



# Parent values, civic participation, and children's volunteering

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## ABSTRACT

While numerous studies have examined civic engagement among adolescents and adults, there is limited research on civic engagement in preadolescent populations. The current study aimed to address this gap in the literature by examining the child dispositions and family processes related to children's civic participation. Specifically, this study explored the degree to which children's civic dispositions (i.e., social responsibility, civic values) and parents' civic engagement (i.e., humanitarian-egalitarian values, civic participation) were associated with children's volunteering. Survey data were collected from 359 ethnically and economically diverse 4th-6th grade students ( $M$  age = 10.56) and their parents. Results from logistic regressions showed that children with a greater sense of community responsibility were more likely to volunteer. Additionally, parents who more strongly endorsed humanitarian-egalitarian values and those with greater civic participation were more likely to have children who volunteered, even after controlling for child and family background variables. Findings suggest that parent values and civic participation, and children's own beliefs about social responsibility contribute to children's civic participation. Practical implications are discussed.

## 1. Introduction

Participation in political and community processes is essential in a democratic society. John Dewey (1923) believed that "a democracy is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experiences" (p. 101). Dewey (1927) saw democracy as "the idea of community life itself" (p. 148) and maintained that democratic societies are built on social relations, community interest, and civic participation. One type of civic participation aligned with these principles is volunteering, which includes "any activity in which time is given freely to benefit another person, group, or organization" (Wilson, 2000, p. 215-216). Indeed, volunteering is considered to be mutually advantageous, as it strengthens communities by supporting community members and building social capital (Putnam, 2000) while also providing benefits to those who volunteer including better mental and physical health (Lawton, Gramatki, Watt, & Fujiwara, 2021; Piliavin & Siegl, 2007; Wilson, 2000; 2012).

Research with adolescent populations has shown numerous benefits associated with volunteering including increased psychological adjustment and well-being (Kim & Morgül, 2017; Wray-Lake, Shubert, Lin, & Starr, 2019; Zaff et al., 2003), a connection to community members (Kuperminc, Holditch, & Allen, 2001; Wilson & Musick, 1999; Yates & Youniss, 1996), future civic engagement (Moorfoot, Leung, Toumbourou, & Catalano, 2015), and improved physical health (Moreno,

Furtner, & Rivara, 2013). Volunteering during adolescence is also associated with greater engagement in school (Bang, Won, & Sanghyun, 2020), higher levels of educational attainment (Moorfoot et al., 2015), and higher earnings in adulthood (Kim & Morgül, 2017), even after controlling for family socioeconomic status (SES) and individual characteristics. Despite these benefits, volunteer rates in the United States remain low. According to the U.S. Bureau of Labor Statistics (BLS), 24.9% of adults volunteered in 2015 while 26.4% of 16- to 19-year-olds report volunteering (BLS, 2016). Grimm and Dietz (2018, 2016) find that the total hours spent volunteering has increased since the early 2000s though volunteer rates (which reflect the actual number of people who volunteer) have declined.

While there is a broad and substantial literature on adolescent and adult civic engagement (Barrett & Pachi, 2019) and volunteerism (Wilson, 2000; 2012), far less is known about children's civic engagement or the factors associated with civic participation among preadolescent children. Scholars have noted the need for research to better understand civic participation among younger groups and to understand possible precursors for adolescent and adult civic engagement (Astuto & Ruck, 2010; Bonnesen, 2020). Middle childhood, the developmental period between early childhood and adolescence (i.e., ages 6 to 12), is a particularly relevant developmental period to examine civic engagement, as children show increased capabilities in logical reasoning, perspective taking, self-reflection, and conscious planning (Eccles,

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1999). Further, middle childhood represents a time when children's social worlds broaden considerably as they begin to participate in youth organizations and activities and engage in more social interactions outside of the home (Eccles, 1999). Jans (2004) argues that although age-based restrictions may limit some forms of civic participation (e.g., voting) during childhood, children are, indeed, "active citizens" and should be considered as such. The purpose of the current study was to add to the literature on civic engagement in middle childhood by examining the child dispositions and family processes related to children's civic participation. Specifically, this study examined the degree to which children's civic dispositions (i.e., beliefs about social responsibility and civic values) and parents' civic engagement (i.e., humanitarian-egalitarian values and civic participation) were associated with children's volunteering, controlling for child and family background variables. This study addresses a significant gap in the literature, as Bonnesen (2020) maintains that "volunteerism studies seldom – if ever – include minors below the age of 16 in empirical research" (p. 2). This research also has practical importance, as findings may highlight ways to increase volunteer rates and build a foundation for future civic engagement.

### 1.1. Defining civic engagement & volunteering

Civic engagement has been defined in a variety of ways in the extant literature, though most researchers agree that it is a broad, complex, and multidimensional construct that includes participation in political processes and community-based activities, as well as political and civic knowledge, skills, beliefs, and values (Adler & Goggin, 2005; Barrett & Pachi, 2019; Metzger et al., 2018; Wray-Lake, Metzger, & Syvertsen, 2017). Barrett and Pachi (2019) simply define civic engagement as "the engagement of an individual with the concerns, interests and common good of a community" (p. 3). Barrett and Pachi (2019) also argue that civic engagement does not necessarily mean participation, as they distinguish between civic participation (i.e., participatory behaviors and actions related to the community or community issues), and psychological engagement (i.e., interest, opinions, values, and beliefs about political or social issues), and maintain that both forms constitute civic engagement. Applying these meanings to the current study, children's volunteering classifies as civic participation and is conceptually distinct from children's civic values and beliefs about social responsibility which are forms of psychological engagement. Researchers examining youth civic engagement use the term "civic dispositions" (Guilfoile and Delander, 2014; Kahne, Chi, & Middaugh, 2006; Torney-Purta & Lopez, 2006) to represent beliefs, attitudes, values, and motivations for civic participation, so "civic dispositions" is used herein to represent children's civic values and their beliefs about social responsibility.

Volunteering in childhood is defined in simple and broad terms. "Volunteering means spending some of your free time helping others," and examples include helping people in the community, raising money for charity, or protecting the environment (KidsHealth, 2021). Researchers argue that volunteering is an especially relevant form of civic engagement among children and adolescents because it is not met with the same age-based restrictions as other forms of participation, and it is frequently organized through schools (Adler & Goggin, 2005; Keeter, Jenkins, Zukin, & Andolina, 2005). In the current study, children's volunteering is measured by whether or not participants reported volunteering in the last 12 months. Including a dichotomous response option is consistent with a number of studies examining adolescent volunteering (Bonnesen, 2020; Hart, Donnelly, Youniss, & Atkins, 2007; Moorfoot et al., 2015; Ottoni-Wilhelm et al., 2014), and research shows that children in the upper elementary grades understand the concept of volunteering (Metzger, Syvertsen, Oosterhoff, Babskie, & Wray-Lake, 2016). Further, recent research has revealed that youth volunteering is seen as a way to promote community engagement among younger populations and build connections with the community (Brady, Chaskin, & McGregor, 2020), so it is an especially important construct to

examine.

### 1.2. Theoretical framework

This study is guided by numerous theoretical perspectives. Snyder and Omoto's (2008) Volunteer Process Model offers a framework to understand volunteer behavior, as volunteering is framed in terms of antecedents (what led the individual to start volunteering), experience (the actual experience of volunteering), and consequences of volunteering. According to Snyder and Omoto (2008), individual dispositions such as community concern and personal values are key antecedents to help understand whether or not a person volunteers. Thus, children's civic dispositions (i.e., sense of social responsibility and civic values) are important to examine in relation to children's volunteering. Metzger and Smetana (2010) examine youth civic engagement from a social-cognitive perspective and maintain that, "cognitions and beliefs are central to how individuals view themselves in relation to civic and community institutions. They affect whether individuals will become civically involved, as well as the form that such involvement will take" (p. 221–222). Accordingly, children's ideas about social responsibility and their own civic values are likely relevant to their own civic participation.

More broadly, this study is informed by bioecological theory (Bronfenbrenner & Morris, 2006), which maintains that child and adolescent development occurs within overlapping environmental systems. These include the microsystem or proximate settings (e.g., home), the exosystem or broader social settings (e.g., neighborhood, government), the macrosystem or cultural ideology (e.g., policies, beliefs), and the chronosystem which includes life transitions and the sociohistorical period in which one lives. Bioecological theory maintains that interactions between the child and their environment, which includes others within these environments, are the driving force behind human development. Interactions that are enduring over time and take place within the most proximate settings (e.g., family, home) are the most influential to child and adolescent development. Parents are often the primary person with whom children interact on a regular and enduring basis, so parents' values and civic participation will likely influence children's civic participation. Furthermore, according to Bandura (1986), children learn how to act by observing and replicating the behavior of influential others. Thus, children's volunteering may also be shaped by parents' civic participation, as children may work to emulate their own parents' civic engagement. Unless volunteering occurs in school, parents would likely need to help children volunteer by seeking out, organizing, and providing transportation for the volunteer experience, which makes parent values and civic participation even more relevant during this developmental period.

