

**ORIGINAL ARTICLE**

# Longitudinal associations among adolescents' organized activity involvement and sociopolitical values

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**Abstract**

Organized activities represent a potentially important context for the development of adolescent sociopolitical values, but few studies have examined longitudinal associations between youths' sociopolitical values and activity involvement. Adolescents ( $N = 299$ , Time 1  $M_{\text{age}} = 15.49$ ,  $SD = .93$ , 62% female) reported on their organized activity involvement (volunteering, church, sports, arts/music, school and community clubs) and sociopolitical values (materialism, social dominance, authoritarianism, patriotism, spirituality) at baseline and one year later. Greater involvement in arts/music predicted lower spirituality and patriotism one year later and greater involvement in church predicted higher levels of spirituality and lower levels of social dominance one year later. Higher levels of materialism predicted less involvement in arts/music one year later and higher social dominance values predicted less involvement in volunteering one year later. Findings support the importance of organized activities in sociopolitical development, and suggest that sociopolitical values may guide decisions concerning future organized activity involvement.

**KEYWORDS**

adolescent political development, longitudinal design, organized activities, sociopolitical values

Adolescence is a developmental period marked by substantial social-cognitive growth and the emergence of values concerning the nature and role of social and political systems (Bardi & Schwartz, 1996). These sociopolitical values are thought to guide social decision making throughout adolescence and into adulthood. Thus, understanding the developmental contexts that help shape adolescents' emerging sociopolitical values has important implications for elucidating sources of variation in social and political behavior. Experiences within organized, group-based activities expose youth to social systems with common goals, established hierarchy, and peer cultures that may be used to inform their developing personal value systems (Hansen, Larson, & Dworkin, 2003). Cross-sectional research has demonstrated

associations among involvement in specific organized activities and distinct sociopolitical values (Oosterhoff, Ferris, & Metzger, 2014), yet the directionality of these effects is unknown. Examining relations among organized activities and sociopolitical values longitudinally may provide novel insight into whether and how organized activities serve as a context for sociopolitical development and elucidate the extent to which emerging values help guide later activity participation. The current study examined longitudinal associations among different types of adolescent organized activity involvement (i.e., volunteering, church, sports, arts/music, school and community clubs) and five distinct sociopolitical values (i.e., materialism, social dominance, authoritarianism, patriotism, spirituality).

Sociopolitical values refer to a broad system of personal priorities that have implications for social and political decisions. Consistent with the theory of basic human values (Bardi & Schwartz, 1996) and the dual process motivation model (Duckitt, 2001), these values may include (but are not limited to) constructs such as authoritarianism (i.e., support for hierarchy and structure; Altemeyer, 1996), social dominance (i.e., support for group-based inequality; Pratto, Sidanius, Stallworth, & Malle, 1994), patriotism (i.e., pride in one's country; Flanagan, Syvertsen, Gill, Galloway, & Cumsille, 2009), spirituality (i.e., connection with a higher power; Benson, Roehlkepartain, & Rude, 2003), and materialism (i.e., prioritization of wealth and material goods; Kasser, 2005).

Sociopolitical values are thought to represent an important facet of adolescents' social understanding, and are hypothesized to inform social and political beliefs and behaviors (Grube, Mayton, & Ball-Rokeach, 2010). Several studies have demonstrated links between sociopolitical values and attitudes concerning substance abuse (e.g., Wray-Lake et al., 2012), abortion and the death penalty (e.g., Cook, 1998), and civic participation (Metzger, Oosterhoff, Palmer, & Ferris, 2014). Further, many sociopolitical values have been tied to actual voting behavior (Schwartz, Caprara, & Vecchione, 2010). Previous research examining the development of sociopolitical values has primarily focused on parental socialization (e.g., Ranieri & Barni, 2012), and theorizes that adolescents' sociopolitical values are learned through parent-adolescent political discussion and parental modeling. Ecological models of development propose a more dynamic process in which adolescents' values interact with numerous elements of their microecological context, including parents, peers, school, and organized activity programs (Barni, Vieno, Rosnati, Roccato, & Scabini, 2014; McKinney, 1975; Overton, 2013). Thus, ecological models may provide a useful framework to examine contexts that are thought to shape, and are shaped by, sociopolitical values.

Organized activities are one component of youth's microecological context that may have important implications for sociopolitical development. Organized activities represent a diverse array of adult-guided, group-based organizations that include participation in volunteering, church, sports, arts/music, and school and community clubs (Eccles, Barber, Stone, & Hunt, 2003). Organized activity involvement provides youth with specific social structures conducive of value development. For instance, organized activities embed youth within a peer culture with unique norms (Mahoney, Larson, Eccles, & Lord, 2005) that may introduce teens to different political and social viewpoints (Verba, Scholzman, & Brady, 1995). Exposure to these perspectives, norms, and structures may prompt youth to evaluate their values and beliefs concerning favorable or unfavorable social and political arrangements.

