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Longitudinal associations between civic engagement and interpersonal needs during the 2018 US midterm elections

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ABSTRACT

Civic engagement is thought to enhance personal well-being, yet little research has examined links between civic engagement, burdensomeness, and belongingness during periods of heightened civic action. Late adolescent college students ($N = 235$, $M_{age} = 19.43$) completed daily assessments of civic engagement (community service, environmentalism, standard political behavior, social movement behavior), belongingness, and burdensomeness for one week during the 2018 US midterm elections. Greater daily community service and environmentalism was associated with higher daily belongingness and lower daily burdensomeness. Lower daily belongingness was associated with higher next-day community service. Greater daily standard political and social movement engagement was associated with greater daily burdensomeness. Greater daily social movement engagement was associated with lower daily belongingness. Findings help to advance theory on youth civic development.

Civic engagement—broadly defined as political and prosocial contributions to community and society—is essential for a healthy democracy (Flanagan & Faison, 2001). Advances in developmental science highlight that civic engagement is also important for personal health and well-being (Ballard et al., 2019). Participating in civic activities, including community service, political action, and environmentalism, provides youth with a variety of important developmental assets, including social support (Oosterhoff et al., 2017), feelings of purpose (Malin et al., 2015), and personal identity (Crocetti et al., 2014). Research examining the benefits of civic engagement has generally focused on links between civic participation and physical health (Ballard et al., 2019) or indicators of emotional well-being, including positive/negative affect, vitality, and depressive symptoms (Wray-Lake et al., 2019; Wray-Lake et al., 2019). Less research has longitudinally examined links between civic engagement and interpersonal psychological needs, including belongingness (i.e., perception that you belong in society) and burdensomeness (i.e., perception that you actively worsen the lives of others). Civic activities involve working with others to collectively improve society. Participation in civic activities may therefore

support interpersonal needs by providing opportunities to connect with others and enhance belongingness while meaningfully giving back to society and reducing perceptions of burdensomeness. Links between civic engagement and interpersonal needs may be especially important to examine during national elections, when political action is normative, expected, and vital for democratic functioning. Using a diary design, this research examines longitudinal associations between civic engagement and interpersonal needs among late adolescent college students during the 2018 US midterm elections.

Daily forms of civic engagement

Civic engagement entails attitudes and behaviors directed toward the betterment of society (Zaff et al., 2010). Civic activities are diverse, and may include standard types of political involvement (i.e., political activities that maintain effective democratic functioning, such as voting and following current events; Walker, 2002) and social movement behaviors (i.e., activities that seek to change the existing political structures, including protesting or boycotting; Youniss et al., 2002). Civic engagement may also involve

nonpolitical community activities, such as community service and environmentalism (Flanagan & Faison, 2001). Prior research has shown that standard political, social movement, community service, and environmentalism behaviors represent related yet distinct facets of civic engagement with different antecedents and developmental implications (Metzger et al., 2018; Wray-Lake et al., 2019). Civic engagement is therefore multidimensional and incorporating diverse forms of civic action into conceptual models is necessary to advance theory on civic development.

Opportunities for civic engagement vary widely across different activities and time-periods for young adults (Oosterhoff & Wray-Lake, 2019). Prior research has successfully measured college students' daily participation in community service and environmentalism over the course of one week (Wray-Lake et al., 2019). Less research has examined students' daily participation in political activities. Young adults participate in community service and environmental activities at a higher rate than political activities (Syvertsen et al., 2011), which may be partly due to the infrequency of election cycles and limited opportunities to participate in many forms of political action. Capturing daily-levels of civic engagement requires careful consideration of the type of activities assessed and historical timing of assessment.

Presidential or mid-term national elections provide a unique opportunity for young people to participate in standard and social movement types of political involvement. National elections are characterized by higher rates of public discourse on politics, greater opportunities to participate in election-related activities, and heightened potential for protests and boycotts designed to influence election results (e.g., Roche & Jacobson, 2019). Prior research has leveraged national elections in daily diary designs as a means of examining the antecedents and consequences of political action (Fuller-Rowell et al., 2011; Carstensen et al., 2011; Stanton et al., 2010). This study builds on prior research (Wray-Lake et al., 2019) by examining within-person daily and next-day associations between multiple forms of civic engagement (community service, environmental, standard political behaviors, social movement behaviors), and interpersonal needs over the 2018 US midterm elections. Understanding temporal associations between civic engagement and interpersonal needs during national elections will provide unique insight into the potential personal benefits or costs of being civically engaged during a sociohistorical sensitive time when participation is heightened and important for democratic health. Examining these

links among late adolescents is further important to better understand the effects of elections on adolescent development at an age when youth are becoming more politically active (Quintelier, 2007).

Civic engagement and interpersonal needs

A growing body of research has demonstrated the importance of civic engagement for adolescent and young adult health and well-being (Ballard et al., 2019; Wray-Lake et al., 2019; Wray-Lake et al., 2019). Civic engagement is thought to provide individuals with a variety of social, identity, and physiological benefits that enhance mental health. Social capital perspectives propose that civic engagement strengthens individuals' relationships and social networks with others in their community and provides opportunities for sustained social support (Putnam, 2000). Participating in civic life may also be internally rewarding and bolster a sense of personal identity, meaning, and purpose in life that stem from contributing to something outside the self (Flanagan & Bundick, 2011; Malin et al., 2015; Piliavin & Siegl, 2015). Others have further highlighted that civic engagement can serve as a context to exercise autonomy, relatedness, and competence (Wray-Lake et al., 2019). Civic engagement therefore provides youth with several inter- and intra-personal assets important for personal health and well-being (Zaff et al., 2010).

Despite the clear conceptual implications of civic engagement for psychological health and well-being, there have been few attempts to integrate theory and research on civic development with clinical science. Clinical scholars have used the interpersonal theory of suicide (ITS; Joiner, 2005) to explain variation in several facets of mental health. ITS proposes that perceptions of burdensomeness and (thwarted) belongingness are close proximal predictors of suicide ideation among youth. Burdensomeness includes negative appraisals of the self with beliefs that one's life accrues greater costs on the lives of others compared to the value it offers. Burdensomeness is consistent with the absence of feeling valued by others or society. In contrast, belongingness can be described as feelings of connectedness and the belief that one has meaningful social relationships. ITS was originally developed as a model to explain suicide ideation and attempts. However, there has been mounting evidence that burdensomeness and belongingness have implications for a wide-range of mental health issues including anxiety, stress, depression, and grief (Buitron et al., 2016; Hill et al., 2018; Hill et al., 2019).

