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Volunteerism as purpose: examining the long-term predictors of continued community engagement

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This study frames continued long-term participation in community engagement activities as indicative of a sense of ‘purpose’ as defined by Damon, Menon, and Cotton Bronk (2003). Using data from US-based National Longitudinal Study of Adolescent Health, we examined factors that predict whether students participating in civic engagement activities between the ages of 12 and 18 would report similar participation six years later. Multilevel logistic regression analyses revealed no demographic differences beyond age and highest level of education attained. However, continued participation was most likely among individuals who participated in a combination of voluntary and required community-based civic activities as an adolescent, and who participated in any of a number of various types of extracurricular activities. Other factors, including religiosity, sense of belonging in school, achievement, and having parents engaged in civic activities, were also positively related to continued community engagement.

Keywords: secondary; social context; adolescent

Civic engagement can be conceptualised as an expression of positive youth development, as youth draw from internal and external resources to contribute to something that is both personally satisfying and socially beneficial (Sherrod, 2007). In this broad field, understanding participation in civically-oriented voluntary activities within one’s community (referred to throughout as ‘community engagement’ or ‘volunteerism’) has long been of interest in the United States, where rates of volunteerism have historically been high, as well as in other countries in part due to support from international organisations such as the United Nations (Snyder & Omoto, 2008). Further, as young people’s interest in more conventional and political forms of civic engagement wane, especially in older democracies, community-based engagement has increased (as discussed by Amnå, 2012). For these reasons, Penner (2004) described volunteerism as both a common and an important form of social action to study.

In an effort to learn more about how individuals develop the desire to participate in their communities, scholars have used a variety of frameworks. Some have taken a social-capital theory approach (Coleman, 1988), especially when examining how organisational participation in adolescence relates to civic participation in young adulthood (e.g., McFarland & Thomas, 2006). Others employ psychological

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perspectives such as social cognitive theory (Bandura, 2001) or theories of identity development (Erikson, 1968, as illustrated in a study of US youth by Marcia, 1996; Yates & Youniss, 1996, 1998; as illustrated in an analysis of Italian youth by Crocetti, Pahromi, & Meeus, 2012) to link adolescents' experiences in community engagement to a multitude of prosocial outcomes, including expected or actual political participation (e.g., McLellan & Youniss, 2003; Reinders & Youniss, 2006; Torney-Purta, Amadeo, & Richardson, 2007).

One thing that many of these studies have in common is that they consider early community engagement as a predictor of later volunteerism. Early participation, however, is not a guarantee of later participation (Vogelgesang & Astin, 2005). This is especially the case when examining patterns of volunteerism across the transition from adolescence to adulthood, which is characterised as a time of change and potentially instability in positive development (Hawkins et al., 2011, in an analysis of Australian youth). In this analysis, we explore what makes those who continue to engage in their communities, despite the many changes that accompany this developmental transition, differ from those who stop.

One could conceptualise this persistence as indicative of a sense of 'purpose', defined by Damon et al. (2003) as 'a stable and generalised intention to accomplish something that is at once meaningful to the self and of consequence to the world beyond the self' (p. 121). In keeping with purpose as a conceptual framework, young people who continue to be engaged despite contextual and developmental changes do so because they continue to place importance on the need to serve the communities in which they reside in an effort to contribute to the greater good. By conceptualising long-term community participation as indicative of 'purpose', we have a framework through which the many theoretical perspectives used in the previous literature can come together in order to examine how one comes to see such activities as an integral part of one's life. The goal of this study is to identify factors that can predict whether an adolescent exposed to community engagement opportunities will report continued participation as a young adult. The review of literature that follows is divided into two components: we first draw upon the concept of purpose as defined by Damon et al. (2003) to make the case for its manifestation in long-term involvement in community activities, and then, consider how previously-identified correlates of such participation aligns with prior and needed future research on purpose.