Different organized activities offer distinct experiences that may be important for the formation of specific values. For example, religious congregations explicitly encourage spirituality through religious teachings, and more frequent involvement in religious activities may lead to the formation of stronger spiritual values (Oosterhoff et al., 2014). Likewise, athletes often report using spirituality as a means of coping with stress surrounding competition (Parry, Robinson, Watson, & Nesti, 2007), which may also promote spirituality. Sports involvement also typically requires youth to obey coaches that are viewed as "experts" within their chosen activity, which may promote positive values toward authority, and popular cultures affiliated with sports may emphasize material gains as an indicator of achievement (e.g., Miller, 2009), which may lead to greater materialism. These connections are supported by cross-sectional research which has found that greater involvement in sports is associated with higher levels of spirituality, authoritarianism, and materialism (Oosterhoff et al., 2014).

Involvement in volunteering and arts/music may also be linked with specific sociopolitical values. Volunteering often entails direct contact with the less fortunate, and interactions with individuals of a lower socioeconomic status may prompt adolescents to see potential injustice in social hierarchies. Prior research suggests that greater

volunteering is linked with lower social dominance (Brown, 2011). In contrast, performing arts has also been recognized as a “nonconformist” activity that is characterized an expression of individuality, which may “. . . result in minimal conventional social attachments” (Barber, Eccles, & Stone, 2001, p. 447). Thus, norms surrounding arts and music may lead to the rejection of mainstream social values, including nationalism and religious beliefs (Oosterhoff et al., 2014).

Although organized activities may provide experiences that contribute to the formation of sociopolitical values, values may also guide decisions concerning involvement in specific organized activities. Participation in organized activities is often a voluntary and autonomous decision that is based on youths’ personal interest (Vandell, Larson, Mahoney, & Watts, 2015). Youth may be more inclined to self-select into activities that are consistent with their current value systems and avoid activities that conflict with their existing values. For instance, Simpkins, Delgado, Price, Ouach, and Starbuck (2013) found that Mexican–American adolescents’ cultural values informed their decisions on how to spend their leisure time. While certain values promoted selection into specific activities (e.g., religious values and church involvement), other cultural values served as a barrier to activity involvement (e.g., valuing familism prevented some youth from engaging in activities that do not allow for familial involvement, such as sports; Simpkins et al., 2013). Similarly, youth may seek activities that allow them to cultivate and express existing sociopolitical values and avoid activities that conflict with their values. Examining whether sociopolitical values predict later involvement in organized activities may help elucidate individual differences in activity participation and provide valuable information for youth programs seeking to improve recruitment and retention rates (Vandell et al., 2015).

## 1 | THE CURRENT STUDY

The current study had two primary aims. Our first aim was to examine organized activity involvement as a developmental context for sociopolitical values by investigating whether activity participation longitudinally predicts the endorsement of sociopolitical values one year later, after accounting for previous value endorsement. To better elucidate the directionality of these effects, our second aim was to examine whether adolescents’ sociopolitical values longitudinally predict organized activity involvement one year later while controlling for previous activity participation. Based on previous research (Oosterhoff et al., 2014), it was hypothesized that greater involvement in church and sports would be associated with greater spirituality, and greater involvement in sports would be associated with greater authoritarianism and materialism. It was also hypothesized that greater involvement in volunteering would be associated with lower social dominance, whereas greater involvement in arts/music would be associated with lower patriotism and spirituality.

## 2 | METHOD

### 2.1 | Participants

Data were drawn from the second and third wave of the Youth Civic Development Project (YCDP). The YCDP is a 3-year longitudinal study examining civic development among youth from rural and city environments. Participants for the YCDP were recruited from two high schools. The first high school is located within a small town in a community with a population of 7,000 residents designated as rural by the most recent U.S. census (U.S. Census Bureau, 2010) and the second high school is located within a midsized city with a population of 70,000 residents. The YCDP utilized an open enrollment procedure, where all youth enrolled in social studies courses at the time of data collection were eligible to participate for that particular wave, regardless of whether they had previously participated in the study. Response rates indicated that roughly 40% of eligible youth at each school participated across at each time point. The total sample consisted of  $N = 703$  youth who participated at Wave 1,  $N = 846$  youth who participated at Wave 2, and  $N = 902$  youth who participated at Wave 3.

The current study builds off previous research that utilized data from Wave 2 of the YCDP to examine cross-sectional associations among organized activities and sociopolitical values (Oosterhoff et al., 2014). Data for this study

TABLE 1 Sample demographic characteristics

	<i>n</i>	%
Ethnicity		
White	264	88.3
African American/Black	7	2.9
Asian American/Pacific Islander	4	1.4
Hispanic/Latino	3	1.1
Native American	1	.4
Other	4	1.4
Biracial	16	5.4
Grades in School		
Mostly A's	89	29.8
Some A's and some B's	121	40.5
Mostly B's	25	8.4
Some B's and some C's	41	13.7
Mostly C's	4	1.3
Some C's and some D's	11	3.7
Parents' Education (mothers, fathers)		
Completed 8 <sup>th</sup> grade	12, 16	4.0, 5.4
Completed high school	110, 111	36.8, 37.1
Completed college	103, 86	34.4, 28.8
Graduate degree	50, 42	16.7, 14.0

Notes: Eight participants did not report their grades in school.

Twenty-four participants did not report mother's education and 44 participants did not report father's education.

consisted of  $N = 299$  youth that completed both Wave 2 (hereafter called Time 1) and Wave 3 (hereafter called Time 2) of the YCDP ( $M_{\text{age}} = 15.49$ ,  $SD = .93$ , Range: 14–18 years, 62% female).