Identifying contexts that help reduce perceptions of burdensomeness and enhance perceptions of belongingness may therefore have important implications for theory, service, and policy seeking to promote public health.

Civic engagement may be one context that reduces perceptions of burdensomeness and promotes perceptions of belongingness. Civic participation involves working with others toward accomplishing a shared goal of contributing to society. Civic participation has been connected with a greater sense of purpose, meaning, and fulfillment in youth (Ballard & Ozer, 2016). Purpose, meaning, and fulfillment may contribute to sense of feeling valued by others and thus reduce feelings of burdensomeness. Civic participation is also associated with higher levels of perceived social support (Kay & Bradbury, 2009), which may facilitate perceptions of belongingness. Civic activities may therefore be a unique context that simultaneously provides opportunities to meaningfully improve society while connecting with others. Consistent with social capital and civic purpose models of engagement, working toward the betterment of society may alleviate perceptions of burdensomeness while the collective nature of civic participation may enhance perceptions of belongingness.

Civic activities are distinct and specific forms of participation may offer different types of interpersonal benefits. For instance, community service and environmentalism often involve working with others to directly benefit those in need or benefit society more generally. Participating in community service and environmentalism may therefore be connected with greater belongingness and lower burdensomeness. In contrast, political engagement entails both risks and rewards (Oosterhoff & Wray-Lake, 2019). Political engagement has been connected with increased stress and depressive symptoms (Ballard & Ozer, 2016; Smith et al., 2019), but also may provide a sense of solidarity, reenforced identity, and improved physical health (Ballard & Ozer, 2016; Ballard et al., 2019). Political involvement may provide interpersonal benefits through working toward common goals with like-minded others, but may also involve navigating potentially contentious situations that disrupt interpersonal relationships. Thus, it is unclear how political engagement is associated with burdensomeness and belongingness during national elections. An aim of this study is to clarify these associations by examining temporal links between political engagement, burdensomeness, and belongingness.

Methodological considerations

Examining the intersection between civic engagement and interpersonal needs requires certain methodological considerations. Developmental theory proposes that civic involvement serves as contexts to promote well-being (Flanagan & Bundick, 2011). However, it is also possible that young people who feel greater feelings of belongingness and lower feelings of burdensomeness can draw on their social resources to become involved in civic action. Thus, links between civic engagement and interpersonal needs may be bi-directional. Additionally, connections between interpersonal needs and civic engagement may occur on different timescales. Whereas some activities may provide immediate same-day benefits, others may carry over into the following-day. Developmental theory emphasizes the importance of considering the scaling of intrapersonal change (Kleiman et al., 2017), yet these assumptions are rarely tested. Daily diary designs allow for the test of links between civic engagement and interpersonal needs at various time scales (same daily, next day) while also examining temporal sequencing among civic engagement and interpersonal needs for next-day effects. Further, daily diary designs with three or more measurements points allow researchers to separate within-person from between-person effects in dynamic processes (Berry & Willoughby, 2017), which is essential for building developmental theory. Daily diary designs may be especially advantageous during national elections when political action is more salient and common, thus allowing for the modeling of daily-levels of political participation (Roche & Jacobson, 2019; Carstensen et al., 2011; Stanton et al., 2010).

The current study

The purpose of this study was to examine same day and next-day within-person associations among civic engagement and interpersonal needs during the 2018 US midterm elections. Based on prior research (e.g., Wray-Lake et al., 2019), we hypothesized that those who are involved in greater volunteering and environmentalism will have greater same day and next-day belongingness and lower burdensomeness. Given that political engagement has been linked with greater personal well-being and greater interpersonal conflict (Ballard et al., 2019; Smith et al., 2019; Roche & Jacobson, 2019; Stanton et al., 2010), we explored links between standard political and social movement engagement, burdensomeness, and belongingness.

Method

Participants and procedures

Participants were recruited through the psychology subject pool at a public university in the northwest United States. The initial survey was completed by 235 college students ages 18–25 years ($M = 19.24$, $SD = 1.80$). On day 7, 95% ($n = 223$) were still participating. The sample was 50% female and 91.1% White, 3.8% Native American, 3.4% Black, and 1.7% Pacific Islander. A total of 5.1% of participants were Hispanic. Participants were primarily freshman (55.1%) or sophomores (26.5%), with fewer juniors (15.8%) and seniors (2.6%). All participants were recruited during the Fall 2018 semester, with 157 participants beginning their seven days of assessments the Thursday prior to the midterm elections and ending the Wednesday after the elections. The remaining 78 participants started the daily diary assessments two days after the election and ended nine days after the election.

After obtaining informed consent, participants completed an initial 30–45 min survey online with demographics, values, attitudes, and behaviors. As a part of this survey, participants also provided their phone numbers to receive text message reminders to complete the daily diary portion of the study. Participants completed the initial survey during a sign-up week; then all participants were sent the first daily survey on the following Thursday. Daily survey links were sent at 8:00 PM for seven consecutive days. Participants received course credit for participating.

Measures

Burdensomeness

Burdensomeness was assessed with 6-items (daily α 's ranged from .88 to .92) taken from the Interpersonal Needs Questionnaire (Joiner, 2005). Participants rated the extent to which they felt like a burden on others and society (i.e., I think I am a burden on society; I feel like a burden on the people in my life; I think I contribute to the well-being of the people in my life; I think my ideas, skills, or energy make a difference; I think I am an asset to the people in my life; I think I matter to the people in my life) on a 7-point scale from 1 (*not at all true for me*) to 7 (*very true for me*). Appropriate items were reverse coded and sum scores were calculated with higher values indicated greater burdensomeness.

Belongingness

Belongingness was assessed with 4-items (daily α 's ranged from .90 to .93) taken from the Interpersonal Needs Questionnaire (Joiner, 2005). Participants rated the extent to which they felt like they belong (i.e., I feel like I belong; other people care about me; I am close to other people; I have had at least one satisfying interaction today) on a 7-point scale from 1 (*not at all true for me*) to 7 (*very true for me*). Sum scores were calculated with higher values indicated greater belongingness.

Community service

Community service was assessed with 2-items (daily α 's ranged from .67 to .73) adapted from prior research (Wray-Lake et al., 2019). Participants reported the frequency that they had participated in two community service activities (i.e., helped someone in need, volunteered at an organization for a cause) in the past 24 hours on a 7-point scale from 1 (*not at all*) to 7 (*almost all day*). Mean scores were calculated with higher values indicating greater engagement in community service.