Assumptions of community engagement as a form of purpose

Damon and colleagues described purpose as being defined by three components: it is a stable and far-reaching goal, it is of benefit to one's self and to the greater good, and it is something at which one can make progress even if the outcome is unattainable. The first two components are especially salient when considering volunteerism as an area in which one may find purpose. Related to the first component, a proximal goal of completing a single activity in one's community does not indicate purpose; however, continued engagement may. In this sense, as Damon et al. acknowledge one could specify that purpose as a specific component of an achieved identity. Several longitudinal studies have examined changes in community involvement over the course of high school (e.g., Kerestes, Youniss, & Metz, 2004; Metz & Youniss, 2005; Reinders & Youniss, 2006), or afterwards (Rosenthal, Feiring, & Lewis, 1998); however, the strongest support for considering community

engagement as a stable and far-reaching goal comes from studies that span the transition from adolescence to young adulthood. For example, Duke, Skay, Pettingell, and Borowsky (2009) and McFarland and Thomas (2006) related voluntary organisational involvement and school and family connexions among adolescents, respectively, to future civic engagement as a young adult using data from the National Longitudinal Study of Adolescent Health (AddHealth). Each of these studies used a composite scale incorporating many forms of civic engagement as an outcome, meaning that the contribution of these activities to volunteerism specifically is difficult to ascertain. Hart, Donnelly, Youniss, and Atkins (2007) took a more specific approach, identifying school-related predictors of three forms of future civic engagement (titled voting, community service, and youth service), and tested them in several models developed using data the National Educational Longitudinal Study of 1988 (NELS-88), also conducted in the United States. Their predictors included several related to organisational membership.

One of the major goals in Hart et al.'s study was to establish that earlier participation in voluntary activities was predictive of later engagement. However, as stated previously, there are many young participants who do not continue these activities as young adults. As outlined by Damon et al.'s second tenet of purpose, one thing that may separate those who do and do not continue is a sense that the activity is important both internally and externally. Generally, one can think of community engagement as an activity that provides personal satisfaction as well as one that makes a contribution to the community; in fact, Damon et al. list it as one area in which young people can find 'purpose'. This focus on both personal and greater good separates purpose from more general goal setting behaviour. In fact, it echoes the very definition of civic engagement offered by Sherrod (2007), who described it as a series of activities in which people participate in actions that benefit themselves as well as the community as a whole.

Participation in such activities, however, may not necessarily be motivated by broader, more noble means. This may especially be true if the voluntary activity is completed to fulfil a requirement by schools, churches, or parents. A student may participate in required activities to meet a goal of personal import (e.g., graduation) without considering what it means for the greater good, thus becoming likely to discontinue the activity once these personal motivations are taken away. Results from studies of such requirements have been mixed: Henderson, Brown, Pancer, and Ellis-Hale (2007) found no effect of such a policy on future civic engagement among students in Ontario, Canada, while a study of US high school students by Metz and Youniss (2005) found that participants did have higher expectations of future 'unconventional' engagement. Differences between these results could be due to national context, to considering actual vs. expected engagement as an outcome, or to the generalizability of the sample to the target population (as Metz & Youniss focused on a specific suburban community). Hart et al. (2007) also discussed the issue of mandated community engagement, finding that truly voluntary activity was more predictive of future work with youth organisations than were required activities, and that the combination of the two (voluntary and required) was most predictive of civic volunteerism. Participants in either activity, however, were more likely to volunteer than were non-participants.

In addition to the two components of purpose described above, a final consideration in studying youth purpose is the domain-specificity of its manifestation. Damon et al. make several references to multiple 'purposes' that young people may

find, and discuss how specific purposes that young people are attracted to may change over generations and vary across contexts. This suggests that the study of community engagement separately from civic engagement more generally is warranted. Community engagement, which as previously discussed is an especially common and relevant form of civic engagement, is predicted by different experiences that are other forms of civic engagement (e.g., Hart et al. 2007, using NELS-88; Marzana, Marta, & Pozzi, 2012, in an analysis of Italian youth; Torney-Purta et al. 2007, using data from Chilean, Danish, English, and US samples from the IEA Civic Education Study of 1999). Thus, an analysis of this specific activity is warranted.