Descriptive statistics for the analytic sample are presented in Table 1. The majority of participants identified as Caucasian/White, and the remaining identified as African American/Black, Asian American/Pacific Islander, Hispanic/Latino, Native American, other, or biracial. The sample racial and ethnic composition was similar to both regions from which they were drawn (LaFleur, Shaw, Coutts, & Larson, 2013). Participants earned “mostly As” and “some As and some Bs.” Regarding the highest level of parental education, most mothers and fathers either completed high school or college. The majority of participants ( $n = 219$ ) were recruited from the high school located in the small, rural town, while the remaining participants were recruited from the school located within the midsized city ( $n = 80$ ). Participating adolescents from the midsized city volunteered more often at Time 2 (City:  $M = 2.51$ ,  $SD = 1.09$ , Rural:  $M = 2.22$ ,  $SD = 1.03$ ,  $t(295) = -2.15$ ,  $p = .032$ ), were lower in social dominance at Time 2 (City:  $M = 2.61$ ,  $SD = 1.18$ , Rural:  $M = 2.91$ ,  $SD = 1.12$ ,  $t(295) = 1.99$ ,  $p = .048$ ), and had parents' with higher education ( $M = 2.91$ ,  $SD = .81$ ) than those from the rural town ( $M = 2.54$ ,  $SD = .70$ ,  $t(295) = -3.86$ ,  $p < .001$ ). Participants from both communities did not differ on any other demographic characteristic, involvement in organized activities, or endorsement of sociopolitical values.

Several steps were taken to ensure that youth who completed measures at both Time 1 and Time 2 were reflective of their cohort. Specifically, adolescents who completed both time points of the study were compared to 9th through 11th grade youth that only completed the study at Time 1 ( $N = 284$ ) and 10th through 12th grade youth who only completed the study at Time 2 ( $N = 376$ ) on all demographic and study variables.<sup>1</sup> Youth from the small rural town were more likely to complete both time points compared to the midsized city,  $\chi^2$  ( $df = 2$ ,  $N = 582$ ) = 44.76,  $p < .001$ . Participants that completed both time points were slightly more involved in clubs ( $M = 2.03$ ,  $SD = .83$ ) and were slightly older ( $M = 15.49$ ,  $SD = .93$ ) when compared to students that only completed the study at Time 1 (clubs:  $M = 1.88$ ,  $SD = .76$ ;  $t(295) = -2.11$ ,  $p = .040$ , age:  $M = 15.25$ ;  $t(295) = -2.96$ ,  $p = .003$ ). Additionally, participants that completed both time points were slightly less materialistic ( $M = 2.63$ ,  $SD = .73$ ), less involved in sports ( $M = 2.63$ ,  $SD = 1.45$ ), and more likely to be male,  $\chi^2$  ( $df = 2$ ,  $N = 674$ ) = 7.31,  $p = .007$  compared to those who only participated

at Time 2 (Materialism:  $M = 2.74$ ,  $SD = .72$ ,  $t(295) = 2.01$ ,  $p = .045$ , Sports:  $M = 2.96$ ,  $SD = 1.47$ ,  $t(295) = 2.87$ ,  $p = .001$ ). Participants that completed both time points did not differ from those that only completed one time point on any other study variables, suggesting that these students were predominantly similar to their cohort on many variables assessed in the current study, including organized activity involvement, sociopolitical values, and demographic characteristics.

## 2.2 | Procedure

Recruitment at both time points was open to adolescents that provided signed parental consent and completed adolescent assent forms. Participating adolescents completed surveys in their social studies classes during regularly scheduled class time. Members of the research team were present to answer participants' questions during the course of the survey. Participating adolescents were eligible to win cash prizes ranging in value from \$25 to \$100. All questionnaires and study procedures were approved by the ethics committee at the last author's institution.

## 2.3 | Measures

### 2.3.1 | Materialism

Six items measured materialistic values (Richins & Dawson, 1992,  $\alpha_{\text{validation}} = .71$ ; e.g., "Some of the most important accomplishments in life include getting material things"). Responses were given on a 5-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Mean scores were calculated; higher scores indicated greater materialism ( $\alpha_{\text{time 1}} = .71$ ,  $\alpha_{\text{time 2}} = .75$ ).

### 2.3.2 | Social dominance

Eight items assessed social dominance (Pratto et al., 1994,  $\alpha_{\text{validation}} = .80$ ; e.g., "This country would be better off if we cared less about how equal all people were"). Responses were given on a 7-point scale from 1 (*very negative*) to 7 (*very positive*). Mean scores were calculated; higher scores indicated greater social dominance values ( $\alpha_{\text{time 1}} = .79$ ,  $\alpha_{\text{time 2}} = .80$ ).

### 2.3.3 | Authoritarianism

Five items measured authoritarian values (Altemeyer, 1996,  $\alpha_{\text{validation}} = .90$ ; e.g., "It is important for children to learn obedience to authorities"). Responses were given on a 6-point scale from 1 (*strongly disagree*) to 6 (*strongly agree*). Mean scores were calculated; higher scores indicated greater authoritarian values ( $\alpha_{\text{time 1}} = .82$ ,  $\alpha_{\text{time 2}} = .84$ ).