## 2. Literature review

### 2.1. Children's volunteering and civic dispositions

Research on civic participation during middle childhood is limited though research has shown that children do show psychological engagement through civic dispositions (i.e., social responsibility and civic values) in the upper elementary grades (White & Mistry, 2016, 2019). Further, research shows that children have accurate conceptions of what it means to engage in volunteering, as youth in 4th through 12th grades associate characteristics such as being generous and responsible with individuals who volunteer (Metzger et al., 2016). Metzger et al. (2018) examined civic engagement in a sample of 8- to 20-year-olds and found that empathy was associated with volunteering among both 4th-8th grade students and 9th-12th grade students. Sarre and Tarling (2010) examined volunteering among a sample of 8–15-year-olds in the UK and reported that helping to run an activity and raising money were the most commonly reported volunteer activities.

Qualitative work has also explored children's civic participation by

examining school-based experiences. Fair and Delaplane (2015) examined a class of third-grade students who engaged in monthly volunteering (i.e., participating in crafts, drawing, or conversation) at a local retirement community. An examination of students' journals and interview responses revealed that through the volunteer experience, children "gained a better understanding of the needs of others and how to interact with those of differing abilities" as well as an understanding of the reciprocity of relationships (Fair & Delaplane, 2015, p. 24). In their multi-year investigation of "Dewey Elementary," a school that serves as a model of democratic processes, Mitra and Serriere (2012, 2015) examined civic action (i.e., efforts to make changes to school lunches) among a small group of fifth grade girls and highlighted how the students used voice and civic agency to identify a problem in the school and then worked with teachers to conduct research and develop a plan to address the issue. However, few quantitative studies have examined civic participation in middle childhood.

In order to understand children's volunteering, their own civic dispositions are important to consider. In the current study, civic dispositions include children's civic values and their sense of social responsibility (i.e., community responsibility and responsibility to people). Rokeach (1968) maintains that a value "becomes, consciously or unconsciously, a standard criterion for guiding action" (p. 160). Further, Barrett and Pachi (2019) argue that values motivate civic participation, as they "have a normative-prescriptive quality about what *ought* to be done or thought across many different contexts" (p. 38). Thus, children's values related to civic engagement and social responsibility may influence whether or not they engage in volunteering. Research with adults and adolescents supports this connection. In their review of the volunteering literature, Snyder and Omoto (2008) report that community concern, personal values, and concern for others are consistently found to be antecedents to volunteering among adult populations. Similarly, Penner (2002) found that a sense of responsibility and concern for the welfare of others was associated with volunteer behavior among adults. Research examining adolescent populations also shows that social responsibility is associated with volunteering (Cemalcilar, 2009; Flanagan, Bowes, Jonsson, Csapo, & Sheblanova, 1998; Porter, 2013). For example, Cemalcilar (2009) conducted a short-term longitudinal study examining the dispositional characteristics associated with the initial decision to volunteer among a sample of Turkish adolescents and found that volunteers demonstrated a greater sense of social responsibility when compared to non-volunteers. Crocetti, Jahromi, and Meeus (2012) examined Italian adolescents and found that a sense of social responsibility was associated with future expected volunteerism. Additionally, social justice values and social concern are also associated with youth volunteering (Neufeind, Jiranek, & Wehner, 2014; Porter, 2013). For example, Neufeind et al. (2014), examined volunteering among a sample Swiss adolescents and young adults, and found that social justice dispositions predicted the extent to which participants volunteered. Porter (2013) examined civic engagement among high school seniors and found that having an identity that emphasized a concern for human rights, compassion, and responsibility was associated with more frequent volunteering. Thus, based on the adolescent literature, it was expected that children with a greater sense of social responsibility and stronger endorsement of civic values would be more likely to volunteer.

## 2.2. Parent civic engagement

In addition to children's own civic dispositions, several family processes may also be associated with volunteering in middle childhood (Barrett & Pachi, 2019). Research has shown that family relationships matter, as greater family cohesion (Taylor et al., 2019), more positive relationships with parents (Muddiman, Taylor, Power, & Moles, 2019), and greater perceived parental warmth and parental monitoring (Bebiroglu, Geldhof, Pinderhughes, Phelps, & Lerner, 2013) are all associated with higher levels of civic participation (e.g., volunteering, helping others or the environment) among adolescents. Parents' civic

practices and psychological engagement also matter, as youth and young adults who report hearing and engaging in more frequent civic discussion in the home are more likely to volunteer and be involved in community service (Andolina, Jenkins, Zukin, & Keeter, 2003; McIntosh, Hart, & Youniss, 2007). Two additional parent factors consistently associated with greater youth civic participation are parent values and parents' own civic participation (Barrett & Pachi, 2019).

### 2.2.1. Parent humanitarian-egalitarian values

In examining parent values that may influence children's civic engagement, humanitarianism-egalitarianism is important to consider. Humanitarian-egalitarian values represent concern for the well-being of others and support for democratic principles of equality and social justice (Katz & Hass, 1988). Furthermore, these values demonstrate social concern and a connection to diverse members of society, a key component of civic identity, which is hypothesized to motivate civic participation in adolescence and into adulthood (Youniss & Yates, 1997). Humanitarian-egalitarian values are related to both political and interpersonal attitudes, as individuals high in humanitarianism-egalitarianism are more likely to demonstrate collectivist values (Strunk & Chang, 1999), express more positive attitudes towards ethnic minorities (Glover, 1994), immigrants (Cowan, Martinez, & Mendiola, 1997), and social welfare policies (Feldman & Steenbergen, 2001), and show lower levels of prejudice towards women and gay and lesbian populations (Case, Fishbein, & Ritchey, 2008). Further, Rokeach's landmark studies (1968, 1973) showed that one's ranking of "equality" as an important life value most clearly distinguished those who participated in a civil rights demonstration from those who did not.

Research examining the transmission of sociopolitical attitudes and values has shown similarities between parents and children in terms of political attitudes (Hatemi et al., 2009; Hess & Torney, 1967). Flanagan et al. (1998) examined an international sample of adolescents and found that regardless of their country of origin, youth who reported that parents demonstrate humanitarian values were more likely to consider doing something for society as an important life goal. Similarly, adolescents whose parents emphasize humanitarian values are more likely to demonstrate altruistic life goals (Flanagan & Tucker, 1999). Lenzi, Vieno, Santinello, Nation, and Voight (2014) examined civic responsibility among a sample of Italian adolescents and found that youth community responsibility and global civic responsibility were associated with parent reports of these same constructs. Overall, evidence indicates that youth civic engagement is at least partly shaped by parents' sociopolitical values. In fact, Levine and Higgins-D'Alessandro (2010) argue that adults create civic participation experiences for youth in order to transmit their own sociopolitical values. Thus, it was expected that parents who showed stronger endorsement of humanitarian-egalitarian values would be more likely to have a child who volunteers.

### 2.2.2. Parent civic participation

In addition to parent values, research consistently shows that adolescents are more likely to volunteer if parents or family members also show civic participation (CNCS, 2005; Metz & Youniss, 2005; Rossi, Lenzi, Sharkey, Vieno, & Santinello, 2016; Ottoni-Wilhelm et al., 2014; Wilson, 2012). For example, Metz and Youniss (2005) examined adolescent volunteers and found that those who were "inclined-to-serve," meaning they volunteered during multiple years of high school, were significantly more likely to have parents who volunteered, when compared with youth who volunteered less often or not at all. Similarly, McLellan & Youniss (2003) found that adolescents "whose parents did some voluntary service were twice as likely to volunteer as those whose parents did none" (p. 53). Ottoni-Wilhelm, Estell, and Perdue (2014) examined volunteering among a nationally representative sample of adolescents and found that youth who volunteered were also more likely to have parents who modeled volunteering. Retrospective reports have shown similar findings, as adults who report growing up in a home where someone volunteered are more likely to be civically engaged and

volunteer themselves (Keeter, Zukin, Andolina, & Jenkins, 2002). These findings are also true in international samples, as Bekkers (2007) analyzed retrospective reports of Dutch adults and found that adult volunteers were more likely to report that during their childhood, their parents also volunteered. Researchers maintain that when parents are civically engaged, they act as civic role models for their children and create a civic culture in the home which engenders youth civic participation (Keeter et al., 2002; Kelly, 2006; Ottoni-Wilhelm et al., 2014; Wilson, 2012). Interestingly, research has also shown that parent volunteering is more impactful for younger adolescents when compared with older adolescents (van Goethem, van Hoof, van Aken, Orobio de Castro, & Raaijmakers, 2014), so examining parent civic participation is especially relevant to civic engagement among younger groups. Given the extant literature, it was expected parents with greater civic participation would be more likely to have a child who volunteered.