In sum, the very nature of community engagement, along with previous research supporting its constancy for some youth, aligns with Damon et al.'s (2003) description of purpose. This current study seeks to extend upon previous longitudinal studies documenting the connection between earlier civic engagement and young adult participation by focusing specifically on volunteerism and by focusing solely on those with at least some prior exposure to community engagement.

Individual and contextual factors associated with the development of purpose

Damon et al. (2003) identified several individual factors that have been studied in connection with youth purpose, including demographic characteristics, religiosity, and general well-being. Additionally, they identified five areas worthy of further research into the construct of purpose. Of these, two areas (understanding of traditional introductions to youth purpose and identification of the purposes being supported by educational institutions) align with the notion that social-contextual factors work with personal characteristics to shape how purpose develops. In this section, we examine research on these factors using broad range of developmental and psychological theories of adolescence, with the assumption that they are connected to prosocial outcomes by fostering one's sense of purpose towards meeting these goals.

Demographic characteristics of youth who find purpose in community engagement

Damon et al. (2003) highlighted the potential for gender, cultural/ethnic, and socio-economic differences in the development of purpose, stating that empirical evidence for such differences has been mixed. Perhaps one reason for this is that the authors highlight purpose in general, rather than looking at specific manifestations of purpose, as the authors mention that various types of purposes may appeal in different ways to specific groups of individuals. It then stands to reason that community engagement as a form of purpose may appeal specifically to individuals of a certain gender, racial/ethnic background, or socio-economic status (SES).

Similarly, previous research has identified demographic differences in community engagement. Looking first at gender differences, Cruce and Moore (2007) found that university women had stronger intentions of volunteering. Both Hart and colleagues (2007) and Rosenthal et al. (1998) found that young women were more likely than young men to participate in non-political or civic activities, although Hart and colleagues found no difference between young men and women in their likelihood of participating in youth activities. These gender differences are also found in samples that are more diverse in terms of age (e.g., Williams, Muhajarine,

Randall, Labonte, & Kitchen, 2008, in a phone survey of residents of Saskatoon, Saskatchewan, Canada).

There is similar evidence for racial differences in engagement. Lopez et al. (2006) conducted a survey with a nationally representative sample of over 1,700 US youth between 15 and 25 years old and found racial and ethnic differences in the frequency and nature of political engagement. While African American participants were the most likely to vote, make donations, belong to political groups, and raise money for charity; Asian Americans were most likely to volunteer regularly and work on community concerns. Cruce and Moore (2007) found that African Americans, Latino Americans, and Asian Americans first-year college students had greater odds of volunteering than did White first-year students.

SES is highlighted as factors both in the development of purpose and of civic engagement. The general trend is that being of higher SES oneself, or residing in a high-SES neighbourhood, is associated with civic engagement. Williams et al. (2008) found that participants' levels of volunteerism varied as a function of neighbourhood SES. Rosenthal et al. (1998) similarly found that youth from higher socio-economic backgrounds were more likely to volunteer. Given this, some researchers suspect that extra financial resources are needed to dedicate one's time and energy for volunteer work. The question, then, becomes whether such factors are related only to opportunity for initial exposure or whether they are related to continued participation once exposed.

Religious organisations

Many researchers have investigated the relationship between civic engagement and religiosity, paralleling the importance that Damon et al. place on religiosity as a factor in youth purpose. Adolescents who belonged to religious groups were more likely to volunteer in community activities (McLellan & Youniss, 2003), and greater levels of religious activity were associated with greater civic engagement (Kerestes, Youniss, & Metz, 2004). Similarly, among religious adults, the level of participation in religious activities was positively associated with volunteer activities (as noted by Garland, Meyers, & Wolfer, 2008, in an analysis of social workers). Moreover, college students in religious private school were found to be more engaged in volunteer services than the ones in public or private institution (Cruce & Moore, 2007). As was the case with SES, this suggests an importance in looking at both individual and contextual factors associated with religious influences on the development of volunteerism as a form of youth purpose.