### 2.3.4 | Patriotism

Four items assessed patriotic values (Kosterman & Feshbach, 1989,  $\alpha_{\text{validation}} = .87$ ; e.g., "I am proud to be an American"). Responses were given on a 6-point scale from 1 (*strongly disagree*) to 6 (*strongly agree*). Mean scores were calculated; higher scores indicated greater patriotic values ( $\alpha_{\text{time 1}} = .87$ ,  $\alpha_{\text{time 2}} = .89$ ).

### 2.3.5 | Spirituality

Seven items adapted from previous research were used to measure spirituality (Seidlitz et al., 2002,  $\alpha_{\text{validation}} = .90$ ; e.g., "Maintaining my spirituality is a priority for me"). Responses were given on a 6-point scale from 1 (*strongly disagree*) to 6 (*strongly agree*). Mean scores were calculated; higher scores indicated greater spiritual values ( $\alpha_{\text{time 1}} = .97$ ,  $\alpha_{\text{time 2}} = .98$ ).

### 2.3.6 | Organized activity involvement

Similar to prior research (Ferris, Oosterhoff, & Metzger, 2013,  $\alpha_{\text{validation}}$ 's = .38 to .87), 14 items assessed intensity of involvement in five distinct activities: *volunteering* (3 items; e.g., work for charity to collect money for a social cause), *church* (2 items; e.g., attend religious services), *sports* (2 items; e.g., participate with a school sports team), *arts/music* (2 items; take part in local or community art, music, or drama organization), and *school and community clubs* (5 items;

e.g., participate in a community social club such as YMCA or Boy/Girl Scouts; take part in a computer, language, or academic club at school).<sup>2</sup> To ensure measurement equivalence across time demands (e.g., activities which meet daily vs. once a week) and seasonal differences in activity participation, adolescents reported how often they were involved in a variety of organized activities in an average month (Bohnert, Fredricks, & Randall, 2010) on a 5-point scale from 1 (*never*) to 5 (*very often*). Mean scores were calculated within each organized activity category with higher values representing greater activity participation. All subscales demonstrated adequate internal consistency at both time points ( $\alpha$ 's ranged from .64 to .90 across both waves).

## 2.4 | Analytic strategy

An autoregressive cross-lagged model was used to test bidirectional, longitudinal associations among sociopolitical values and organized activities. Mean scores for Time 1 sociopolitical values (i.e., materialism, social dominance, authoritarianism, patriotism, spirituality) and Time 1 organized activities (i.e., volunteering, church, sports, arts/music, school and community clubs), were entered in the model as exogenous variables. Mean scores for Time 2 sociopolitical values and Time 2 organized activities were entered into the model as observed endogenous variables. Autoregressive paths were specified by regressing Time 2 activities/values on the identical construct measured at Time 1. Cross-lagged associations were specified between each organized activity type measured at Time 1 and each sociopolitical value measured at Time 2 and among each sociopolitical value measured at Time 1 and organized activity measured at Time 2. Given that adolescents typically engage in multiple organized activities simultaneously (Metzger, Crean, & Forbes-Jones, 2009) and sociopolitical values are intercorrelated with each other (e.g., Duckitt, Wagner, du Plessis, & Birum, 2002), cross-lagged paths were also specified among different organized activities and among different sociopolitical values measured at each time point. Prior research has also shown that activity involvement and sociopolitical values systematically differ across adolescent gender, age, parents' education, and rural context (Vandell et al., 2015), so all analyses controlled for these demographic covariates.

To ensure the current sample provided sufficient power and coverage, and acceptable levels of parameter bias to test a full autoregressive model, a priori Monte Carlo simulations using effect size estimates from prior research (Oosterhoff et al., 2014) were conducted. The *Mplus* syntax for this analysis is available in the Supporting Information documentation. Based on  $N = 10,000$  simulations, a sample size of  $N = 299$  result in unbiased parameter estimates ( $<5\%$ ) and standard errors ( $<5\%$ ) and provides sufficient power (92%–100%) and coverage (95% Coverage: .94 to .96) to detect anticipated effects of  $b^* = .20$  assuming  $\alpha = .05$  (Muthén & Muthén, 2002).

## 3 | RESULTS

Scatter plots and histograms were used to inspect the data for the presence of univariate outliers and Mahalanobis distance was calculated to check for multivariate outliers. No outliers were detected based on these analyses. Table 2 displays the means and standard deviations of organized activity involvement and sociopolitical values at each time point. Paired *t*-tests indicate that compared to Time 1, adolescents more strongly endorsed social dominance and less strongly endorsed authoritarianism, patriotism, and spirituality at Time 2. Additionally, youth were less involved in church and sports at Time 2 compared to Time 1. Table 3 displays the bivariate correlations for all key study variables. Older adolescents had higher patriotism values at Time 1. Across both waves, girls were more involved in volunteering, arts/music, and clubs and endorsed lower materialism and social dominance values. Adolescents with more educated parents were more involved in all activities except church and endorsed lower social dominance values at both waves.