Environmentalism

Environmentalism was assessed with 2-items (daily α 's ranged from .73 to .84) adapted from prior research (Wray-Lake et al., 2019). Participants rated the extent to which they had participated in two activities (i.e., worked to protect the environment, acted in a way that was environmentally responsible) in the past 24 hours on a 7-point scale from 1 (*not at all*) to 7 (*almost all day*). Mean scores were calculated with higher values indicating greater engagement in environmentalism.

Standard political involvement

Standard political involvement was assessed with 5-items (daily α 's ranged from .82 to .83) adapted from prior research (Metzger & Smetana, 2009). Participants rated the extent to which they had participated in five activities (i.e., written a politician about a political issue, donated money to a political campaign, expressed your opinion to a politician on social media, posted a political message to social media, talked about politics with others) in the past 24 hours on a 7-point scale from 1 (*not at all*) to 7 (*almost all day*). The standard political activities used in this study were selected based on their likelihood of daily occurrence. Thus, voting was not included given the restricted timeframe for this action. Mean

scores were calculated with higher values indicating greater engagement in standard political activities.

Social movement participation

Social movement involvement was assessed with 3-items (daily α 's ranged from .85 to .87). Participants rated the extent to which they had participated in three activities (i.e., participated in protest, participated in a boycott, worked to change a law you disagree with) in the past 24 hours on a 7-point scale from 1 (*not at all*) to 7 (*almost all day*). Mean scores were calculated with higher values indicating greater engagement in social movement political activities.

Demographics

Participants reported their age, gender, race, and ethnicity.

Analytic technique

Fixed-effect autoregressive cross-lagged (FACL) modeling with structured residuals was used to examine longitudinal associations between civic engagement, burdensomeness, and belongingness. FACL is used to examine dynamic associations between constructs over time and was preferred over traditional autoregressive cross-lagged modeling given its ability to isolate within-person effects from between-person effects in longitudinal data. Model specification procedures were consistent with recommendations by Berry and Willoughby (2017). Latent intercepts were fixed for each construct specifying mean scores for day-level engagement in each form of civic engagement and interpersonal needs as indicators of a latent variable and fixing the factor loadings to one. Autoregressive and cross-lagged paths were specified among the residuals of the daily indicators. Per recommendations by Berry and Willoughby (2017), the variances of the residuals for the residuals were constrained to be equal. For parsimony, we also constrained each autoregressive and cross-lagged effect to be equal given that we did not expect differences in these estimates across any given day. Separate covariances were specified across constructs for the same day, and were constrained to be equal to indicate day effects¹. A covariance was also specified across intercepts for the latent variables and was used to indicate an overall

between-person effect. See Figure 1 for a conceptual depiction of the primary model.

Separate models were specified for each form of civic engagement (community service, environmentalism, standard political involvement, social movement involvement) and interpersonal needs (burdensomeness, belongingness). All models accounted for age, gender, and race (coded 1 = Not White, 2 = White) by regressing the between-person intercepts and within-person residuals for each construct on these demographic covariates. Models were estimated in Mplus version 7 and low levels of missing data (<6%) was estimated using full-information maximum likelihood (FIML). Model fit was evaluated with standard metrics, and acceptable fit was indicated with comparative fit index (CFI) $\geq .90$ and root mean square error of approximation (RMSEA) $\leq .08$ indicating acceptable fit (Ullman & Bentler, 2003). The data that support the findings of this study are available from the corresponding author.

Results

Table 1 displays the means and correlations among types of civic engagement and interpersonal needs. The most commonly reported civic behavior was environmentalism ($M = 3.47$, $SD = 1.18$ across the week) and the least commonly reported civic behavior was social movement participation ($M = 1.62$, $SD = 1.06$ across the week). Most civic activities were moderately and positively correlated, with a strong association between community service, social movement, and standard political engagement. Burdensomeness and belongingness were strongly, negatively correlated. Greater social movement behavior was correlated with higher burdensomeness and lower belongingness and greater standard political behavior was correlated with higher burdensomeness.

Intra-class correlation coefficients were used to describe within-person variability in civic engagement and interpersonal needs. ICCs for community service indicated that 72% of the variance was between individuals and 28% within-person. Environmentalism showed similar trends, with 69% of variance attributed to between person and 31% attributed to within-person. For standard political involvement, 71% of the variance was attributed to between-person effects and 29% attributed to within-person effects and for social movement involvement, 73% of the variance was attributed to between person effects and 27% attributed to within-person effects. For interpersonal needs, 79% of the variance in belongingness was attributed

¹Constraining the autoregressive, cross-lagged, and daily covariances produced a slightly better model fit relative to a model where these parameters were freely estimated ($\Delta CFI > .01$), suggesting that the values for the constrained parameters were highly similar.