School-related experiences

Damon et al. specifically indicate that more research is needed on how educational institutions foster various types of purpose in young people. Indeed, Seider (2007) proposed a model that conceptualised academic experiences as a mechanism through which young people could make sense of prior experiences and translate them into future civic action. As described earlier, one mechanism by which schools encourage youth to engage in volunteerism is through the organisation of activities promoting community engagement, be they mandatory or voluntary. However, other opportunities exist as well. In Hart and colleagues' (2007) analysis of data from NELS-88, participation in school-sponsored extracurricular activities was considered

along with participation in community activities as a predictor of future civic engagement. Participation in activities, especially ‘instrumental’ activities designed to contribute to a common good, was positively related to future civic and youth group engagement.

The current study expands upon Hart et al.’s previous work in part by considering a broader range of predictors among those who have had at least some prior exposure to volunteerism. For example, even within the school context, there are additional factors that may relate to the likelihood that someone will continue to be engaged in their communities. Several researchers have commented that individuals who volunteer are more successful in school (e.g., Rosenthal et al., 1998). In addition, a psychological connection to school may foster a young person’s sense of community in their proximal social context, which may lead them to want to be part of a broader community as they become young adults (see the ‘communities of practice’ paradigm described in Wenger, 1998)

Significant others: peer groups and families

Peer and family contexts are also important factors in shaping young people’s civic engagement. These may serve as unique contexts for introducing individuals to purpose, or (in the case of peers) may represent one way in which school contexts shape intentions for future behaviour. In studies with high school students, those with parents and peers who were engaged in their communities were more likely to volunteer themselves (McLellan & Youniss, 2003; Mustillo, Wilson, & Lynch, 2004). Here, we incorporate reports of engagement directly from parents and peers, which is an improvement over self-report measures used in other research.

Well-being

Finally, although Damon et al. (2003) acknowledge that several studies correlate scores on measures of self-reported purpose in life to general psychological well-being, they also argue that, according to their definition of purpose, the two ‘need not be necessarily associated’ (p. 123). We were unable to find any that directly addresses well-being as a predictor of volunteerism among young people, although some work with older adults in Australia suggests a curvilinear relationship between the two (Windsor, Antsey, & Rodgers, 2008). However, following the statements presented above, we would expect that continued community engagement is not limited to those with a certain level of well-being.

Summary

In sum, Damon et al.’s (2003) conceptualisation of purpose, and the directions for future research that they identify, provides a framework with which to synthesise a range of literature on correlates of voluntary community engagement. Apart from the few longitudinal studies mentioned previously, most of this existing research is cross-sectional in design, or it relates to intentions of future participation. This study seeks to extend this work by examining how organisational membership, school-related experiences, religiosity, and parent and peer influences as they relate to the likelihood that an individual exposed to community activities as an adolescent will continue with to be engaged as a young adult. In doing so, we employ data from

AddHealth (Harris, 2008), which allows for the examination of adolescents and their surrounding contexts as they transition into young adulthood. Multilevel modelling will allow for several school-level factors to be considered as predictors of individual outcomes. Further, demographic variables such as race, class, and gender will be considered as they may predict an individual's propensity for future participation.

