see from Figure 3, associative sociability affected political sociability, which, in turn, had an effect on civic and political involvement. On the basis of the joint significance hypothesis testing (Taylor et al., 2008), we concluded that political sociability mediated the effect of associative sociability on civic and political involvement ( $Z = 5.09$ ,  $p < .001$ ). The path from associative sociability to civic and political involvement was zero, thus supporting a full mediation hypothesis.

This study provided us with the following major findings. First, the measurement model of political and associative sociability was very congruent for native English speakers and native Italian speakers (Study 2), thus showing that political and associative sociability scales can be used in cross-cultural political research. As in Study 4, not only was a measure of political participation successfully predicted by sociability, but also the effect of associative sociability was mediated by political sociability. Further implications of this mediation hypothesis are addressed in the following section.

## General Discussion

One's tendency to be sociable is not just a temperamental trait (e.g., Dyson et al., 2012; Ganiban et al., 2008, 2011; Janson & Mathiesen, 2008; Kagan, Reznick, & Gibbons, 1989; Rothbart & Bates, 2006; Young & Brunet, 2011) but also an explanatory concept in social sciences and humanities (e.g., Bankoff, 2007; Bowman, 2011; Gordon, 1994; Hoffmann, 2007; Jain et al., 2012; Lesage & Ha, 2012; R. D. Putnam, 1995, 2000; Sander & Putnam, 2010; Van Damme, 1997). In keeping with the writings of de Tocqueville (1840/1875), Agulhon (1977), and R. D. Putnam (2000), we have defined *sociability* as the sense of enjoyment in planning and carrying out group activities for their own sake with or without explicit political goals (for a similar notion, see also Simmel, 1950, pp. 43–44).

On the basis of these premises, we hypothesized not only that social aspects of personality may play a fundamental role in politics but also that a specific notion of sociability—complementary to already existing general definitions in personality psychology—could be operatively defined and used as an explanatory concept in political psychology. Exploratory and confirmatory factor analyses carried out on independent samples (Studies 1, 2, and 5), using both native Italian and native English speakers, revealed that specific political and associative sociability ratings had a clear-cut two-factor structure as well as high reliability indexes. More important, we showed that political and associative sociability, although related to temperamental sociability and

prosocial behavior (Studies 1 and 2), humanitarianism, and need for affiliation (Study 3), as well as to the five-factor model personality facets and domains (Studies 3 and 4), do not overlap with already existing personality characteristics but rather represent less investigated aspects.

A structural equation modeling analysis of political participation (Study 4) revealed that political and associative aspects of sociability—the same way as self-efficacy—mediated the effect of more general distal variables, such as Extraversion and Openness to Experience, which are expected to influence one's degree of political participation and civic engagement, both directly and indirectly (see Gallego & Oberski, 2012). In addition, the effect of political interest on political participation was also mediated by political sociability and political self-efficacy, as demonstrated by a number of studies (e.g., Gallego & Oberski, 2012; Klemmensen et al., 2012; Prior, 2010). It is worth noting that this model had a good fit with the collected data and helped to clarify otherwise spurious correlations between personality characteristics, political attitudes, and political participation.

Although a number of personality scholars consider sociability to be a facet of Extraversion, the findings reported in our studies revealed that one can measure specific aspects of sociability that share only a limited amount of variance with standard measures included in personality inventories. In particular, our findings are consistent with studies showing that sociability cannot be entirely equated to extraversion (e.g., Depue & Fu, 2013; Lucas et al., 2008; Smillie, 2013; Smillie et al., 2012, 2013). Moreover, political and associative sociability scales were also weakly correlated with voluntary behaviors intended to benefit another (i.e., prosocialness); values of kindness, sympathy, and benevolence toward all human beings (i.e., humanitarianism); and a person's need to seek positive, warm, and intimate social relations (i.e., need for affiliation; Caprara et al., 2005; Feldman & Steenbergen, 2001; Schönbrodt & Gerstenberg, 2012). These findings showed that individual differences in seeking and enjoying group situations aimed at attaining common political or associative goals were concepts that do not belong to the domain of general social interest measures.

It is worth noting, however, that another possible reason for weak-to-moderate correlations with general well-established measures, both traits and social interests, could be the higher specificity of political and associative sociability items compared with the lower specificity of standard items tapping into similar constructs in personality inventories. In this regard, what seems to us to be a distinctive feature of our operative definition of sociability is the item connotation in terms of action (e.g., discussing politics or planning group activities vs. talking a lot at parties or having many friends), target (e.g., fellows working together as peers vs. general others), context (e.g., cooperating in associations vs. crowded events), and time (e.g., spending free time pleasurably to attain a common goal vs. atemporality; see also Ajzen, 2012, p. 445).