### 3.1 | The overall autoregressive cross-lagged model

An autoregressive cross-lagged structural model was used to test bidirectional, longitudinal associations among organized activities and sociopolitical values. To account for shared variance among organized activities and shared variance sociopolitical values within model fit parameters, covariances were specified among organized activities at each time

**TABLE 2** Means, standard deviations, and paired *t*-tests comparing Time 1 and Time 2 organized activities and sociopolitical values

	Range	Time 1		Time 2		<i>t</i>
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<b>Sociopolitical Values</b>						
Materialism	1–5	2.69	.72	2.63	.73	1.40
Social Dominance	1–7	2.67	1.09	2.83	1.14	–2.59*
Authoritarianism	1–6	4.02	.97	3.84	1.04	4.17***
Patriotism	1–6	4.90	1.13	4.75	1.21	2.56*
Spirituality	1–6	4.13	1.47	3.94	1.63	3.32*
<b>Organized Activities</b>						
Volunteering	1–5	2.35	1.08	2.30	1.05	.99
Church	1–5	2.64	1.35	2.51	1.37	2.75**
Sports	1–5	2.86	1.49	2.63	1.45	4.55***
Arts/music	1–5	2.33	1.42	2.30	1.42	.34
Clubs	1–5	2.03	.83	2.00	.87	.59

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

point and among sociopolitical values at each time point. Additionally, church and spirituality were allowed to covary at each time point, and demographic characteristics were allowed to covary with organized activity involvement and sociopolitical values at Time 1. The structural model provided an acceptable fit to the data,  $\chi^2/df = 1.94$ ,  $p < .001$ , CFI = .97, TLI = .93, RMSEA = .06 (90% CI: .04, .07). Table 4 displays the standardized estimates, unstandardized estimates, and standard errors for the full model.

### 3.1.1 | Predictors of sociopolitical values

Sociopolitical values demonstrated moderate to strong stability as indicated by significant autoregressive paths ( $b^*s = .50$  to  $.61$ ). There were also certain significant cross-lagged associations among different sociopolitical values over time. Specifically, greater social dominance values at Time 1 was associated with greater authoritarianism at Time 2, and greater authoritarianism at Time 1 was associated with greater patriotism and spirituality at Time 2. Additionally, some organized activities measured at Time 1 predicted sociopolitical values one year later. Greater church involvement at Time 1 was associated with lower social dominance values and greater spirituality at Time 2. Greater involvement in arts/music at Time 1 was associated with lower patriotism and spirituality at Time 2.

### 3.1.2 | Predictors of organized activity involvement

Organized activity involvement also demonstrated moderate to strong stability, as indicated by significant autoregressive paths ( $b^*s = .57$  to  $.82$ ). There were also certain significant cross-lagged associations among different organized activity over time. Specifically, greater involvement in sports and clubs at Time 1 was associated with higher levels of volunteering at Time 2, and greater volunteering at Time 1 was associated with higher levels of club involvement at Time 2. Additionally, some sociopolitical values measured at Time 1 predicted organized activities one year later. Greater social dominance values at Time 1 was associated with lower involvement in volunteering and arts/music at Time 2, and greater materialism at Time 1 was associated with lower involvement in arts/music at Time 2.

## 4 | DISCUSSION

Developmental scholars theorize that participation in organized activities may serve as a context for the formation of sociopolitical values. Likewise, sociopolitical values are hypothesized to guide social decisions, including whether to engage in certain types of organized activities. The current study extends previous cross-sectional research (Oosterhoff et al., 2014) by demonstrating longitudinal associations among organized activities and sociopolitical values. These