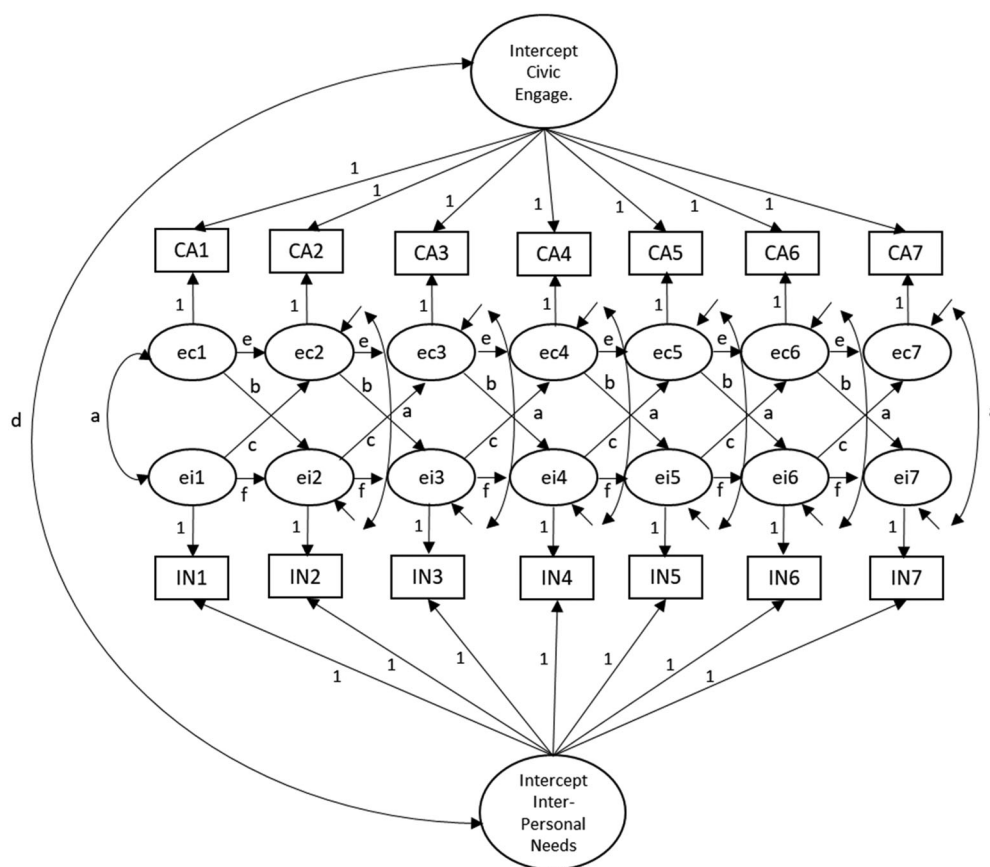


Figure 1. Conceptual model for fixed-effect autoregressive cross-lagged model.

Table 1. Means, Standard Deviations, and Bivariate Correlations among Week-Level Study Variables.

	Range	M	SD	2	3	4	5	6
1 Community Service	1-7	2.87	1.24	.60**	.73**	.72**	.08	.01
2 Environmentalism	1-7	3.47	1.40		.40**	.37**	.01	.05
3 Social Movement	1-7	1.62	1.06			.90**	-.14*	.23**
4 Standard Political	1-7	1.85	1.03				-.10	.19**
5 Belongingness	4-28	10.27	5.51					-.90**
6 Burdensomeness	6-42	15.31	7.49					

Notes:

* $p < .05$.

** $p < .001$.

to between-subject effects and 21% attributed to within-subject effects and 80% of the variance in burdensomeness was attributed to between-subject effects and 20% attributed to within-subject effects. Thus, all constructs showed fluctuation across people and within people across days.

Community service and interpersonal needs

A fixed-effect autoregressive cross-lagged model was used to estimate daily and next-day associations among community service and burdensomeness. The model provided a good fit to the data (Table 2). Table 3 presents the model estimates. We did not find

evidence of a between-person association between community service and burdensomeness, indicated by a non-significant covariance between the latent intercepts. However, daily indicators of community service and burdensomeness were significantly associated. Those who engaged in greater community service in a given day relative to their own weekly average had lower burdensomeness that day relative to their own weekly average. We did not find evidence of significant cross-lagged effects for community service predicting next day burdensomeness or burdensomeness predicting next day community service.

The second model tested links between community service and belongingness, and provided a good fit to

Table 2. Model Fit Statistics for Fixed-Effect Autoregressive Cross Lagged Models.

Model	χ^2 (df)	CFI	TLI	RMSEA [90% CI]	SRMR
Community Service					
Burdensomeness	230.98 (107)	.96	.95	.07 [.06, .09]	.06
Belongingness	246.95 (107)	.96	.95	.08 [.06, .09]	.06
Environmentalism					
Burdensomeness	219.51 (107)	.96	.96	.07 [.05, .08]	.05
Belongingness	247.48 (107)	.95	.94	.08 [.06, .09]	.06
Standard Political					
Burdensomeness	369.05 (107)	.92	.90	.08 [.06, .09]	.06
Belongingness	431.76 (107)	.90	.88	.08 [.06, .09]	.06
Social Movement					
Burdensomeness	344.30 (107)	.93	.91	.08 [.06, .09]	.05
Belongingness	402.80 (107)	.91	.89	.08 [.06, .09]	.05

Notes:

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

the data (Table 2). Table 3 presents the model estimates. We did not find evidence of between-person associations among community service and belongingness. However, daily indicators of community service and belongingness were significantly associated. Those who engaged in greater community service in a given day relative to their own weekly average had higher belongingness that day relative to their own weekly average. We also found significant next-day cross-lagged effects, with lower belongingness predicted higher next day community service. Those who had lower perceptions of belongingness relative to their own weekly average were more likely to volunteer the next the day relative to their own weekly average. We did not find evidence of a cross-lagged effect for community service predicting next day belongingness.

Environmentalism and interpersonal needs

The model examining links between environmentalism and burdensomeness provided a good fit to the data (Table 2). Table 3 presents the model estimates. We did not find evidence of a significant between-person associations among environmentalism and burdensomeness. Daily indicators of environmentalism and burdensomeness were significantly associated. Those who engaged in greater environmentalism in a given day relative to their own weekly average had lower burdensomeness that day relative to their own weekly average. We did not find evidence of a cross-lagged effect for environmentalism predicting next day burdensomeness or burdensomeness predicting next day environmentalism.

The model examining links between environmentalism and belongingness provided a good fit to the data (Table 2). Table 3 presents the model estimates.

Table 3. Standardized and unstandardized estimates for fixed-effect auto-regressive models examining longitudinal associations between civic engagement and interpersonal needs.