Such item-content specificity could have given an advantage to political and associative sociability scales over general scales when testing predictive validity with a number of political participation behaviors, including group membership (Study 2), allocations in economic games (Study 3) and standard participation surveys (Studies 3, 4, and 5). Taken together, findings from different studies are indeed consistent with the view that the more specific the attitude, the more likely it is that it will predict a

relevant behavior, as also stated by the “principle of correspondence or compatibility” (Ajzen, 2012, p. 444).

Besides that, one cannot conclude that general personality traits are useless for understanding personality–behavior relationships. Rather, our studies demonstrated that one needs to specify a meaningful chain of intermediate mediators to explain the causal chain linking more general and distal personality predictors to relevant behavioral endpoints. For instance, associative sociability and political sociability mediated the Extraversion–political participation causal chain, which is a popular account in political psychology (Study 4). In particular, Extraversion—like other types of general sociability measures—was significantly associated with associative sociability (Studies 1, 2, and 3) but not with political sociability, although there was a significant indirect effect (Studies 4 and 5). Furthermore, the interplay between associative and political sociability and civic and political involvement was also replicated in a native English speaker sample (Study 5), thereby showing the cross-cultural validity of sociability ratings as well as their importance as a proxy of social capital.

Our conclusions, based on the empirical evidence collected from about 1,500 participants, are not only consistent with Mondak et al. (2010), who pointed out that general personality variables are basic psychological factors in a holistic model of political behavior, but also have implications for the hybridization of personality psychology with political science. For instance, we demonstrated that a better understanding of the paths that link personality traits, political attitudes, social connectedness and political efficacy to political behavior can help us to address the decline of civic engagement and social capital in advanced capitalist countries (R. D. Putnam, 2000, 2002).

### Take-Home Message

Contemporary political psychology points out a general concern about the decline of civic engagement in voting, in party membership, and in democratic political activities (e.g., Caprara, 2008). Similarly, Weitz-Shapiro and Winters (2008) showed that the average satisfaction of the population in developing countries was positively correlated to free participation in politics. From this perspective, political and associative aspects of sociability could be considered facilitators of social cohesion and within-group solidarity, and—as Agulhon (1977) and R. D. Putnam (2000, 2002) have argued—as ways of improving one’s political engagement. Political and associative sociability, along with other personality and social psychology dimensions, are thus among the attributes that are required to build up a fully developed citizenship.

Likewise, Crouch (2004) considered the lack of political participation to be among the main symptoms of the degeneration of the political systems in the countries with the longest tradition of democracy, in a decadent phase that he called “post-democracy.” In post-democracies, the parties, parliament, institutions, and political activism tend to be seen as purely formal and devoid of content. Governments that operate according to post-democratic rules do not encourage people to engage in direct political participation, movements, parties, or trade unions or their differentiation. In post-democracies, citizens perceive a loss of power that reduces their political engagement and moves them away from participating in political parties. For Crouch (2004), one of the

main ways to end a post-democracy stems from the pressure of democratic associations and movements on the traditional political parties for their renewal and modernization in connection with a new and growing “civilizing process” (p. 112). As to this point, it is worth noting that the freedom to assemble is a principle of the liberal constitutions as well as one of the fundamental human rights (e.g., Article 20 of the Universal Declaration of Human Rights and First Amendment to the United States Bill of Rights). Moreover, in the history of dictatorships, the prevention and control of sociability, using police methods to suppress free associations of citizens (parties, unions, lodges, movements), was constant.

In a similar vein, we renewed de Tocqueville’s (1840/1875) message that “amongst the laws that rule human societies there is one that seems to be more precise and clear than all others. If men are to remain civilized, or to become so, the art of associating together must grow and improve in the same ratio in which the equality of conditions is increased” (p. 102).

Therefore, evaluating political participation as well as its foundations in personality could be one of the most interesting research areas in which personality scholars can contribute to building up such an interpersonal space in a truly democratic culture (e.g., Campbell, 2013; Castells, 2000a, 2000b, 2004, 2009; Christakis & Fowler, 2009; Crouch, 2004; Morgan, Campbell, Crouch, Pedersen, & Whitley, 2010; R. D. Putnam, 1995, 2000, 2002, 2007). According to this stance, psychology will continue to play an important role in the understanding of political events and processes, as a field of inquiry that cuts across disciplinary boundaries to encompass a variety of fields, including history, political science, and sociology. Shedding light on the many driving forces that motivate political behavior may be precisely the contribution made by personality psychology to the continuing challenges to democracy in a postmodern multicultural society.

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