TABLE 3 Bivariate correlations among study variables

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1. Age	-.09	.03	-.01	-.03	-.11	-.10	-.10	-.01	.09	-.10	-.08	.00	.07	.04	-.11	.06	.14*	.04	.01	.03	.04	.10	.03	.04
2. Gender	.06	.11	.25**	.10	-.02	.31**	.17**	.16**	.01	-.04	.28**	.14*	-.25**	-.18**	-.01	-.08	.04	.04	-.16**	-.27**	-.06	-.04	-.06	-.06
3. Parents' Education	.23**	.20**	.20**	.11	.27**	.12	.30**	.21**	.11	.30**	.15*	.29**	-.07	-.23**	.00	.00	.00	-.02	-.03	-.17**	-.02	-.01	-.03	-.03
4. Location	.06	-.05	.01	.10	.12*	.01	.10	.12*	.01	.00	-.03	-.11	-.03	-.11	-.07	.03	.03	-.01	-.04	-.12*	-.05	.05	-.02	-.02
T1 OA Involvement																								
5. Volunteering	.34**	.30**	.38**	.64**	.68**	.23**	.25**	.30**	.55**	-.07	-.17**	.09	.02	.13*	-.04	-.12*	.11	.09	.07	.07	.07	.07	.07	.07
6. Church	.26**	.22**	.32**	.25**	.78**	.27**	.16**	.30**	-.07	-.04	.40**	.28**	.68**	-.07	-.08	.35**	.27**	.58**	.27**	.58**	.27**	.58**	.27**	.58**
7. Sports	.05	.32**	.30**	.23**	.83**	.02	.27**	.10	.04	.12*	.08	.19**	.11	.04	.12*	.14*	.18**	.18**	.14*	.18**	.14*	.18**	.14*	.18**
8. Arts/music	.38**	.19**	.09	.02	.64**	.29**	-.07	-.16**	-.10	-.20**	-.05	-.02	-.15**	-.14*	-.20**	-.13*	-.13*	-.14*	-.20**	-.13*	-.14*	-.20**	-.13*	-.14*
9. Clubs	.52**	.22**	.28**	.23**	.70**	-.02	-.12*	.10	.06	.11	.02	-.04	.07	.06	.11	.02	-.04	.07	.06	.11	.02	-.04	.07	.06
T2 OA Involvement																								
10. Volunteering	.31**	.33**	.27**	.63**	-.11	-.21**	.11	.04	.13*	-.14*	-.20**	.06	.11	.12*	.12*	.12*	.12*	.12*	.12*	.12*	.12*	.12*	.12*	.12*
11. Church	.25**	.15**	.29**	-.06	-.07	.35**	.27**	.59**	-.08	-.09	.35**	.29**	.68**	.29**	.68**	.29**	.68**	.29**	.68**	.29**	.68**	.29**	.68**	.29**
12. Sports	.05	.31**	.02	-.03	.16**	.11	.21**	.07	.03	.14*	.20**	.22**	.22**	.22**	.22**	.22**	.22**	.22**	.22**	.22**	.22**	.22**	.22**	.22**
13. Arts/music	.36**	-.18**	-.26**	-.08	-.18**	-.09	-.11	-.30**	-.11	-.20**	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*
14. Clubs	-.06	-.13*	.11	.05	.11	.05	.11	.00	-.09	-.11	-.30**	-.11	-.20**	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*	-.12*
T1 Sociopolitical Values																								
15. Materialism	.23**	.09	.15**	-.03	.60**	.17**	.05	.12*	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02	.02
16. Social Dominance	.01	.13*	.07	.16*	.59**	.11	.08	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04	.04
17. Authoritarianism	.47**	.58**	.05	.05	.68**	.44**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**	.54**
18. Patriotism	.46**	.10	.12*	.39**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**	.42**
19. Spirituality	-.03	.05	.49**	.43**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**	.77**
T2 Sociopolitical Values																								
20. Materialism	.23**	.13*	.18**	.01	.18**	.01	.18**	.01	.18**	.01	.18**	.01	.18**	.01	.18**	.01	.18**	.01	.18**	.01	.18**	.01	.18**	.01
21. Social Dominance	.06	.53**	.55**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**
22. Authoritarianism	.06	.53**	.55**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**
23. Patriotism	.06	.53**	.55**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**
24. Spirituality	.06	.53**	.55**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**	.53**

Notes. T1 = Time 1, T2 = Time 2, OA = Organized Activity. Gender is coded as 2 = female, and 1 = male. Location is coded as 1 = rural town, 2 = midsized city. \*p < .05, \*\*p < .01.



**TABLE 4** Standardized estimates, unstandardized estimates, and standard errors for autoregressive cross-lagged model among organized activities and sociopolitical values