Data and methods

Data source

The general purpose of AddHealth was to examine how contexts of development in the adolescent years (such as school, community, and family) influenced physical, psychological, and social well-being. Add Health data sets include information collected from participant self-report in addition to information collected on their schools and social networks. Researchers associated with the AddHealth study sampled over 20,000 students from schools in 80 communities (selected using a stratified random sample) at Wave I, in 1994–95. Wave I participants were administered both in-school questionnaires and in-home interviews. Computer-based in-home interviews were conducted between April and December 1995. These interviews took between one and two hours to complete, depending on the respondent's age and experience. During the in-home interview, interviewers read less sensitive questions and recorded responses, and respondents listened to more sensitive questions through earphones and recorded answers themselves. In this analysis, demographic items and questions about adolescents' perceptions of social contexts were asked by the interviewers, while questions about parents' backgrounds and self-perceptions were considered sensitive and therefore self-recorded. Supplementary information was also collected from parents via face-to-face interviews.

At Wave III, conducted in 2001–02 when participants were between 18 and 26 years of age, researchers followed up with almost 15,000 of the original respondents and collected computer-based interviews in participants' homes. As in Wave I, interviewers collected less sensitive information while more sensitive information was self-recorded. In this analysis, the 'civic engagement and citizenship' portion of the questionnaire was considered non-sensitive information.

Sample

The analytic sample in this study was limited to those with data from both Wave I and Wave III who had reported participating in community activities as an adolescent. This was assessed by examining participants' responses to the following Wave III interview item: 'At any time in your adolescence, when you were 12–18 years of age, did you regularly participate in volunteer or community work?' Participants were further advised to discount fundraising activities such as washing cars or selling candy. This was a dichotomous item, with 'yes' and 'no' as the possible responses. Only participants who responded 'yes' to this item were included in the analytic sample. Given this limitation, there is no attempt to generalise these results to the United States population of 12–18 year olds from 1996, and design weights are not utilised.

The sample was further limited by our inclusion of parent and peer network variables. Only participants who had data available from these sources were included in the analytic sample. Altogether, 3,165 participants from 116 schools (at Wave I) were included in this sample.

Measures

Outcome variable: wave III participation

The outcome variable in our analyses was a dichotomous survey item included in the Wave III interview. Participants were asked whether they ‘performed any unpaid voluntary or community service work’ in the ‘last 12 months’. Participants responded to this question by answering ‘no’ or ‘yes’.

Control variables

We considered several variables as statistical controls. *Age* and *education completed* at Wave III were considered as demographic controls. To facilitate interpretation, age was kept in its original metric ($M=21.75$, $SD=1.72$) while education completed was standardised. In addition, we included several psychological variables as controls, keeping in mind Damon et al. (2003)’s assertion that purpose is distinct from general psychological well-being. These variables include self-concept (six items, $\alpha=.841$, factor loadings range from .729 to .795), positive outlook on life (four items, $\alpha=.714$, factor loadings range from .679 to .781), and intrinsic academic achievement motivation (two items, $r=.712$, $\alpha=.683$, factor loadings for each item = .872).

Demographic predictors

Race/ethnicity, SES, and gender were considered as predictors of Wave III community engagement. We assessed gender by examining the participants’ self-report at Wave I (male/female) where 56.3% of the sample identified as female. Race was measured via self-report at Wave I; however, the original variable allowed for multiple responses among several racial/ethnic categories. To simplify, we created a series of discrete classifications with the following groups: African-American (18.8% of sample), Asian-American (6.3%), Hispanic/Latino (13.6%), Other/Multiracial (6.1%), and White (55.2%). The ‘other/multiracial’ category included the small proportions of participants who indicated more than race as well as those who identified as Native American or as a member of an ‘other’ racial/ethnic group. Given the diversity within this group, it is included only as a statistical control and is not analysed further.

Finally, residential mother’s education at Wave I was examined as a proxy for SES. In studies with the Add Health data, mother’s educational level has been often utilised in this manner (e.g. Adler & Snibbe, 2003; Bornstein & Bradley, 2003; Mistry, Biesanz, Chien, Howes, & Benner, 2008). Although family income information was also available in the Add Health dataset, there is considerably more missing data on this variable. To create an ordinal variable for use in the current study, response options were collapsed to create the following categories: never went to school, less than eighth grade, less than high school (some high school or

vocational/trade school instead of high school), high school graduate (or equivalent), less than four years of college (some college or vocational/trade school after high school), college graduate, and professional training beyond a four-year college [university]. Participants who did not know whether their mother went to school or what level she completed were re-coded as missing. Responses were normally distributed across this new categorization, and thus, this variable is treated as continuous in the analyses that follow. In this analysis, it is standardised for ease in interpretation.