### 2.3. The current study

In summary, the current study adds to the literature on civic engagement by examining the individual dispositions and family processes related to children's civic participation (i.e., volunteering) in middle childhood. The limited studies addressing children's civic engagement tend to focus on psychological forms of engagement (i.e., civic dispositions) (White & Mistry, 2016, 2019), or perceptions of engagement (Metzger et al., 2016), rather than actual civic participation. Further, the studies that do examine civic participation usually use qualitative methodology (Fair & Delaplane, 2015; Mitra & Serriere 2012, 2015) which limits the ability to generalize findings. Thus, an examination of civic participation (i.e., volunteering) in middle childhood makes an important contribution to the research on youth civic engagement and addresses a clear gap in the literature.

First, this study examined the degree to which children's civic dispositions, meaning social responsibility and civic values, were associated with volunteering. Research with adults and adolescents consistently shows that values and dispositions such as social concern and a sense of social responsibility are associated with volunteering (Cemalcilar, 2009; Neufeind et al., 2014; Penner, 2002; Porter, 2013; Snyder & Omoto, 2008). Therefore, it was expected that children with a greater sense of community responsibility and responsibility to people and those who showed stronger endorsement of civic values would be more likely to volunteer. Second, this study examined the degree to which parents' humanitarian-egalitarian values and civic participation predicted children's volunteering. Research shows that parents' socio-political values are related to youth civic engagement (Flanagan et al., 1998; Flanagan & Tucker, 1999), and that adolescents are more likely to volunteer if their parents show civic participation (CNCS, 2005; Metz & Youniss, 2005; Rossi et al., 2016; Ottoni-Wilhelm et al., 2014; Wilson, 2012). Based on the findings with adolescents, it was expected that parents who showed stronger endorsement of humanitarian-egalitarian values and greater civic participation would have children who were more likely to volunteer.

The following questions guided this study:

1. Are children's civic dispositions (i.e., beliefs about social responsibility and civic values) associated with volunteering?
2. Are parents' humanitarian-egalitarian values and civic participation associated with children's volunteering?

## 3. Method

### 3.1. Participants

Participants included a convenience sample of 4th- 6th grade students ( $N = 359$ ; 56% female) and their parents from six public schools in Southern California. Student age ranged from approximately 9 to 13 ( $M = 10.56$ ;  $SD = 0.72$ ). Most parents completing the survey were mothers

(73%), though fathers (22%) also participated. The sample was racially and ethnically diverse (42% White, 27% Latino, 15% Multiracial, 12% Asian, and 4% other). The sample was also economically diverse, as 28% of the children were from low-income families, 33% were from middle income families, and 39% were from higher income families. Criteria for assessing family socioeconomic status are provided in the Measures section. Thirty-nine percent of the mothers had at least a college degree (see Table 1 for a description of the study sample).

### 3.2. Procedures

Institutional Review Board approval was granted (IRB#10-000159) prior to data collection. After IRB approval, multiple school districts were contacted to inquire about data collection in their upper elementary (4th-6th grade) classrooms. Specific demographic criteria were not used to target districts or schools, and data collection sites were selected based on willingness to participate and convenience of location. The two districts that agreed to participate were located in suburban areas outside of a large metropolitan city in Southern California. The first district, from which five schools were recruited, serves approximately 15,000 students, and includes 11 elementary schools (grades K-5). At the district level, the student population is predominantly White (46%), Latino (35%), and Asian (9%) though other groups are also represented including African American (3%) and other (7%). Ethnic representation of students in participating schools was similar to overall district reports

**Table 1**  
Descriptive Data for Study Samples ( $N = 359$ ).

	<i>n</i>	%	Range	Mean	SD
Child gender					
Female	192	56.10			
Male	150	43.90			
Child age	357		9.14–13.00	10.56	0.72
Child race/ethnicity					
White	150	41.90			
Latino	98	27.40			
Asian	42	11.70			
Multiethnic	55	15.40			
Other	13	3.60			
Child need for affiliation	337		1.80–5.00	4.06	0.62
Reading achievement					
Below standards	53	18.50			
Meets standards	115	40.20			
Exceeds standards	118	41.30			
Maternal education level					
HS diploma or less	117	37.70			
Associates or vocational degree	73	23.50			
Bachelor's degree	90	29.00			
Graduate degree	30	9.70			
Family income	317		\$5,000–\$500,000	\$97,600	\$87,500
Low income	87	27.50			
Middle income	105	33.20			
Affluent	124	39.20			
Family immigrant status					
Foreign-born parent	164	48.80			
Native-born parent	172	51.20			
Parent civic engagement					
Humanitarian values	337		2.30–5.00	4.12	0.51
Civic participation	340		1.50–5.00	2.16	1.55
Child civic dispositions					
Community responsibility	342		1.56–5.00	3.85	0.72
Responsibility to people	343		2.50–5.00	4.46	0.51
Civic values	341		1.50–5.00	4.22	0.65
Child volunteering					
Yes	79	23.00			
No	264	77.00			

Note: the *n*'s for some variables vary due to missing data.

and to the sample analyzed in the current study. The second district, from which one school was recruited, serves approximately 22,000 students, and includes 21 elementary schools (grades K-6). Students at the sixth school were also majority White (63%), Latino (23%), and Asian (9%), which is also similar to the ethnic representation in the participant sample.

After district permission was secured, an email was sent to the principals of elementary schools in those districts explaining the study timeline and procedures. Principals from six schools agreed to allow their upper elementary grade teachers and students participate in the study. Teachers within each school were then contacted and given information about the study. Data collection was scheduled based on teacher preference and class schedule.

Student participants were recruited directly from classrooms, and all children enrolled were invited to participate. Packets including study information, consent forms, and parent surveys were sent home with students; students' names were entered into a classroom raffle for a gift card for returning completed packets. All children with parental consent, and who themselves assented to participation, were invited to complete a survey. The surveys were administered in a group setting (the classroom) with children completing them independently at their desks. Parents returned completed surveys in sealed envelopes to their child's classroom.

### 3.3. Measures

#### 3.3.1. Parent civic engagement

Parents' humanitarian-egalitarian values were assessed using Katz and Hass' (1988) Humanitarianism-Egalitarianism scale, a 10-item measure assessing concern for the well-being of others and support for democratic principles of equality and social justice. Item examples include "a good society is one in which people feel responsible for one another" and "everyone should have an equal chance and an equal say in most things." Parents responded on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Items were averaged; higher scores indicated greater endorsement of humanitarian-egalitarian values. Cronbach's alpha demonstrated adequate internal consistency reliability ( $\alpha = 0.84$ ).

Parent civic participation was measured by five dichotomous items. Parents indicated if they had volunteered, worked to solve problems in the community, participated in a fundraising walk/run, raised money for charitable causes, or been a member of a community organization over the past 12 months (Keeter et al., 2002). A sum of affirmative responses was used to represent parent civic participation; higher scores indicated greater civic participation.

#### 3.3.2. Child civic dispositions & volunteering

Children's civic dispositions were assessed using self-report measures. All items measuring civic dispositions were factor analyzed to examine dimensionality of the scales. Exploratory factor analyses (EFA's) revealed three factors: community responsibility, responsibility to people, and civic values (see Appendix, for factor analysis results and a list of all items included in children's civic disposition composite measures).

Children's community responsibility was measured with nine items. Children completed the *caring for the community* and *environmental stewardship* subscales from Chi et al.'s (2006) measure assessing children's sense of social responsibility. Item examples included "I believe I can make a difference in my community" and "I do my part to help the environment." Response scale ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The items were averaged so that higher scores indicated a greater sense of community responsibility ( $\alpha = 0.89$ ).

Children's responsibility to people was measured with four items. Children completed the *concern for others* subscale from Chi et al.'s (2006) measure of social responsibility. Item examples included "I try to help when I see people in need" and "I want to help when I see someone having a problem." Response scale ranged from 1 (*strongly disagree*) to 5

(*strongly agree*). The items were averaged; higher scores reflected a greater sense of responsibility to people ( $\alpha = 0.72$ ).

Children's civic values were measured with six items. Children rated the importance they place on civic values (e.g., protecting the earth, helping those who are less fortunate) on a scale from 1 (*not at all important*) to 5 (*very important*) (Flanagan, Syvertsen, & Stout, 2007). Items were averaged so that higher scores reflected greater endorsement of civic values ( $\alpha = 0.79$ ).

Child volunteering was measured with one dichotomous item, which is similar to previous studies (e.g., Bonnesen, 2020; Hart et al., 2007; Moorfoot et al., 2015; Ottoni-Wilhelm et al., 2014). Children were asked to indicate if they had volunteered over the past 12 months by circling "yes" or "no."

#### 3.3.3. Covariates

Numerous covariates were included in analyses. Research shows that females and older adolescents are more likely to volunteer (Kuperminc et al., 2001; Muddiman et al., 2019; Obradovic & Masten, 2007; Wilson, 2000, 2012), and that higher academic achievement is associated with volunteering (Metz & Youniss, 2005; Obradovic & Masten, 2007). Therefore, child gender, age, and academic achievement were included as control variables. Volunteering often requires some type of social interaction and research has shown that extraversion is associated with volunteering among adults (Matsuba, Hart, & Atkins, 2007), so children's need for affiliation with others was also included as a control variable. Maternal education and family income were included as covariates, as numerous studies with adolescents have shown that higher SES and parents' educational attainment are associated with greater civic participation (Hart et al., 2007; Kuperminc et al., 2001; Metz & Youniss, 2005; Sandstrom & Alper, 2019). Further, research shows that higher income and educational attainment are associated with volunteering among adults (Smith, 1994; Wilson, 2012). Finally, family immigrant status was included as a covariate, as prior research has shown that native-born adults show higher levels of civic participation when compared with those who are foreign-born (Wilson, 2012; White & Mistry, 2016).