	Interpersonal Needs					
	Burdensomeness			Belongingness		
	β	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>
Community Service (CS)						
CS \leftrightarrow IN Intercept	.039	.322	.591	.052	.318	.439
Covariance (d)						
CS \leftrightarrow IN Daily Covariance (a)	-.084**	-.228	.084	.104**	.223	.066
CS Autoregressive Path (e)	.193**	.194	.035	.204**	.204	.035
IN Autoregressive Path (f)	.106**	.108	.034	.117**	.117	.033
CS \rightarrow IN Next-Day Cross-Lagged (b)	-.006	-.023	.128	.001	.004	.101
IN \rightarrow CS Next-Day Cross-Lagged (c)	.002	.000	.007	-.085**	-.026	.009
Environmentalism (ENV)						
ENV \leftrightarrow IN Intercept	.081	.727	.650	-.014	-.093	.492
Covariance (d)						
ENV \leftrightarrow IN Daily Covariance (a)	-.060*	-.192	.093	.105**	.266	.074
ENV Autoregressive Path (e)	.282**	.279	.039	.258**	.255	.037
IN Autoregressive Path (f)	.127**	.124	.036	.121**	.120	.033
ENV \rightarrow IN Next-Day Cross-Lagged (b)	-.025	-.093	.128	-.023	-.066	.095
IN \rightarrow ENV Next-Day Cross-Lagged (c)	-.001	.000	.009	-.051	-.018	.010
Standard Political (SP)						
SP \leftrightarrow IN Intercept	.226**	1.486	.490	-.126	-.613	.358
Covariance (d)						
SP \leftrightarrow IN Daily Covariance (a)	.090**	.213	.069	-.031	-.057	.054
SP Autoregressive Path (e)	.309**	.308	.042	.310**	.309	.042
IN Autoregressive Path (f)	.124**	.124	.036	.137**	.137	.035
SP \rightarrow IN Next-Day Cross-Lagged (b)	.022	.113	.177	-.011	-.043	.139
IN \rightarrow SP Next-Day Cross-Lagged (c)	.016	.003	.006	-.042	-.010	.008
Social Movement (SM)						
SM \leftrightarrow IN Intercept	.280**	1.899	.510	-.184**	-.923	.372
Covariance (d)						
SM \leftrightarrow IN Daily Covariance (a)	.118**	.272	.068	-.103**	-.188	.053
SM Autoregressive Path (e)	.364**	.366	.041	.364**	.365	.041
IN Autoregressive Path (f)	.126**	.126	.036	.139**	.138	.035
SM \rightarrow IN Next-Day Cross-Lagged (b)	-.006	-.029	.180	.012	.049	.142
IN \rightarrow SM Next-Day Cross-Lagged (c)	-.022	-.004	.006	.011	.006	.008

Notes: IN = Interpersonal Needs. Separate models were used for each form of civic engagement and interpersonal need (8 total). Letters in parentheses correspond to pathway depicted in Figure 1.

* $p < .05$.** $p < .01$.

We did not find evidence of a significant between-person associations among environmentalism and belongingness. However, daily indicators of environmentalism and belongingness were significantly associated. Those who engaged in greater environmentalism in a given day relative to their own weekly average had higher belongingness that day relative to their own weekly average. We did not find evidence of a cross-lagged effect for environmentalism predicting next day belongingness or belongingness predicting next day environmentalism.

Standard political participation and interpersonal needs

The model examining links between standard political behaviors and burdensomeness provided an acceptable fit to the data (Table 2). Table 3 presents the model estimates. The two latent intercepts were positively correlated, indicating significant between-person associations among standard political behavior and burdensomeness. Those who were more engaged in standard political behavior across the week had higher burdensomeness across the week relative to those who were less involved. We also found positive and significant covariance between daily indicators of standard political behaviors and burdensomeness. Those who engaged in greater standard political behaviors in a given day relative to their own weekly average had higher burdensomeness that day relative to their own weekly average. We did not find evidence of a cross-lagged effect for standard political behavior predicting next day burdensomeness or burdensomeness predicting next day standard political behavior.

The model examining links between standard political behaviors and belongingness provided an acceptable fit to the data (Table 2). Table 3 presents the model estimates. We did not find evidence between-person or daily associations among standard political behavior and belongingness. We also did not find evidence of a cross-lagged effect for standard political behavior predicting next day belongingness or belongingness predicting next day standard political behavior.

Social movement participation and interpersonal needs

The model examining links between social movement behaviors and burdensomeness provided an acceptable fit to the data (Table 2). Table 3 presents the model estimates. The two latent intercepts were positively correlated, indicating significant between-person associations among social movement engagement and burdensomeness. Those who were more engaged in social movement behavior across the week had higher burdensomeness across the week relative to those who were less engaged. We also found positive and significant covariance between daily indicators of social movement behaviors and burdensomeness. Those who engaged in greater social movement behaviors in a given day relative to their own weekly average had higher burdensomeness that day relative to their own weekly average. We did not find evidence of a cross-lagged effect for social movement behavior predicting

next day burdensomeness or burdensomeness predicting next day social movement behavior.

The model examining links between social movement behaviors and belongingness provided an acceptable fit to the data (Table 2). Table 3 presents the model estimates. The two latent intercepts were negatively correlated, indicating significant between-person associations among social movement engagement and belongingness. Those who were more engaged in social movement behaviors across the week had lower levels of belongingness across the week. We also found negative and significant covariance between daily indicators of social movement engagement and belongingness. Those who engaged in greater social movement behaviors in a given day relative to their own weekly average had lower belongingness that day relative to their own weekly average. We did not find evidence of a cross-lagged effect for social movement behavior predicting next day belongingness or belongingness predicting next day social movement behavior².

Discussion

Civic engagement is vital for democratic functioning and is thought to enhance personal health and well-being (Flanagan & Bundick, 2011; Hart et al., 2014). While preliminary evidence has connected greater community service and environmentalism with higher emotional well-being, feelings of autonomy, relatedness, and competence, few studies have examined longitudinal associations between a wide breadth of civic activities and interpersonal needs of burdensomeness and belongingness during times of heightened political action. Using a daily diary design, the purpose of this study was to examine within-person daily and next-day associations among civic engagement and interpersonal needs during the 2018 US midterm elections. Findings indicate differential associations between types of civic engagement and interpersonal needs that varied across within person day-level and next-day analyses and held after accounting for demographic covariates.

Consistent with hypotheses and past research (Wray-Lake et al., 2019), greater daily engagement in community service and environmentalism was associated with greater daily perceptions of belongingness and lower perceptions of burdensomeness, relative to

²Exploratory analyses examined whether estimates for all models varied for youth assessed during the 2018 mid-term election versus those assessed in the two-weeks after. These analyses produced similar results across data collection week.

one's weekly average. Many forms of community service and environmental action may involve working with others, such as volunteering to help the homeless or picking up litter, and thus might provide opportunities to foster interactions and personal connections with others who share similar values. Engagement in these activities may provide youth with a sense of shared social identity (Dietz & Whitley, 2018; Yates & Youniss, 1999) and help facilitate greater perceptions of belongingness. Youth who engage in either volunteering or environmentalism also demonstrate a greater sense of purpose and meaning (Bronk, 2011; Rodell, 2013), which may reflect a recognition that students' actions can contribute to society and alleviate feeling like a burden on others or one's community. Alternatively, it is also possible that greater perceptions of belongingness or lower perceptions of burdensomeness in a given day motivate students to engage community service or environmentalism within the same day, possibly as a means of connecting with others and giving back to their community.