Nature of community participation

In the Wave III interview, participants were asked to indicate whether their adolescent volunteer and community activities were required or voluntary. Under this question, participants could indicate that their community activities were ‘strictly voluntary (that is, you did it only because you wanted to)’, ‘court-ordered’, or ‘required by school/community/religious group’. Participants could answer ‘yes’ or ‘no’ to each option separately.

In order to create an indicator of the nature of adolescent community participation, we created a discrete variable in which participants were coded as voluntary participants only (75% of the sample), court-ordered only (2.3%), required by group only (13.7%), voluntary and group-required (7.1%), voluntary and court-ordered, and all three (collapsed, 2.0% total).

School-related contextual factors

Four indicators examined aspects of participants’ in-school experiences at Wave I of AddHealth data collection. The first two examined individual experiences in school. First, we captured *sense of belonging* at school by creating a four-item scale that captured participants’ perceptions of relationships with peers and teachers in the school context ($\alpha=.760$, factor loadings ranging from .594 to .798). Second, we examined *grade point averages* at Wave I by averaging participants’ most recent grades (self-reported) in mathematics, science, history, and English. Values on this scale mimic a traditional four-point GPA scale, with a four indicating that a student reported receiving ‘As’ in all four subjects. In each case, the values were standardised within the sample for ease in interpretation.

Two additional variables capture characteristics of schools attended at Wave I. Participants’ reports of residential mother’s level of education were aggregated to the school level to create a measure of school SES. This measure was standardised across schools for ease in interpretation. Second, we considered whether the school attended was public/comprehensive (82.5%), another public school (7.6%), a religious private school (7.6%), or another private school (2.3%). We took data on school sector from the school-level files included in the supplementary Adolescent Health and Academic Achievement study (Population Research Center, n.d.).

Activity-related contextual factors

We also considered five indicators of how participants spent out-of-school time at the time of Wave I data collection. The first two indicators capture whether students participated in *instrumental activities* and/or *expressive activities*. As outlined by Kirlin

(cited in Hart et al., 2007), instrumental activities (in which 30.3% of the sample participated) are those that require participants to work together towards a broader common good, which in this analysis includes vocational clubs, newspapers, honours societies, student councils, and yearbook clubs. To contrast, Hart et al. described expressive activities (in which 51% of the sample participated) as those that participants join because of an individual interest in an activity, which in this analysis includes academic clubs, computer clubs, performing arts organisations, debate clubs, or cheerleading. These indicators were developed from the items on activity involvement collected as part of the in-school questionnaire administered at Wave I.

The third activity indicator was *athletics participation*, a dichotomous indicator of whether students participated in any sports-related activity. A number of questions related to participation in specific sports in the in-school questionnaire were collapsed to create this variable, and 60.6% of the sample reported participating in at least one sport. To contrast, additional variables came from the Wave I interview: *time spent on hobbies spent outside of school*, *time spent hanging out with friends*, and *time spent watching television outside of school*. Responses to each of these items were assessed on likert scales, and were standardised for ease in interpretation. Hobby participation was added to the model to test the effect of a constructive but individual activity, while the latter two activities were tested as ones indicating participation in activities not necessarily thought to lead to positive outcomes.

Religious context

To capture religious involvement, we created a three-item scale of religious participation from items included in the Wave I survey assessing how often participants reported attending services, participating in youth activities, and praying ($\alpha=.712$, factor loadings ranging from .747 to .857). Higher scores indicated greater involvement, and participants who were missing data because they indicated not belonging to any religion were considered to 'never' participate in any of the three activities.