Children reported their own gender by circling "boy" or "girl." Child age was calculated using parent reports of children's birth dates and the date of survey administration. To measure academic achievement, reading achievement data were taken directly from children's report cards, accessed via school records. For analysis purposes, achievement was recoded as a 3-point variable indicating if students were below, met, or exceeded standards. Parents completed the need for affiliation with others subscale (10 items) from Simonds and Rothbart (2004) Temperament in Middle Childhood Questionnaire. Parents rated how much each statement described their child (e.g., "my child places great importance on friends") on a scale from 1 (*not at all*) to 5 (*a lot*). Items were averaged ( $\alpha = 0.86$ ); higher scores reflected that the child had a greater need for social connections and relationships with others.

Parents indicated the highest level of education completed by both of the child's parents on a scale from 1 (*less than HS diploma*) to 7 (*J.D., M.D., or Ph.D.*). To deal with skewness, maternal education was recoded into a four-level variable: HS diploma or less; Associates or vocational degree; Bachelor's degree; or Graduate degree. Parents reported their family income from the past year based on all sources of income including earnings, welfare cash assistance, child support, and support from other members of their household, by selecting a category on a scale from 1 (less than \$10,000) to 11 (*more than \$500,000*). Parents also reported family size, meaning the total number of adults and children in their household. Family income-to-needs ratio (INR) was computed by dividing the family's income (e.g., the midpoint of each response bracket, as noted in Diemer et al., 2012) by the poverty threshold for their family size. Family INR was recoded into a three-level variable based on income groupings. As specified in Dowsett, Huston, Imes, and Gennetian (2008), families with an INR less than 2 were categorized as "low income"; between 2 and 4 were labeled "middle income"; and above 4 were

labeled as “higher income.” Parents indicated if they and their spouse/partner were born in the United States or another country. Children were considered to be from an immigrant household if either they, themselves, or at least one parent reported being born in a country other than the United States.

### 3.4. Preliminary analysis

All survey data collected were entered into SPSS for data cleaning. Descriptive and frequency reports were run for each item to check for typographical errors and to ensure that the values were within the expected response range. Next, composite scores were calculated, described in the Measures section, and preliminary checks were performed to ensure that assumptions were met for multivariate analyses. First, data were checked for normality by examining skewness and kurtosis of each composite variable. Skewness and kurtosis values were within the acceptable range of  $-2$  to  $+2$  to meet this assumption (George & Mallery, 2010). Composite measures were also checked for multicollinearity to ensure that predictors were not too highly correlated (Field, 2005). Variance inflation factor (VIF) values greater than 10 (Myers, 1990) and tolerance values lower than 0.2 (Menard, 1995) indicate issues with multicollinearity. Preliminary analyses indicated no issues with multicollinearity among predictors, as VIF values were all less than 2.5 and tolerance values were greater than 0.4. A third assumption is independence, meaning that data from each participant is independent and not related to data from other participants. Because data were collected from multiple schools and classrooms, intraclass correlation coefficients (ICC's) were calculated at the school- and classroom- level for variables related to children's civic engagement (i.e., child volunteering, community responsibility, responsibility to people, civic values) to examine the school- and classroom-level clustering of these data. According to Lee (2000), examining ICC's also determines “whether HLM [hierarchical linear modeling] is needed or whether a single level analytic method is appropriate. Only when the ICC is more than trivial (i.e., greater than 10% of the total variance in the outcome) would the analyst need to consider multilevel methods” (p. 128). Across all child civic variables, ICC's were low ranging from 0 to 0.07 for schools and 0.02 to 0.08 for classrooms within schools, indicating that there was little shared variance among students in the same schools and classrooms. Parent variables (humanitarian-egalitarian values and civic participation) were also examined for school-level differences. ICC's were also low for parent variables (0.02, 0.01), indicating there was little shared variance among parents of children at the same schools. As a final check, one-way ANOVAS were used to determine if children's volunteering differed significantly by classroom or school. There was no statistically significant difference in children's volunteering at the school level [ $F(5, 337) = 1.40, p = .22$ ] or the classroom level [ $F(20, 322) = 1.11, p = .34$ ]. Thus, it was determined that the assumption of independence was met, and a multilevel model was not necessary.

### 3.5. Data analysis plan

Data were analyzed using the software *Mplus* v. 6.0 (Muthén & Muthén, 1998-2010). Full-information maximum likelihood (FIML) estimation procedures were used to address missing data issues. FIML is one of the preferred methods that allows generalization of results to the population while preserving the use of all available data and a default in *Mplus* (Muthén & Muthén, 1998-2010). FIML does not impute missing data; rather, it fits the covariance structure model directly to the observed raw data for each participant (Arbuckle, 1996; Enders, 2006).

A logistic regression analysis was used to examine relations among study constructs due to the dichotomous dependent variable (i.e., children's volunteering). In addition to the assumptions already discussed, logistic regression assumes that “the relationship between the continuous predictors and the logit (log odds) is linear” (Wuensch, 2021, p. 9). According to Wuensch (2021), “this assumption can be tested by

including in the model interactions between the continuous predictors and their logs. If such an interaction is significant then the assumption has been violated” (p. 9). Natural logs of each continuous predictor were created; the interaction of each continuous predictor and their log were entered into the model. No interaction terms were significant, indicating that this assumption was met.

First, a logistic regression was used to determine if children's sense of social responsibility and civic values were associated with volunteering. Child gender, age, academic achievement, need for affiliation, maternal education, family income, and family immigrant status were included as control variables. A second logistic regression was used to investigate if parents' humanitarian-egalitarian values and civic participation were associated with children's volunteering, also controlling for child and family characteristics. Wald tests were used to determine if the predictors were “making a significant contribution to the prediction of the outcome” (Field, 2005, p. 224). The Wald statistic has a chi-square distribution with one degree of freedom (Agresti & Finlay, 1997; Field, 2005).

## 4. Results

### 4.1. Parent & child civic indicators: Descriptive findings

Results indicated that 23% of the children ( $n = 79$ ) reported volunteering. Children's volunteering was positively correlated with children's sense of community responsibility ( $r = 0.20, p < .001$ ) and civic values ( $r = 0.15, p = .005$ ), but was not associated with children's sense of responsibility to people ( $r = 0.08, p = .162$ ). Parents showed high endorsement of humanitarian-egalitarian values ( $M = 4.12, SD = 0.51$ ) and reported an average of slightly more than two civic activities ( $M = 2.16, SD = 1.55$ ). Parents' humanitarian-egalitarian values were not significantly associated with their own civic participation ( $r = 0.04, p = .524$ ). However, parents' values were positively correlated with children's volunteering ( $r = 0.18, p = .001$ ). Parents' civic participation was not significantly correlated with children's volunteering ( $r = 0.10, p = .078$ ). See Table 2 for correlations among study variables.

### 4.2. RQ 1: Are children's civic dispositions associated with volunteering?

Table 3 presents the results from the first logistic regression and includes standardized logistic coefficients and odds ratios. Children's sense of responsibility to the community significantly predicted volunteering ( $\beta = 0.28, p = .016$ ) whereas children's responsibility to people and civic values were not significantly associated with volunteering (see Table 3). The odds ratio for children's responsibility to the community,  $OR = 2.11$  (95% CI: 1.13, 3.95), indicates that for every unit change in children's community responsibility (e.g., moving from less to more community responsibility), there is 111% increase in the odds of volunteering. The Wald statistic showed that children's community responsibility contributed significantly to the model,  $\chi^2(1, N = 359) = 5.49, p = .019$ . The Wald statistic indicated that children's responsibility to people,  $\chi^2(1, N = 359) = 1.23, p = .267$ , and children's civic values,  $\chi^2(1, N = 359) = 0.09, p = .765$ , did not contribute significantly to the model.