	Time 2 Sociopolitical Values														
	Materialism			Social Dominance			Authoritarianism			Patriotism			Spirituality		
	<i>b</i> *	<i>b</i>	SE	<i>b</i> *	<i>b</i>	SE	<i>b</i> *	<i>b</i>	SE	<i>b</i> *	<i>b</i>	SE	<i>b</i> *	<i>b</i>	SE
Age	.00	-.01	.04	.07	.08	.06	.00	.00	.05	.03	.03	.06	-.01	-.02	.06
Gender	-.01	-.02	.08	-.16**	-.38	.12	-.04	-.09	.10	.02	.04	.12	-.08+	-.25	.13
Parents' Education	.00	.00	.05	-.06	-.09	.08	.01	.01	.06	-.04	-.06	.08	-.03	-.07	.08
Location	-.03	-.04	.08	-.04	-.10	.12	.01	.01	.10	.05	.14	.12	.02	.07	.13
T1 Sociopolitical Values															
Materialism	.58**	.59	.05	-.02	-.03	.08	-.04	-.06	.06	.03	.04	.08	-.04	-.08	.08
Social Dominance	.01	.01	.03	.59**	.60	.05	.11*	.10	.04	.01	.01	.05	-.04	-.05	.05
Authoritarianism	-.01	-.01	.04	.04	.04	.07	.61**	.64	.10	.13*	.15	.07	.14*	.21	.07
Patriotism	.02	.02	.04	.02	.02	.06	.04	.04	.05	.50**	.52	.10	.05	.10	.06
Spirituality	.01	.00	.04	.05	.05	.06	.07	.05	.05	.09	.08	.06	.56**	.63	.06
T1 OA Involvement															
Volunteering	-.03	-.02	.04	-.02	-.02	.07	.11+	.11	.05	.09	.10	.07	-.04	-.06	.07
Church	-.06	-.03	.04	-.12*	-.11	.05	.05	.04	.04	.02	.02	.05	.17**	.20	.06
Sports	.06	.03	.03	.03	.02	.04	.00	.00	.03	.06	.05	.04	.04	.04	.04
Arts/music	.03	.02	.03	.00	.00	.04	-.08	-.05	.04	-.12*	-.10	.04	-.10*	-.10	.05
Clubs	.05	.04	.06	.11+	.15	.09	.04	-.05	.07	-.03	-.04	.09	.00	.00	.10
	Time 2 Organized Activity Involvement														
	Volunteering			Church			Sports			Arts/music			Clubs		
	<i>b</i> *	<i>b</i>	SE	<i>b</i> *	<i>b</i>	SE	<i>b</i> *	<i>b</i>	SE	<i>b</i> *	<i>b</i>	SE	<i>b</i> *	<i>b</i>	SE
Age	.10*	.11	.05	-.01	-.02	.05	-.01	-.02	.05	.06	.09	.07	.09*	.08	.04
Gender	.01	-.02	.09	-.21+	-.20	.11	-.04	-.11	.10	.06	.16	.13	.00	.00	.08
Parents' Education	.00	.00	.06	.02	.03	.07	.09*	.17	.07	.05	.10	.09	.07+	.09	.05
Location	.07	.16	.10	.04	.13	.11	-.03	-.10	.10	-.03	-.10	.14	.04	.07	.08
T1 Sociopolitical Values															
Materialism	-.08+	-.11	.06	-.02	-.03	.07	-.06+	-.11	.07	-.10*	-.19	.09	-.03	-.04	.05
Social Dominance	-.08*	-.08	.04	-.07+	-.08	.05	-.04	-.06	.04	-.11*	-.13	.06	.00	.00	.03
Authoritarianism	.03	.04	.05	.00	.00	.06	.04	.06	.06	-.03	.05	.08	.04	.03	.05
Patriotism	-.02	-.02	.05	-.07	.02	.05	.02	.03	.05	-.04	-.03	.06	-.03	-.02	.04
Spirituality	.03	.02	.05	.09+	.09	.05	.01	.01	.05	-.12+	-.12	.07	-.03	-.02	.04
T1 OA Involvement															
Volunteering	.59**	.56	.05	-.02	-.02	.06	-.01	-.02	.06	.07	.08	.08	.14*	.11	.04
Church	-.03	-.02	.04	.72**	.73	.05	.04	.04	.05	.10	.10	.06	.07	.05	.04
Sports	.11*	.07	.03	.04	.03	.04	.80**	.77	.03	.00	.00	.05	.02	.01	.03
Arts/music	-.09+	-.07	.04	-.04	-.04	.04	-.03	-.03	.04	.59**	.58	.05	.00	.00	.03
Clubs	.13*	.17	.07	-.01	-.02	.08	.00	.00	.08	-.08	-.14	.10	.57**	.60	.06

Notes. T1 = Time 1. OA = Organized Activity.

Gender is coded as 2 = female, and 1 = male. Location is coded as 1 = rural town, 2 = midsized city.

*b*\* = standardized estimate, *b* = unstandardized estimate, SE = standard error.

+*p* < .10, \**p* < .05, \*\**p* < .01.

relations were specific to the type of activity and value, highlighting the importance of distinct experiences embedded within activities and their surrounding cultures. Findings from this study further support organized activities as a context for sociopolitical development, and demonstrate that emerging sociopolitical values have implications for social behavior as youth experience greater independence and expanding autonomy.

Very little research has examined potential contexts that facilitate adolescent sociopolitical value development, and this study is among the first longitudinal investigations to empirically test whether these values may be rooted within organized activity involvement. Findings from this study suggest that involvement in arts and music and church activities may be particularly important for the formation of several sociopolitical values, including patriotism, spirituality, and social dominance. Consistent with previous cross-sectional findings (Oosterhoff et al., 2014), youth that were more involved in arts and music at baseline endorsed lower levels of patriotism and spirituality one year later. Arts and music have been characterized as “non-conformist” activities (Eccles et al., 2003), and experiences within arts and music may expose youth to values related to self-expression, leading them to question more mainstream norms (Eccles & Barber, 1999). Patriotism involves reverence for one’s country and spirituality is characterized by a connection to a higher power, both of which are common values among youth (Lippman & McIntosh, 2010; Oosterhoff et al., 2014). Potentially, the “non-conformist” peer culture surrounding art and music activities may prompt youth to critically evaluate popular support for religious and government institutions, and thereby lead to the rejection of values that may be more normative like spirituality and patriotism. In contrast, greater adolescent church involvement was associated with high levels of spirituality but also lower social dominance values. Many churches explicitly teach spiritual principles (e.g., Benson et al., 2003), and these findings replicate prior research that has found strong associations among church involvement and spirituality (Seidlitz et al., 2002). Additionally, adolescents involved in religious activities may be exposed to messages that stress equality (e.g., Fletcher, 1999), which may potentially promote egalitarianism and potentially lower social dominance (Pratto et al., 1994).

Findings from this study also build on preliminary research suggesting that sociopolitical values may influence adolescents’ decisions concerning future activity involvement (Simpkins et al., 2013) by demonstrating that certain values predict involvement in organized activities over time. For instance, greater social dominance values were associated with lower volunteering one year later. Social dominance values oppose equality and emphasize a preference for group-based hierarchy, while volunteering often promotes equality by aiding lower-status groups (e.g., those with lower socioeconomic status). Potentially, adolescents with lower social dominance values may be more inclined to volunteer as means of promoting equality and egalitarianism. Alternatively, youth who endorse higher social dominance values may be less inclined to volunteer to limit contact and support for lower status groups and upholding group-based hierarchy.