The daily diary design used in this study allowed us to examine temporal sequencing between civic engagement and interpersonal needs. Interestingly, we found that lower perceptions of belongingness relative to one's weekly average predicted greater community service involvement the next day. Feeling a lower sense of belongingness may potentially motivate individuals to become active in their community and seek out opportunities to work with others and contribute to society. Students may recognize the social benefits of community service and utilize this type of engagement as a strategy to accrue social support. These findings add important nuance to our daily-level results and prior cross-sectional research which consistently demonstrates positive associations between civic engagement and social support (e.g., Putnam, 2000) by indicating that links between community service and belongingness may be bi-directional, operate on different time scales, and work in a compensatory manner.

A particular strength of this study was the ability to model daily-levels of political engagement during a national election. Results from these analyses suggest that greater participation in social movement and standard political behavior were associated with *greater* burdensomeness during the 2018 US midterm elections. These connections were found between people across the week, but also within-person for a given day. Thus, students who are more politically active in general have higher general burdensomeness compared to those who are less active and for any given

person, engaging in greater political action is associated with greater burdensomeness for a given day. These findings add to a growing body of evidence indicating that political action may entail meaningful social costs (Ballard & Ozer, 2016; Smith et al., 2019; Oosterhoff & Wray-Lake, 2019). Engaging in politics may involve expressing personal opinions within contentious discussions, working against an established status quo, advocating for a particular stance, and trying to influence public beliefs and opinions. Participating in politics may therefore sometimes feel like an encroachment on others, especially during national elections when political activity is heightened and expected. Some evidence has shown that daily-levels of anxiety and stress increased during the 2008 and 2016 US presidential elections (Roche & Jacobson, 2019; Stanton et al., 2010), which may be due to the high level of immediacy and importance of political influence surrounding the election. Young people who engage in politics during times of high political action may encounter more contentious situations and responses (e.g., voiced opposition in political discussions, counter protests) from others compared to non-election years when people may feel less pressure to be involved. It is also possible that youth who feel like as though they are a burden on others may engage in politics as a means of attempting to alleviate that burden by giving back to society.

Social movement—but not standard political—engagement was significantly associated with lower belongingness at a weekly level across people and at a daily level for a given person. Social movement actions such as participating in a boycott or protest involve voicing opposition against established social norms and structures. Repetitive attempts to change existing structures may enhance feelings that someone does not belong. This may be especially true if attempts to change structures are ineffective, delayed, or met with resistance. It is also possible that those who feel like they do not belong may be more inclined to seek out activities that allows them to work to change society in hopes of facilitating greater inclusivity. This perspective is consistent with research which suggests that youth who engage in social movement activities may have an iconoclast self-image (Yates & Youniss, 1999).

Implications for theory and practice

Findings from this study have important implications for theory and practice. Broadly, findings from this study contribute to theory on the possible

interpersonal consequences of political action. Recent theorizing has highlighted that political action may provide important personal benefits (Ballard et al., 2019), but may also sometimes accompanied with personal cost (e.g., Ballard & Ozer, 2016; Oosterhoff & Wray-Lake, 2019). Results from this study support this line of inquiry by demonstrating that daily standard political and social movement political engagement are linked with to greater perceptions of burdensomeness during national elections when political engagement is heightened. This research highlights the need to document the breadth of costs and benefits of political engagement, who is most likely to experience these costs and benefits, and how these costs and benefits fluctuate in the months and years preceding and following national elections. Such efforts may strengthen theoretical models seeking to explain individual differences in political engagement, aid in understanding possible strategies to limit the costs and increase the rewards of political action, and further elucidate how national elections may impact adolescent development.

Findings from this study also contribute to growing evidence that civic engagement is connected with short and long-term benefits. Research on the antecedents and consequences of civic engagement has largely focused on the long-term precursors or effects of youth civic action (e.g., Zaff et al., 2003). This perspective is critical for understanding civic engagement within a broader developmental framework. Our results build on this body of knowledge by demonstrating short-term antecedents and possible benefits of civic engagement, thus pointing to possible mechanism that may explain long-term processes and provide a more complete understanding of civic development. Study findings also emphasize the need to separate between and within-person variance within research on civic development by demonstrating that these factors may reflect distinct processes. Longitudinal research examining dynamic, elongated connections between civic engagement and positive youth development may benefit from isolating within and between person effects.

More generally, findings have important implications for community practice and public health. Burdensomeness and belongingness are proximal predictors of suicide ideation (Joiner, 2005) and have also been linked with other mental health issues including depression and anxiety (Hill et al., 2018). Programs seeking to enhance mental health may benefit from providing opportunities for students to become involved in community service and environmental

actions. Integrating volunteer and environmental civic experiences within public health programs may be one way to provide 'downstream' suicide and mental health prevention efforts while also enriching the health and well-being of a community at large. This perspective is consistent with attempts to generate a framework for utilizing civic engagement as a means of promoting both adolescent and community health (Ballard & Syme, 2016).

Limitations and future directions

Findings should be considered in the context of certain limitations. Although a daily diary design can offer reliable information about dynamic, within-person associations between civic engagement and interpersonal needs (Bolger et al., 2003), this study cannot determine causality. Third variables may account for the results found in this study and experimental research designs are needed. Additionally, our sample was composed of primarily White college students and lacks generalizability to other ages and demographic groups. It is possible that youth from politically marginalized backgrounds may experience greater intrapersonal costs and benefits from certain forms of civic action, such as politics (Ballard & Ozer, 2016; Oosterhoff et al., 2020). Future studies should examine links between civic engagement and interpersonal needs among youth from different demographic and social backgrounds. To reduce response burden, this study used abbreviated measures of interpersonal needs. Although these measures demonstrated adequate psychometric properties in this study, future research should consider utilizing the full interpersonal needs questionnaire.

An important strength of this study was the use of a national election to elucidate connections between political action and interpersonal needs. Although this approach is methodologically and conceptually advantageous, findings should be considered in light of the specific sociohistorical and sociocultural context from which this study occurred. There have been notable historical shifts in social concerns, social trust, and levels of social conflict over the past 40 years (Oosterhoff et al., 2020; Syvertsen et al., 2011). Links between standard political engagement and higher burdensomeness found in this study may be a product of heightened US political division and future research is needed to further elucidating how sociohistorical periods alter the costs and benefits of civic engagement. Although young people voted at almost double the rate for the 2018 mid-term election compared to

the 2016 mid-term election (Misra, 2019), it is possible that youth who were politically engaged during the 2018 election were particularly active given that it was a mid-term election year and turnout and participation is often much lower compared to national elections. It will be important to replicate these findings during future elections and non-election times to understand the contextualization of these findings. Additionally, data was collected from college students located in a primarily liberal community but otherwise a predominantly conservative state. Findings should be considered within this political context and consider how individual (e.g., ideology) by context (e.g., predominant ideology within the community) interactions may alter connections between civic engagement and interpersonal needs.