### 4.3. RQ2: Are parents' values and civic participation associated with children's volunteering?

Table 4 presents the results from the second logistic regression and includes standardized logistic coefficients and odds ratios. Based on earlier findings, children's community responsibility, but not responsibility to people and civic values, was included as a covariate. Parents' humanitarian-egalitarian values significantly predicted children's volunteering ( $\beta = 0.21, p = .006$ ). The odds ratio for parents' values,  $OR = 2.24$  (95% CI: 1.22, 4.08), indicates that for every unit change in parents' humanitarian-egalitarian values (e.g., moving from

**Table 2**  
Correlations Among Study Variables (N = 257–358).

Variable Names	1	2	3	4	5	6	7	8	9	10	11	12
1. Child gender (female)												
2. Child age	-0.06											
3. Reading achievement	0.03	0.24***										
4. Child affiliation	0.20***	-0.07	0.02									
5. Maternal education	0.04	0.03	0.26***	0.05								
6. Family Income	0.00	0.11 <sup>+</sup>	0.37***	0.01	0.39***							
7. Family Immigrant Status	-0.12*	-0.02	-0.17**	-0.06	0.01	-0.24***						
8. Parent Humanitarian Values	-0.01	-0.02	-0.07	0.22***	0.11*	-0.08	0.22***					
9. Parent Civic Participation	0.08	-0.13*	0.14*	0.02	0.31***	0.32***	-0.26***	0.04				
10. Child Community Responsibility	0.28***	-0.19***	-0.09	0.19***	-0.03	-0.13*	0.10 <sup>+</sup>	0.14*	0.09 <sup>+</sup>			
11. Child Responsibility to People	0.29***	-0.06	0.13*	0.27***	0.07	0.00	-0.00	0.15**	0.07	0.53***		
12. Child Civic Values	0.23***	-0.09 <sup>+</sup>	0.08	0.18**	0.01	-0.08	0.02	0.14*	0.09	0.76***	0.50***	
13. Child Volunteering	0.09	-0.03	-0.00	0.10 <sup>+</sup>	0.02	-0.09	0.06	0.18***	0.10 <sup>+</sup>	0.20***	0.08	0.15**

Note: + $p \leq 0.10$  \* $p \leq 0.05$  \*\* $p \leq 0.01$  \*\*\* $p \leq 0.001$ .

**Table 3**  
Summary of Logistic Regression for Children’s Civic Dispositions Predicting Volunteering (N = 359).

Predictor	$\beta$	SE B	p	OR	95% CI OR
Community Responsibility	0.28*	0.11	0.016	2.11	[1.13, 3.95]
Responsibility to People	-0.11	0.10	0.268	0.66	[0.32, 1.37]
Civic Values	0.03	0.11	0.765	1.10	[0.59, 2.04]

Note: All reported logistic coefficients are standardized values. Controls are child gender, age, academic achievement, need for affiliation, maternal education, family income, and family immigrant status (omitted from the table). OR = odds ratio. CI = confidence interval. \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$ .

**Table 4**  
Summary of Logistic Regression for Parents’ Values and Civic Participation Predicting Children’s Volunteering (N = 359).

Predictor	$\beta$	SE B	p	OR	95% CI OR
Parent Values	0.21**	0.08	0.006	2.24	[1.22, 4.08]
Parent Civic Participation	0.16*	0.08	0.038	1.23	[1.01, 1.51]

Note: All reported logistic coefficients are standardized values. Controls are child community responsibility, gender, age, academic achievement, need for affiliation, maternal education, family income, and family immigrant status (omitted from the table). OR = odds ratio. CI = confidence interval. \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$ .

lower to stronger endorsement of these values), there is a 124% increase in the odds of their children volunteering. Wald tests showed that parents’ humanitarian-egalitarian values contributed significantly to the model,  $\chi^2(1, N = 359) = 6.84, p = .009$ . Parents’ civic participation also significantly predicted children’s volunteering ( $\beta = 0.16, p = .038$ ). The odds ratio for parents’ civic participation,  $OR = 1.23$  (95% CI: 1.01, 1.51), indicates that for every unit change in parents’ civic participation (e.g., moving from fewer to more civic activities), there is a 23% increase in the odds of their children volunteering. Wald tests showed that parents’ civic participation made a significant contribution to the model,  $\chi^2(1, N = 359) = 4.10, p = .043$ .

**5. Discussion**

The purpose of this study was to examine volunteering during middle childhood and the degree to which children’s civic dispositions, parent values, and parent civic participation were associated with children’s volunteering. Findings from logistic regressions showed that children who had a greater sense of responsibility to the community were significantly more likely to volunteer, above and beyond the influence of a robust set of covariates. Additionally, parents who more strongly endorsed humanitarian-egalitarian values and parents with more civic participation were significantly more likely to have children who

volunteered. Findings are discussed below.

**5.1. Children’s civic dispositions & volunteering**

First, results indicate that some children do, indeed, show civic participation in the form of volunteering. This finding is important to the literature on youth civic engagement because it demonstrates that some children are already actively involved in their community before they reach adolescence. Interestingly, the volunteer rate among children in the current study (23%) was similar to adolescent (26.4%) and adult rates (24.9%), as reported by the U.S. Bureau of Labor Statistics. Middle childhood may represent a developmental period in which a foundation for future civic engagement is established, though findings show that civic participation during childhood is important to examine, in and of itself.

Findings also showed that, as expected, children with a greater sense of social responsibility to the community were significantly more likely to volunteer. In other words, children’s beliefs about their role in the community and relationship to community institutions were related to their civic participation, which is consistent with Metzger and Smetana’s (2010) ideas connecting youth cognition to civic participation. Snyder and Omoto (2008) maintain that community concern is an antecedent to adult volunteering, and research with adolescents and adults has shown similar connections between social responsibility or social concern and volunteering (Cemalcilar, 2009; Crocetti et al., 2012; Flanagan et al., 1998; Neufeld et al., 2014; Penner, 2002; Porter, 2013). Results from the current study indicate that a relationship between community responsibility and volunteering is also found during an earlier developmental period. Children’s sense of responsibility to the community may also be an important precursor of adolescent and adult civic engagement, so researchers should continue to explore this construct, the degree to which it is associated with later civic participation, and ways to foster this disposition during early and middle childhood. Further, some scholars (Haste, 2010; Torney-Purta, 1995) maintain that children are “active agents” in the civic socialization process, and findings that children’s own beliefs predict their volunteering bolsters this argument.

However, children with a greater sense of responsibility to people and those who more strongly endorsed civic values were not significantly more likely to volunteer. Without knowledge of children’s specific type of volunteer experience, it is difficult to speculate why, though this could be due to the types of volunteer activities children are more likely to engage in during middle childhood. Research in the UK has shown that helping with an organizational event and raising money for a cause are the most common formal volunteer activities among 8–15-year-olds (Sarre & Tarling, 2010). Thus, it is possible that community responsibility (i.e., “caring for the community” and “environmental stewardship”) is more closely connected to the types of volunteer activities children tend to engage in during middle childhood, while responsibility to people (i.e., “concern for others”) is more likely to be

associated with volunteer experiences involving direct contact with people in need. Future work should tease out these nuances and examine the degree to which specific types of volunteer experiences in middle childhood are associated with unique civic dispositions or whether these processes differ based on the frequency and duration of volunteering.

### 5.2. Parent values, civic participation, and children's volunteering

Parents' sociopolitical values and civic participation were found to also matter for children's volunteering, over and above the effects of children's sense of community responsibility and child and family characteristics. Specifically, parents who more strongly endorsed humanitarian-egalitarian values and those with greater civic participation were more likely to have children who volunteered. According to bioecological theory (Bronfenbrenner & Morris, 2006), parents are among the most influential figures within a child's proximate environment, so these findings were not surprising. Further, researchers argue that family is "an initial microsystem that influences civic development" (Wilkenfeld, Lauckhardt, & Torney-Purta, 2010, p. 204). Bioecological theory maintains that parents exert a powerful effect on development during childhood due to consistent and enduring interactions (Bronfenbrenner & Morris, 2006), so it's likely that parents' values are communicated and demonstrated to children in various ways that shape children's civic participation. Findings also lend support to Social Cognitive Theory and observational learning (Bandura, 1986), as results show that parents serve as behavioral models of civic engagement. In addition to modeling civic participation, it is also plausible that parents who show greater civic participation may facilitate or organize volunteer experiences for their children (Wilkenfeld et al., 2010), as some research shows that youth most commonly name "family" as the way that they became civically involved (Muddiman et al., 2019). Research consistently shows that adolescent and young adult civic engagement are associated with parent values (Flanagan et al., 1998; Flanagan & Tucker, 1999) and parent civic participation (Andolina et al., 2003; Keeter et al., 2002; Ottoni-Wilhelm et al., 2014; Wilson, 2012) so findings from the current study indicate that this relationship holds true for younger groups.

### 5.3. Practical implications

Several practical implications can be drawn from study findings. First, the findings show that some children engage in volunteering during middle childhood so interventions aimed at increasing civic participation, particularly volunteering, should include preadolescent children. Opportunities to volunteer in the community could be provided by schools or through community organizations. Barrett and Pachi (2019) maintain that schools are one of the best places to reach youth populations to foster civic engagement because all children and adolescents must attend school. This study also showed that children with a greater sense of community responsibility were significantly more likely to volunteer. These findings highlight the connection between psychological engagement and civic participation and indicate that efforts to increase children's volunteering should also work to increase children's sense of community responsibility. In other words, initiatives aimed at increasing children's civic participation by providing opportunities to volunteer should also include opportunities to reflect on these experiences and build civic dispositions that may lead to greater participation in the future. Study findings also revealed that parents' civic engagement predicted children's volunteering. Thus, efforts to increase volunteering among youth should consider involving parents and creating opportunities for families to become engaged in the community together, particularly for preadolescent children.