Greater endorsement of social dominance and materialism values were also associated with lower levels of arts and music involvement one year later. Adolescence is a period of heightened peer conformity (e.g., Brown, Clasen, & Eicher, 1986), and those involved in “non-conformist” activities such as arts and music may belong to peer crowds that are less popular relative to youth involved in other types of activities (e.g., sports; Brown, Lohr, & Trujillo, 1990). Adolescents who support group-based hierarchy may avoid involvement in arts and music to limit potential affiliation with “lower-status” peer crowds. Additionally, adolescents often report that their involvement in arts/music is intrinsically motivated (Driscoll, 2009), and greater materialism has been linked with lower intrinsic motivation within the school context (Ku, Dittmar, & Banerjee, 2012). Youth who prioritize material gain may be less intrinsically motivated to engage in arts/music activities and choose to invest their time in activities that provide more tangible benefits (e.g., working).

Certain demographic characteristics predicted greater involvement in organized activities and greater endorsement of sociopolitical values. Consistent with prior research, older youth were more involved in volunteering and clubs at Time 2. These age-related differences may reflect greater access or availability of certain forms of organized activity involvement for older youth (e.g., older youth may be able to drive and attend more volunteering events). Additionally, greater parents’ education predicted greater involvement in sports at Time 2. Youth from higher socioeconomic backgrounds may have more resources and access to organized sports teams and parents’ with higher education may be more inclined to encourage participation in organized sports (Zeijl, 2001). Also consistent with prior research (Oosterhoff et al., 2014), adolescent girls endorsed lower social dominance values at Time 2, which may reflect gender differences in the growth of perspective taking and empathy across adolescence (Van der Graaff et al., 2014).

Findings from this study should be taken in light of certain limitations. Although the design is longitudinal, unmeasured variables may have accounted for findings from the current study. Causal inferences should therefore be

interpreted with caution. For example, although youth often view activity selection as an autonomous decision (Vandell et al., 2015), some youth may be exposed to parent or peer messages that stress the importance of participation in certain activities and also endorse specific values. Future research is needed to examine the intersection between multiple microecological contexts (e.g., families, organized activities) and sociopolitical development. With the open enrolment study design, eligible participants had to be enrolled in a social studies course at the time of administration, which potentially limited students' opportunity to participate in subsequent years. Although several steps were taken to ensure that youth who completed both time points were similar to those who only completed one time point, findings may have been prone to attrition bias. Further, although participants exhibited considerable heterogeneity in terms of socioeconomic status and were drawn from both a city and rural context, the sample was primarily white/Caucasian. Future research is needed to examine these processes in racially and ethnically diverse samples and for youth residing in different types of communities (rural, suburban, urban) to determine whether activities are similarly linked with sociopolitical values. Some of the activities measured, such as participation in clubs or sports, may involve diverse experiences within the activity. Examining a broader array of specific activities and the components of involvement that are related to value development (e.g., specific peer norms or adult interactions) may further elucidate explanatory mechanisms for these effects.

Despite these limitations, results from this study have important implications for theory and practice. Theories concerning the origins of sociopolitical values have largely focused on individual differences in emotion-related processes (Terrizzi, Shook, & McDaniel, 2013) or socialization (e.g., Ranieri & Barni, 2012). The current research suggests that preferences for certain social and political structures may also be rooted in personal experiences with organized groups within youths' school and community. These findings are particularly notable when considering that approximately 83% of 12- to 17-year-olds participate in one or more sports, lessons, or clubs in a given year (Ehrle & Moore, 1999; Moore, Hatcher, Vandivere, & Brown, 2000), suggesting that the sociopolitical implications of organized activities may affect a large proportion of the population. Additionally, the current study also contributes to the growing body of research seeking to identify individual differences in selection into certain organized activities (Vandell et al., 2015). Much of this research has focused on the potential implications of social relationships (e.g., Bohnert, Martin, & Garber, 2007), and our findings suggest that sociopolitical values may be an additional factor that contributes to activity selection. Accordingly, youth organizations seeking to improve recruitment and retention may consider how engagement supports or conflicts with youths' sociopolitical values.

Identifying developmental contexts that may contribute to the formation of sociopolitical values has important implications for social behavior and beliefs. Results from this study demonstrate bidirectional relations between sociopolitical values and organized activity involvement, which suggest that participation in organized activities may be implicated in the development of values and certain values may inform decisions regarding future activity involvement. Examining the connection between adolescents' emerging values and organized activity involvement helps identify important contexts that inform sociopolitical development, and further exemplifies the broad, behavioral implications of these value systems.

## NOTES

<sup>1</sup> Youth who were in 12th grade at Time 1 ( $n = 263$ ) and in 9th grade at Time 2 ( $n = 224$ ) were excluded from these comparisons because they were not eligible to complete both time points.

<sup>2</sup> Prior work has separated school and community clubs into distinct categories. When separated, reliability coefficients are unacceptably low which is likely due to the small number of items. For parsimony and to gain a more reliable index of club involvement, these categories were combined for this project. The pattern of significant findings did not change when estimating combined or separate club involvement.

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