Overall, findings from this study point to several between-person or daily associations among civic engagement and interpersonal needs, with less evidence of next-day cross-lagged associations. This general pattern of findings may indicate that the interpersonal benefits or costs of civic engagement are more transient and momentary. The interpersonal benefits and costs of civic engagement may diminish quickly or require a longer period of time to accumulate, suggesting that repetitive involvement may be important for sustained effects. The daily assessment structure precluded our ability to test temporal associations between civic engagement and interpersonal needs within a given day or over longer periods of time (e.g., several weeks). Future research may benefit from utilizing ecological momentary assessments and measurement-burst designs to test links between civic engagement and interpersonal needs within a given day and over several weeks. Such designs will contribute to theory on civic development by further elucidate the scaling of change.

Conclusions

Civic engagement is thought to provide youth with important interpersonal needs. Findings from this longitudinal study highlight the dynamic and highly nuanced relation between various civic experiences, burdensomeness, and belongingness during the 2018 US national election. Future research should continue to examine the effects of elections on adolescent development. Future research should also continue to examine the interpersonal benefits and costs of youth civic engagement using longitudinal, within-subject methodology. Such inquiries will advance theory on civic development and provide direct guidance for

programs seeking to enhance the well-being of youth and their community.

Notes: Parameters denoted with an (a) represent daily effects, (b) represent civic engagement → interpersonal needs cross-lagged effects, (c) represent interpersonal needs → civic engagement cross-lagged effects, (d) represent between-person effects, (e) civic engagement autoregressive effects, and (f) interpersonal needs autoregressive effects.

References

- Ballard, P. J., Hoyt, L. T., & Pachucki, M. C. (2019). Impacts of adolescent and young adult civic engagement on health and socioeconomic status in adulthood. *Child Development, 90*(4), 1138–1154. <https://doi.org/10.1111/cdev.12998>
- Ballard, P. J., & Ozer, E. (2016). The implications of youth activism for health and well-being. In J. O. Conner & S. M. Rosen (Eds.), *Contemporary youth activism: Advancing social justice in the United States*. Praeger.
- Ballard, P. J., & Syme, S. L. (2016). Engaging youth in communities: A framework for promoting adolescent and community health. *Journal of Epidemiology and Community Health, 70*(2), 202–206. <https://doi.org/10.1136/jech-2015-206110>
- Berry, D., & Willoughby, M. T. (2017). On the practical interpretability of cross-lagged panel models: Rethinking a developmental workhorse. *Child Development, 88*(4), 1186–1206. <https://doi.org/10.1111/cdev.12660>
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology, 54*, 579–616. <https://doi.org/10.1146/annurev.psych.54.101601.145030>
- Bronk, K. C. (2011). The role of purpose in life in healthy identity formation: A grounded model. *New Directions for Youth Development, 2011*(132), 31–44. <https://doi.org/10.1002/yn.426>
- Buitron, V., Hill, R. M., Pettit, J. W., Green, K. L., Hatkevich, C., & Sharp, C. (2016). Interpersonal stress and suicidal ideation in adolescence: An indirect association through perceived burdensomeness toward others. *Journal of Affective Disorders, 190*, 143–149. <https://doi.org/10.1016/j.jad.2015.09.077>
- Carstensen, L. L., Turan, B., Scheibe, S., Ram, N., Ersner-Hershfield, H., Samanez-Larkin, G. R., Brooks, K. P., & Nesselroade, J. R. (2011). Emotional experience improves with age: Evidence based on over 10 years of experience sampling. *Psychology and Aging, 26*(1), 21–33. <https://doi.org/10.1037/a0021285>
- Crocetti, E., Erentaitė, R., & Žukauskienė, R. (2014). Identity styles, positive youth development, and civic engagement in adolescence. *Journal of Youth and Adolescence, 43*(11), 1818–1828. <https://doi.org/10.1007/s10964-014-0100-4>
- Dietz, T., & Whitley, C. T. (2018). Environmentalism, norms, and identity. *Proceedings of the National Academy of Sciences of the United States of America, 115*(49), 12334–12336. <https://doi.org/10.1073/pnas.1817487115>