### 5.4. Study strengths, limitations, & future directions

Study findings add to the literature on civic engagement in middle

childhood, as this is a growing area of research. A key strength of the current study was including both parent and child respondents (which limits respondent bias), as much of the literature examining adolescent and young adult civic engagement relies on youth reports of their parents' views and behavior. Previous research with the same dataset has shown that parents' sense of social trust, civic efficacy, and civic participation are associated with children's civic dispositions, which are psychological forms of engagement (White & Mistry, 2016), and the current study shows that parents' values and civic participation also matter for children's volunteering, a form of civic participation. Further, the study sample was ethnically and economically diverse, with multiple racial/ethnic groups (White, Latino, Asian, Multiracial) and economic groups represented so findings are relevant to multiple populations.

Findings should also be considered in light of limitations. While the study sample was ethnically diverse, African American and Asian families and children were largely underrepresented. Most participants came from suburban areas, so generalizability of findings to all populations is limited. Future studies should examine children's volunteering across varying types of neighborhoods and with a more representative sample. Additionally, data were collected at one point in time which limits the ability to infer causation between children's volunteering and both children's civic dispositions and parent humanitarian-egalitarian values. Theoretically, children's sense of community responsibility and parent values are more deeply rooted though longitudinal data is needed to further substantiate study claims and to examine the potentially bidirectional nature of these associations. Future research should also explore the types of volunteer activities children participate in and whether they are organized by parents, a youth organization, or schools to understand these civic processes better.

In this study, parent values and civic participation were examined in relation to children's civic participation, though future research should examine other parenting practices and associations with children's civic engagement. Recent research has shown that more positive family relationships and effective parenting practices (i.e., warmth, parental monitoring) are associated with adolescent civic participation (Bebir oglu et al., 2013; Muddiman et al., 2019; Taylor et al., 2019) so future studies should also examine these family processes in younger samples. Finally, research is needed to understand volunteer experiences and other forms of emergent civic engagement in early childhood, as findings may provide insights into developmental precursors to adolescent and adult volunteering.

## 6. Conclusion

Findings from the current study add to the growing body of literature on civic engagement in middle childhood. Results indicated that nearly a quarter of children reported volunteering during the past year, and that children's volunteering was associated with their own sense of community responsibility. Additionally, parent humanitarian-egalitarian values and civic participation were associated with children's volunteering. Thus, some of the individual dispositions and family processes associated with civic participation among adults and adolescents are also associated with civic participation during middle childhood. Researchers should continue to examine volunteer behavior as well as other forms of civic participation in middle childhood to better understand these processes.

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## CRedit authorship contribution statement

**Elizabeth S. White:** Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Writing - original draft, and Writing - review & editing.

## Declaration of Competing Interest

The authors declare that they have no known competing financial

interests or personal relationships that could have appeared to influence the work reported in this paper.

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## Appendix A

Exploratory Factor Analysis Results for Child Civic Dispositions

	Factor 1	Factor 2	Factor 3
Items	Responsibility to Community	Responsibility to People	Civic Values
I try to get my family to recycle at home	<b>0.55</b>		
I have a responsibility to help keep the community clean	<b>0.71</b>		
I do my part to help the environment	<b>0.77</b>		
I try to get my friends to recycle bottles and cans	0.31	0.59	
By working with others in the community, I can help make things better	<b>0.77</b>		
I spend time on projects with other people to help the community	<b>0.65</b>		
I think it is important to change things that are unfair in society	<b>0.64</b>		
I have done things to help people in my community	<b>0.68</b>		
I believe I can make a difference in my community	<b>0.56</b>		
I try to help when I see people in need		<b>0.66</b>	
I try to be kind to other people		<b>0.75</b>	
I apologize when I hurt someone's feelings		<b>0.73</b>	
I want to help when I see someone having a problem	0.52	<b>0.53</b>	
<i>It is important for me to...</i>			
help those who are less fortunate			<b>0.47</b>
help people in my community	0.53		<b>0.46</b>
help stop pollution			<b>0.67</b>
help protect animals			<b>0.76</b>
preserve the earth for future generations			<b>0.69</b>
work to stop prejudice			<b>0.47</b>
Eigenvalues	4.72	3.45	2.40
% of Variance	24.84	18.15	12.61
Cumulative %		42.99	55.60

Note: Factor loadings  $\leq 0.45$  are not shown. Although three items loaded strongly onto multiple factors, these items were included to preserve the original scales. Extraction method: Principal component analysis. Rotation method: Varimax rotation with Kaiser Normalization.

## References

- Adler, R., & Goggin, J. (2005). What do we mean by "civic engagement"? *Journal of Transformative Education*, 3(3), 236–253. <https://doi.org/10.1177/1541344605276792>
- Agresti, A., & Finlay, B. (1997). *Statistical methods for the social sciences* (3rd ed.). Prentice Hall, Inc.
- Andolina, M. W., Jenkins, K., Zukin, C., & Keeter, S. (2003). Habits from home, lessons from school: Influences on youth civic engagement. *PS. Political Science & Politics*, 36(2), 275–280. <https://doi.org/10.1017/S104909650300221X>
- Arbuckle, J. L. (1996). Full information estimation in the presence of incomplete data. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling: Issues and techniques* (pp. 243–277). Erlbaum.
- Astuto, J., & Ruck, M. D. (2010). Early childhood as a foundation for civic engagement. In L. R. Sherrod, J. Torney-Purta, C. A. Flanagan, (Eds.), *Handbook of research on civic engagement in youth* (pp. 249–275). Wiley.
- Bang, H., Won, D., & Sanghyun, P. (2020). School engagement, self-esteem, and depression of adolescents: The role of sport participation and volunteering activity and gender differences. *Children and Youth Services Review*, 113(2020), 1–10. <https://doi.org/10.1016/j.childyouth.2020.105012>
- Bandura, A. (1986). *Social foundations of thought and action*. Prentice-Hall.
- Barrett, M., & Pachi, D. (2019). *Youth civic and political engagement*. Routledge.
- Bekkers, R. (2007). Intergenerational transmission of volunteering. *Acta Sociologica*, 50(2), 99–114. <https://www.jstor.org/stable/20459986>.
- Bebiroglu, N., Geldhof, G. J., Pinderhughes, E., Phelps, E., & Lerner, R. (2013). From family to society: The role of perceived parenting behaviors in promoting youth civic engagement. *Parenting: Science and Practice*, 13(3), 153–168. <https://doi.org/10.1080/15295192.2013.756352>
- Brady, B., Chaskin, R., & McGregor, C. (2020). Promoting civic and political engagement among marginalized urban youth in three cities: Strategies and challenges. *Children and Youth Services Review*, 116(2020), 1–11. <https://doi.org/10.1016/j.childyouth.2020.105184>
- Bonnesen, L. (2020). Children's lived citizenship learning processes: Impact of a voluntary approach. *Children and Youth Services Review*, 110(2020), 1–11. <https://doi.org/10.1016/j.childyouth.2020.104807>
- Bronfenbrenner, U., & Morris, P. (2006). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology* (2nd ed., pp. 993–1028). Wiley.
- Case, K. A., Fishbein, H. D., & Ritchey, P. N. (2008). *Personality, prejudice, and discrimination against women and homosexuals*. *Current Research in Social Psychology*, 14(2), 23–38.
- Cemalcilar, Z. (2009). Understanding individual characteristics of adolescents who volunteer. *Personality and Individual Difference*, 26(4), 432–436. <https://doi.org/10.1016/j.paid.2008.11.009>
- Chi, B., Jastrzab, J., Melchior, A. (2006). Developing indicators and measures of civic outcomes for elementary school students (CIRCLE Working Paper 47). [https://circle.tufts.edu/sites/default/files/2019-12/WP47\\_DevelopingIndicatorsCivicOutcomesElementaryStudents\\_2006.pdf](https://circle.tufts.edu/sites/default/files/2019-12/WP47_DevelopingIndicatorsCivicOutcomesElementaryStudents_2006.pdf).
- Corporation for National and Community Service (2005, November). Youth helping America: The role of social institutions in teen volunteering. CNCS. [https://www.nationalservice.gov/pdf/05\\_1130\\_LSA\\_YHA\\_study.pdf](https://www.nationalservice.gov/pdf/05_1130_LSA_YHA_study.pdf).
- Cowan, G., Martinez, L., & Mendiola, S. (1997). Predictors of attitudes toward illegal Latino immigrants. *Hispanic Journal of Behavioral Sciences*, 19(4), 403–415. <https://doi.org/10.1177/07399863970194001>
- Crocetti, E., Jahromi, P., & Meeus, W. (2012). Identity and civic engagement in adolescence. *Journal of Adolescence*, 35(3), 521–532. <https://doi.org/10.1016/j.adolescence.2011.08.003>
- Dewey, J. (1923). *Democracy and education*. The Macmillan Company.
- Dewey, J. (1927). *The public and its problems*. Gateway.
- Diemer, M. A., Mistry, R. S., Wadsworth, M. E., Lopez, I., & Reimers, F. (2012). Best practices in conceptualizing and measuring social class in psychological research. *Analyses of Social Issues and Public Policy*, 13(1), 77–113. <https://doi.org/10.1111/asap.12001>
- Dowsett, C. J., Huston, A. C., Imes, A. E., & Gennetian, L. (2008). Structural and process features in three types of child care for children from high and low income families.