Friendship context

Measures in this study capturing 'friendship context' utilise reports from the friends themselves. As part of the AddHealth in-school questionnaire administered in Wave I, participants were asked to identify up to 10 friends (five male, five female) within the participant's school or sister school (defined as the junior high school that feeds into the high school of a same neighbourhood, or vice versa). Variables were created by averaging nominated friends' responses to many of the items administered as part of the in-school questionnaire.

From these variables, we chose three indicators of friendship context. Two, friends' average GPA and the number of activities in which friends are involved on average, were compiled by researchers associated with the AddHealth study and made available in the social-network dataset. We created a third, friends' sense of belonging, by averaging together the items in the 'sense of belonging' scale described above, each of which had been aggregated across the friendship network by AddHealth researchers. All predictors were standardised for ease in interpretation, and in all cases, we considered responses from reciprocated friends only (i.e., friends nominated by the participant who in turn nominate the participant as a friend).

Parent context

During Wave I, AddHealth researchers collected data from In-Home Interview participants' mothers or female head-of-household. (Data were collected from fathers or male head-of-household only if there was no female head.) Included was an item about whether the parent participated in civic activities. Response options were 'yes' or 'no', and 18.2% of the sample had parents reporting participation.

Additional information about these scales appears in Table 1.

Analytic strategy

The percentage of respondents missing data was under 2% for every predictor except for mother's education (6.4% missing). No schools were missing data on

Table 1. Items for scales.

Scale name	Response options	Items
Positive outlook on life	Never or rarely, sometimes, a lot of the time, most or all of the time	<i>How often was the following true in the past week?</i> (1) You felt that you were just as good as other people (2) You felt hopeful about the future (3) You were happy (4) You enjoyed life
School motivation	Never, just a few times, once a week, almost everyday, everyday	(1) How often have you had trouble getting homework done?*
Self-concept	Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree	(2) How often have you had trouble paying attention?*
Sense of belonging	Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree	(1) You have a lot of good qualities (2) You have a lot to be proud of (3) You like yourself just the way you are (4) You feel like you are doing everything just right (5) You feel social accepted (6) You feel loved and wanted
Religiosity	Once a week or more, once a month or more, less than once a month, never Once a day, once a week, once a month, less than once a month, never	(1) You feel close to people at school (2) You feel like you are a part of your school (3) You are happy to be at your school (4) You feel safe in your school <i>In the past 12 months, how often have you:</i> (1) Attend religious services (2) Attend youth activities (3) Pray?

Note: *Item is reverse-coded.

school type; however, one school was removed from analysis for having only a single eligible student in it. Data on all continuous variables were imputed using the EM algorithm provided in SPSS 19.0. In addition, a small number of students missing categorical demographic data ($n < 5$) were removed from analysis.

As described when introducing that AddHealth study, participants were nested in 145 schools in 80 communities; there were two schools per community when ‘sister schools’ were sampled. Given the importance of in-school experiences and school-level characteristics to this study, we chose to nest participants within schools rather than communities, treating sister schools independently of one another. To handle this, we conducted multilevel modelling using HLM statistical software (Raudenbush, Bryk, Cheong, & Congdon, 2004). More specifically, given the dichotomous nature of the outcome (i.e., participants either completed an activity in the last twelve months or they did not), we conducted a multilevel logistic regression using hierarchical generalised linear modelling, employing restricted penalised quasi-likelihood estimation and examining the population-average model with robust standard errors.

This analysis can be described as a ‘lagged-variable’ analysis, as responses collected from participants in 1994–95 are used to predict an outcome that happened several years later. (Controls for age and educational attainment at Wave III are the exception to this general rule.) Variables were added as individual-level predictors of the likelihood of continued participation (represented by parameters β_x), or as school-level predictors of the average likelihood of continued participation in a school (represented by parameters γ_{0x}). Variables were entered in the following order: controls, demographic information, characteristics of adolescents’ community participation, contextual factors, and personal controls. The purpose of entering variables in blocks was to examine whether the strength of association between predictors and the outcome was influenced by the addition of more variables.