- Flanagan, C., & Bundick, M. (2011). Civic engagement and psychosocial well-being in college students. *Liberal Education*, 97, 20–27.
- Flanagan, C. A., & Faison, N. (2001). Youth Civic Development: Implications of Research for Social Policy and Programs. PsycEXTRA Dataset, <https://doi.org/10.1037/e640322011-002>
- Fuller-Rowell, T. E., Burrow, A. L., & Ong, A. D. (2011). Changes in racial identity among African American college students following the election of Barack Obama. *Developmental Psychology*, 47(6), 1608–1618. <https://doi.org/10.1037/a0025284>
- Hart, D., Matsuba, M. K., & Atkins, R. (2014). Civic engagement and child and adolescent well-being. In B. Asher, F. Casas, I. Frones, & J. E. Korbin (Eds.), *Handbook of child well-being. Theories, methods and policies in global perspective* (pp. 957–975). Springer.
- Hill, R. M., Busto, C. T. D., Buitron, V., & Pettit, J. W. (2018). Depressive symptoms and Perceived Burdensomeness Mediate the Association between Anxiety and Suicidal Ideation in Adolescents. *Archives of Suicide Research : official Journal of the International Academy for Suicide Research*, 22(4), 555–568. <https://doi.org/10.1080/13811118.2018.1427163>
- Hill, R. M., Kaplow, J. B., Oosterhoff, B., & Layne, C. M. (2019). Understanding grief reactions, thwarted belongingness, and suicide ideation in bereaved adolescents: Toward a unifying theory. *Journal of Clinical Psychology*, 75(4), 780–793. <https://doi.org/10.1002/jclp.22731>
- Joiner, T. (2005). Why people die by suicide. Harvard University Press.
- Kay, T., & Bradbury, S. (2009). Youth sport volunteering: developing social capital. *Sport, Education and Society*, 14(1), 121–140. <https://doi.org/10.1080/13573320802615288>
- Kleiman, E. M., Turner, B. J., Fedor, S., Beale, E. E., Huffman, J. C., & Nock, M. K. (2017). Examination of real-time fluctuations in suicidal ideation and its risk factors: Results from two ecological momentary assessment studies. *Journal of Abnormal Psychology*, 126(6), 726–738. <https://doi.org/10.1037/abn0000273>
- Malin, H., Tirri, K., & Liauw, I. (2015). Adolescent moral motivations for civic engagement: Clues to the political gender gap? *Journal of Moral Education*, 44(1), 34–50. <https://doi.org/10.1080/03057240.2015.1014324>
- Metzger, A., Alvis, L. M., Oosterhoff, B., Babskie, E., Syvertsen, A., & Wray-Lake, L. (2018). The intersection of emotional and sociocognitive competencies with civic engagement in middle childhood and adolescence. *Journal of Youth and Adolescence*, 47(8), 1663–1683. <https://doi.org/10.1007/s10964-018-0842-5>
- Metzger, A., Ferris, K. A., & Oosterhoff, B. (2019). Adolescents civic engagement: Concordant and longitudinal associations among civic beliefs and civic involvement. *Journal of Research on Adolescence : The Official Journal of the Society for Research on Adolescence*, 29(4), 879–896. <https://doi.org/10.1111/jora.12423>
- Metzger, A., & Smetana, J. G. (2009). Adolescent civic and political engagement: Associations between domain-specific judgments and behavior. *Child Development*, 80(2), 433–441. <https://doi.org/10.1111/j.1467-8624.2009.01270.x>
- Misra, J. (2019). Voter turnout rates among all voting age and major racial and ethnic groups were higher than in 2014. April 9th, 2020. <https://www.census.gov/library/stories/2019/04/behind-2018-united-states-midterm-election-turnout.html>.
- Oosterhoff, B., Kaplow, J. B., Wray-Lake, L., & Gallagher, K. (2017). Activity-specific pathways among duration of organized activity involvement, social support, and adolescent well-being: Findings from a nationally representative sample. *Journal of Adolescence*, 60, 83–93. <https://doi.org/10.1016/j.adolescence.2017.07.012>
- Oosterhoff, B., Poppler, A., Hill, R. M., Fitzgerald, H., & Shook, N. J. (2020, March 16). The costs and benefits of adolescent political engagement among diverse youth. <https://doi.org/10.31234/osf.io/3uc8g>
- Oosterhoff, B., & Wray-Lake, L. (2019). Risky politics? Associations between adolescent risk preference and political engagement. *Child Development*. <https://doi.org/10.1111/cdev.13313>
- Oosterhoff, B., Wray-Lake, L., Palmer, C. A., & Kaplow, J. B. (2020). Historical trends in concerns about social issues across four decades among US Adolescents. *Journal of Research on Adolescence*, 30(S2), 485–498. [online]. <https://doi.org/10.1111/jora.12493>
- Piliavin, J. A., & Siegl, E. (2015). Health and well-being: Consequences of formal volunteering. In D. A. Schroeder & W. G. Graziano (Eds.), *Handbook of prosocial behavior* (pp. 494–523). Oxford University Press.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon & Schuster.
- Quintelier, E. (2007). Differences in political participation between young and old people. *Contemporary Politics*, 13(2), 165–180. <https://doi.org/10.1080/13569770701562658>
- Roche, M. J., & Jacobson, N. C. (2019). Elections have consequences for student mental health: An accidental daily diary study. *Psychological Reports*, 122(2), 451–464. <https://doi.org/10.1177/0033294118767365>
- Rodell, J. B. (2013). Finding meaning through volunteering: Why do employees volunteer and what does it mean for their jobs. *Academy of Management Journal*, 56(5), 1274–1294. ? <https://doi.org/10.5465/amj.2012.0611>
- Smith, K., Hibbing, J., & Hibbing, M. (2019). Friends, relatives, sanity and health: The psychological costs of politics. Presented at the Society for Personality and Social Psychology.
- Stanton, S. J., Labar, K. S., Saini, E. K., Kuhn, C. M., & Beehner, J. C. (2010). Stressful politics: Voters' cortisol responses to the outcome of the 2008 United States Presidential election. *Psychoneuroendocrinology*, 35(5), 768–774. <https://doi.org/10.1016/j.psyneuen.2009.10.018>
- Syvertsen, A. K., Wray-Lake, L., Flanagan, C. A., Osgood, D. W., & Briddell, L. (2011). Thirty-year trends in U.S. adolescents civic engagement: A story of changing participation and educational differences. *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence*, 21(3), 586–594. <https://doi.org/10.1111/j.1532-7795.2010.00706.x>
- Ullman, J. B., & Bentler, P. M. (2003). Structural equation modeling. In J. A. Schinka & W. F. Velicer (Eds.) *Handbook of psychology* (pp. 607–634). John Wiley.
- Walker, T. (2002). Service as a pathway to political participation: What research tells us. *Applied Developmental*

- Science*, 6(4), 183–188. https://doi.org/10.1207/S1532480XADS0604_4
- Wray-Lake, L., DeHaan, C. R., Shubert, J., & Ryan, R. M. (2019). Examining links from civic engagement to daily well-being from a self-determination theory perspective. *The Journal of Positive Psychology*, 14(2), 166–177. <https://doi.org/10.1080/17439760.2017.1388432>
- Wray-Lake, L., Shubert, J., Lin, L., & Starr, L. R. (2019). Examining associations between civic engagement and depressive symptoms from adolescence to young adulthood in a national US sample. *Applied Developmental Science*, 23(2), 119–131. <https://doi.org/10.1080/17439760.2017.1388432>
- Yates, M., & Youniss, J. (Eds.). (1999). *Roots of civic identity: International perspectives on community service and activism in youth*. Cambridge University Press.
- Youniss, J., Bales, S., Christmas-Best, V., Diversi, M., McLaughlin, M., & Silbereisen, R. (2002). Youth civic engagement in the twenty-first century. *Journal of Research on Adolescence*, 12(1), 121–148. <https://doi.org/10.1111/1532-7795.00027>
- Zaff, J. F., Hart, D., Flanagan, C. A., Youniss, J., & Levine, P. (2010). Developing civic engagement within a civic context. In M. E. Lamb, & A.M. Freund (Eds.), *Social and emotional development. The handbook of life-span development* (Vol. 2, pp. 590–630). Wiley. (Editor-in-chief: Richard M. Lerner).
- Zaff, J. F., Moore, K. A., Papillo, A. R., & Williams, S. (2003). Implications of extracurricular activity participation during adolescence on positive outcomes. *Journal of Adolescent Research*, 18(6), 599–630. <https://doi.org/10.1177/0743558403254779>