- Early Childhood Research Quarterly, 23(1), 69–93. <https://doi.org/10.1016/j.ecresq.2007.06.003>
- Eccles, J. (1999). The development of children ages 6 to 14. The Future of Children, 9(2), 30–44. <https://www.jstor.org/stable/1602703>.
- Enders, C. K. (2006). Analyzing structural equation models with missing data. In G. R. Hancock & R. O. Mueller (Eds.), *Structural equation modeling: A second course* (pp. 313–342). Information Age Publishing.
- Fair, C., & Delaplane, E. (2015). “It is good to spend time with older adults. You can teach them, they can teach you”: Second grade students reflect on intergenerational service learning. *Early Childhood Education Journal*, 43(1), 19–26. <https://doi.org/10.1007/s10643-014-0634-9>
- Feldman, S., & Steenbergen, M. (2001). Social welfare attitudes and the humanitarian sensibility. In J. H. Kuklinski (Ed.), *Citizens and politics: Perspectives from political psychology* (pp. 366–400). Cambridge University Press.
- Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). Sage Publications.
- Flanagan, C. A., Bows, J. M., Jonsson, B., Csapo, B., & Sheblanova, E. (1998). Ties that bind: Correlates of adolescents’ civic commitments in seven countries. *Journal of Social Issues*, 54(3), 457–475. <https://doi.org/10.1111/j.1540-4560.1998.tb01230.x>
- Flanagan, C. A., Syvertsen, A. K., & Stout, M. D. (2007). Civic measurement models: Tapping adolescents’ civic engagement (CIRCLE Working Paper 55). Center for Information and Research on Civic Learning and Engagement (CIRCLE).
- Flanagan, C. A., & Tucker, C. J. (1999). Adolescents’ explanations for political issues: Concordance with their views of self and society. *Developmental Psychology*, 35(5), 1198–1209. <https://psycnet.apa.org/doi/10.1037/0012-1649.35.5.1198>
- George, D., & Mallery, M. (2010). *SPSS for Windows step by step: A simple guide and reference, 17.0 update* (10a ed.). Pearson.
- Glover, R. J. (1994). Using moral and epistemological reasoning as predictors of prejudice. *Journal of Social Psychology*, 134(5), 633–640. <https://doi.org/10.1080/00224545.1994.9922993>
- Grimm, R., & Dietz, N. (2018). Where are America’s volunteers? A look at America’s widespread decline in volunteering in cities and states. University of Maryland, Do Good Institute. <https://dogood.umd.edu/research-impact/publications/where-are-americas-volunteers>.
- Grimm, R., & Dietz, N. (2016). Doing good by the young and old: Forty years of American volunteering. *Nonprofit Quarterly*. <https://nonprofitquarterly.org/good-young-old-forty-years-american-volunteering/>.
- Guilfoile, L., & Delander, B. (2014). Guidebook: Six proven practices for effective civic learning. Education Commission of the States. <http://www.ecs.org/clearinghouse/01/10/48/11048.pdf>.
- Hart, D., Donnelly, T. M., Youniss, J., & Atkins, R. (2007). High school community service as a predictor of adult voting and volunteering. *American Educational Research Journal*, 44(1), 197–219. <https://psycnet.apa.org/doi/10.3102/0002831206298173>.
- Haste, H. (2010). Citizenship education: A critical look at a contested field. In L. R. Sherrod, J. Torney-Purta, C. A. Flanagan, (Eds.), *Handbook of research on civic engagement in youth* (pp. 161–188). Wiley.
- Hatemi, P., Funk, C., Medland, S., Maes, H., Silberg, J., Martin, N., & Eaves, L. (2009). Genetic and environmental transmission of political attitudes over a life time. *The Journal of Politics*, 71(3), 1141–1156. <https://www.jstor.org/stable/10.1017/s0022381609090938>.
- Hess, R., & Torney, J. (1967). The development of political attitudes in children. *Aldine*.
- Jans, M. (2004). Children as citizens: Towards a contemporary notion of child participation. *Childhood*, 11(1), 27–44. <https://doi.org/10.1177/0907568204040182>.
- Kahne, J., Chi, B., & Middaugh, E. (2006). Building social capital for civic and political engagement: The potential of high school civics courses. *Canadian Journal of Education*, 29(2), 387–409. <https://www.jstor.org/stable/20054169>.
- Katz, I., & Hass, R. G. (1988). Racial ambivalence and American value conflict: Correlational and priming studies of dual cognitive structures. *Journal of Personality and Social Psychology*, 55(6), 895–905. <https://doi.org/10.1037/0022-3514.55.6.893>
- Keeter, S., Zukin, C., Andolina, M., & Jenkins, K. (2002). The civic and political health of the nation: A generational portrait. Center for Information and Research on Civic Learning and Engagement (CIRCLE).
- Keeter, S., Jenkins, K., Zukin, C., & Andolina, M. (2005). Community-based civic engagement. In K. A. Moore, & L. H. Lippman (Eds.), *What do children need to flourish?* (pp. 325–338). Springer.
- Kelly, D. C. (2006). Parents’ influence on youths’ civic behaviors: The civic context of the caregiving environment. *Families in Society: The Journal of Contemporary Social Services*, 87(3), 447–455. <https://doi.org/10.1606/1044-3894.3550>
- KidsHealth (2021). Be a volunteer. <https://kidshealth.org/en/kids/volunteering.html?ref=search>.
- Kim, J., & Morgül, K. (2017). Long-term consequences of youth volunteering: Voluntary versus involuntary service. *Social Science Research*, 67, 160–175. <https://doi.org/10.1016/j.ssresearch.2017.05.002>
- Kuperminc, G., Holditch, P., & Allen, J. (2001). Volunteering and community service in adolescence. *Adolescent Medicine: State of the Art Reviews*, 12(3), 445–457.
- Lawton, R., Gramatki, I., Watt, W., & Fujiwara, D. (2021). Does volunteering make us happier, or are happier people more likely to volunteer? Addressing the Problem of Reverse Causality When Estimating the Wellbeing Impacts of Volunteering. *Journal of Happiness Studies*, 22, 599–624. <https://doi.org/10.1007/s10902-020-00242-8>
- Lee, V. E. (2000). Using hierarchical linear modeling to study social contexts: The case of school effects. *Educational Psychologist*, 35(2), 125–141. [https://doi.org/10.1207/S15326985EP3502\\_6](https://doi.org/10.1207/S15326985EP3502_6)
- Lenzi, M., Vieno, A., Santinello, M., Nation, M., & Voight, A. (2014). The role played by the family in shaping early and middle adolescent civic responsibility. *Journal of Early Adolescence*, 34(2), 251–278. <https://doi.org/10.1177/0272431613485822>
- Levine, P., & Higgins-D’Alessandro, A. (2010). Youth civic engagement: Normative issues. In L. R. Sherrod, J. Torney-Purta, C. A. Flanagan (Eds.), *Handbook of research on civic engagement in youth* (pp. 115–137). Hoboken, NJ: Wiley.
- Matsuba, K., Hart, D., & Atkins, R. (2007). Psychological and social-structural influences on commitment to volunteering. *Journal of Research in Personality*, 41(4), 889–907. <https://doi.org/10.1016/j.jrp.2006.11.001>
- McIntosh, H., Hart, D., & Youniss, J. (2007). The influence of family political discussion on youth civic development: Which parent qualities matter? *PS. Political Science and Politics*, 40(3), 495–499. <https://doi.org/10.1017/S1049096507070758>
- McLellan, J. A., & Youniss, J. (2003). Two systems of youth service: Determinants of voluntary and required youth community service. *Journal of Youth and Adolescence*, 32, 47–58. <https://doi.org/10.1023/A:1021032407300>
- Menard, S. (1995). *Applied logistic regression analysis*. Sage university paper series on quantitative applications in the social sciences. Sage.
- Metz, E., & Youniss, J. (2005). Longitudinal gains in civic development through school-based required service. *Political Psychology*, 26(3), 413–437. <https://www.jstor.org/stable/3792604>.
- Metzger, A., Alvis, L., 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., Syvertsen, A., Oosterhoff, B., Babskie, E., & Wray-Lake, L. (2016). How children understand civic actions: A mixed methods perspective. *Journal of Adolescent Research*, 31(5), 507–535. <https://doi.org/10.1177/0743558415610002>
- Metzger, A., & Smetana, J. (2010). Social cognitive development and adolescent civic engagement. In L. R. Sherrod, J. Torney-Purta, C. A. Flanagan (Eds.), *Handbook of research on civic engagement in youth* (pp. 221–247). Wiley.
- Moorfoot, N., Leung, R., Toumbourou, J., & Catalano, R. (2015). The longitudinal effects of adolescent volunteering on secondary school completion and adult volunteering. *International Journal of Developmental Science*, 9(3–4), 115–123. <https://doi.org/10.3233/DEV-140148>
- Moreno, M., Furtner, F., & Rivara, F. (2013). Adolescent volunteering. *JAMA. Pediatrics*, 167(4). <https://doi.org/10.1001/jamapediatrics.2013.2118>
- Muddiman, E., Taylor, C., Power, S., & Moles, K. (2019). Youth people, family relationships and civic participation. *Journal of Civil Society*, 15(1), 82–98. <https://doi.org/10.1080/17448689.2018.1550903>
- Muthén, L. K., & Muthén, B. O. (1998–2010). *Mplus user’s guide* (6th ed.). Author.
- Myers, R. (1990). *Classical and modern regression with applications* (2nd ed.). Duxbury.
- Neufeld, M., Jiranek, P., & Wehner, T. (2014). Beyond skills and structure: Justice dispositions as antecedents of young citizens’ volunteering and political participation. *Journal of Community & Applied Social Psychology*, 24(4), 278–295. <https://doi.org/10.1002/casp.2166>
- Obrovic, J., & Masten, A. S. (2007). Developmental antecedents of young adult civic engagement. *Applied Developmental Science*, 11(1), 2–19. <https://doi.org/10.1080/1088690709336720>
- Otto-Wilhelm, M., Estell, D., & Perdue, N. (2014). Role-modeling and conversations about giving in the socialization of adolescent charitable giving and volunteering. *Journal of Adolescence*, 37(1), 53–66. <https://doi.org/10.1016/j.adolescence.2013.10.010>
- Penner, L. A. (2002). Dispositional and organizational influences on sustained volunteerism: An interactionism perspective. *Journal of Social Issues*, 58(3), 447–467. <https://doi.org/10.1111/1540-4560.00270>
- Piliavin, J. A., & Siegl, E. (2007). Health benefits of volunteering in the Wisconsin longitudinal study. *Journal of Health and Social Behavior*, 48(4), 450–464. <https://doi.org/10.1177/002214650704800408>
- Porter, T. (2013). Moral and political identity and civic involvement in adolescence. *Journal of Moral Education*, 42(2), 239–255. <https://doi.org/10.1080/03057240.2012.761133>
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon and Schuster.
- Rokeach, M. (1968). *Beliefs, attitudes, and values: A theory of organization and change*. Jossey-Bass.
- Rokeach, M. (1973). *The nature of human values*. The Free Press, A Division of Macmillan Publishing Co., Inc.
- Rossi, G., Lenzi, M., Sharkey, J., Vieno, A., & Santinello, M. (2016). Factors associated with civic engagement in adolescence: The effects of neighborhood, school, family, and peer contexts. *Journal of Community Psychology*, 44(8), 1040–1058. <https://doi.org/10.1002/jcop.21826>
- Sandstrom, A., & Alper, B. (2019). Americans with higher education and income are more likely to be involved in community groups. Pew Research Foundation. Retrieved from <https://www.pewresearch.org/fact-tank/2019/02/22/americans-with-higher-education-and-income-are-more-likely-to-be-involved-in-community-groups/>.
- Sarre, S., & Tarling, R. (2010). The volunteering activities of children aged 8–15. *Voluntary Sector Review*, 1(3), 293–307. <https://doi.org/10.1332/204080510X538301>
- Mitra, D., & Serriere, S. C. (2015). Civic education in the elementary grades. Teachers College Press.
- Mitra, D., & Serriere, S. C. (2012). Student voice in elementary school reform: Examining youth development in fifth graders. *American Educational Research Journal*, 49, 743–774. <https://doi.org/10.3102/0002831212443079>
- Simonds, J., & Rothbart, M. K. (2004). Temperament in middle childhood questionnaire (TMCQ). Poster presented at the Occasional Temperament Conference, Athens, GA.

- Smith, D. H. (1994). Determinants of voluntary association participation and volunteering: A literature review. *Nonprofit and Voluntary Sector Quarterly*, 23(3), 243–263. <https://doi.org/10.1177/089976409402300305>
- Snyder, M., & Omoto, A. (2008). Volunteerism: Social issues perspectives and social policy implications. *Social Issues and Policy Review*, 2(1), 1–36. <https://doi.org/10.1111/j.1751-2409.2008.00009.x>
- Strunk, D. R., & Chang, E. C. (1999). Distinguishing between fundamental dimensions of individualism-collectivism: Relations to sociopolitical attitudes and beliefs. *Personality and Individual Differences*, 27(4), 665–671. [https://doi.org/10.1016/S0191-8869\(98\)00258-X](https://doi.org/10.1016/S0191-8869(98)00258-X)
- Taylor, L. K., Townsend, D., Merrilees, C., Goeke-Morey, M., Shirlow, P., & Cummings, E. M. (2019). Adolescent civic engagement and perceived political conflict: The role of family cohesion. *Youth & Society*, 51(5), 616–637. <https://doi.org/10.1177/0044118X17697236>
- Torney-Purta, J. (1995). Psychological theory as a basis for political socialization research: Individuals' construction of knowledge. *Perspectives on Political Science*, 24(1), 23–33. <https://doi.org/10.1080/10457097.1995.9941862>
- Torney-Purta, J. & Lopez, S. (2006). Developing citizenship competencies from kindergarten through Grade 12: A background paper for policymakers and educators. Education Commission of the States. <https://files.eric.ed.gov/fulltext/ED493710.pdf>.
- U.S. Bureau of Labor Statistics (BLS) (2016). Volunteering in the United States- 2015. Retrieved from <https://www.bls.gov/news.release/volun.nr0.htm>.
- van Goethem, A., van Hoof, A., van Aken, M., Orobio de Castro, B., & Raaijmakers, Q. (2014). Socialising adolescent volunteering: How important are parents and friends? Age dependent effects of parents and friends on adolescents' volunteering behaviours. *Journal of Applied Developmental Psychology*, 35(2), 94–101. <https://doi.org/10.1016/j.appdev.2013.12.003>
- White, E. S., & Mistry, R. S. (2016). Parent civic beliefs, civic participation, socialization practices, and child civic engagement. *Applied Developmental Science*, 20(1), 44–60. <https://doi.org/10.1080/10888691.2015.1049346>
- White, E. S., & Mistry, R. S. (2019). Teachers' civic socialization practices and children's civic engagement. *Applied Developmental Science*, 23(2), 183–202. <https://doi.org/10.1080/10888691.2017.1377078>
- Wilkenfeld, B., Lauckhardt, J., & Torney-Purta, J. (2010). The relation between developmental theory and measures of civic engagement in research on adolescents. In L. R. Sherrod, J. Torney-Purta, C. A. Flanagan, (Eds.), *Handbook of research on civic engagement in youth* (pp. 193–219). Wiley.
- Wilson, J. (2000). Volunteering. *Annual Review of Sociology*, 26(1), 215–240. <https://doi.org/10.1146/annurev.soc.26.1.215>
- Wilson, J. (2012). Volunteerism research. A review essay. *Nonprofit and Voluntary Sector Quarterly*, 41(2), 176–212. <https://doi.org/10.1177/0899764011434558>
- Wilson, J., & Musick, M. (1999). Attachment to volunteering. *Sociological Forum*, 14, 243–272. <https://doi.org/10.1023/A:1021466712273>
- Wray-Lake, L., Metzger, A., & Syvertsen, A. (2017). Testing multidimensional models of youth civic engagement: Model comparisons, measurement invariance, and age differences. *Applied Developmental Science*, 21(4), 266–284. <https://doi.org/10.1080/10888691.2016.1205495>
- Wray-Lake, L., Shubert, J., Lin, L., & Starr, L. (2019). Examining associations between civic engagement and depressive symptoms from adolescence to young adulthood in a national U.S. sample. *Applied Developmental Science*, 23(2), 119–131. <https://doi.org/10.1080/10888691.2017.1326825>
- Wuensch, K. L. (2021). Binary logistic regression with SPSS. <http://core.ecu.edu/psyc/wuensch/MV/Multreg/Logistic-SPSS.PDF>.
- Yates, M., & Youniss, J. (1996). A developmental perspective on community service in adolescence. *Social Development*, 5(1), 85–111. <https://doi.org/10.1111/j.1467-9507.1996.tb00073.x>
- Youniss, J., & Yates, M. (1997). *Community service and social responsibility in youth*. University of Chicago Press.
- Zaff, J., Malanchuk, O., Michelsen, E., & Eccles, J. (2003). Identity development and feelings of fulfillment: Mediators of future civic engagement. CIRCLE WORKING PAPER Retrieved from [https://circle.tufts.edu/sites/default/files/2019-12/WP04\\_IdentityDevelopmentandFulfillment\\_2003.pdf](https://circle.tufts.edu/sites/default/files/2019-12/WP04_IdentityDevelopmentandFulfillment_2003.pdf).