Results

We first ran a fully unconditional model to determine whether between-school differences existed that warranted multilevel modelling. According to this model, the random effect of school on the likelihood of participating in community activities was statistically significant, $\chi^2(115)=190.22$, $p<.001$. Thus, multilevel modelling is warranted. Although variables were entered in blocks in subsequent steps, the magnitude of coefficients entered at earlier stages varied minimally with the addition of subsequent blocks. As a result, only the final model is presented here. The model is also outlined in Table 2.

When examining variables entered in as controls, Wave III community engagement was more likely among younger students, and among students who reported having completed more education as young adults. However, Wave III participation was not related to general outlook on life, self-concept, or school motivation as examined at Wave I.

Turning to demographics, there was no statistically significant difference in the likelihood of participating in community activities at Wave III by gender. There were also no significant differences when comparing racial/ethnic groups, nor was participation more likely among those with more educated mothers. In interpreting the non-significant effect of mother’s education here, it is important to consider that the individual’s educational attainment at Wave III is controlled for in the model.

Table 2. Hierarchical generalised linear model predicting young-adult community participation among adolescent community engagement activity participants.

Predictor, parameter	Coefficient (s.e.)	Odds ratio
Intercept, β_0		
Constant, γ_{00}	-0.09* (.04)	0.92
Other public school, γ_{01}	-0.03 (.11)	0.97
Private religious school, γ_{02}	-0.05 (.14)	0.95
Private other school, γ_{03}	0.39 (.22)	1.48
Average school SES, γ_{04}	0.03 (.06)	1.03
Positive outlook on life, β_1	0.02 (.04)	1.02
School motivation, β_2	0.01 (.04)	1.01
Self-concept, β_3	0.03 (.04)	1.03
Age at Wave III, β_4	-0.10*** (.02)	0.90
Education level at Wave III, β_5	0.24*** (.05)	1.27
Gender: female, β_6	-0.13 (.08)	0.88
Ethnicity: African-American, β_7	0.11 (.10)	1.12
Ethnicity: Asian-American, β_8	-0.07 (.14)	0.94
Ethnicity: Hispanic, β_9	0.04 (.12)	1.04
Ethnicity: other ethnicity, β_{10}	0.03 (.14)	1.03
Mother's education, β_{11}	0.01 (.03)	1.01
Service activities required by parents/school/church, β_{12}	-0.62*** (.10)	0.54
Service activities required by court, β_{13}	-0.56* (.28)	0.57
Voluntary and parent/school/church, β_{14}	0.47*** (.14)	1.60
Court-ordered and other motivation, β_{15}	0.54* (.23)	1.71
Activities: instrumental, β_{16}	0.20** (.07)	1.22
Activities: expressive, β_{17}	0.16* (.06)	1.17
Activities: athletic, β_{18}	0.15* (.07)	1.17
Participation in hobbies, β_{19}	0.13** (.04)	1.14
Time spent watching TV, β_{20}	0.02 (.03)	1.02
Time spent hanging out with friends, β_{21}	-0.01 (.04)	0.99
GPA, β_{22}	0.22*** (.04)	1.25
Sense of belonging to school, β_{23}	0.07* (.03)	1.08
Religiosity, β_{24}	0.14*** (.04)	1.15
Parent participation in civic activities, β_{25}	0.19* (.09)	1.20
Friends' GPA, β_{26}	0.00 (.05)	1.00
Friends' sense of belonging, β_{27}	0.04 (.04)	1.04
Friends' number of activities, β_{28}	-0.05 (.04)	0.95

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

There were several significant differences in the likelihood of Wave III community engagement among groups of participants who were introduced to these activities in various ways. Compared to participants whose adolescent community engagement was solely 'voluntary', those who reported that their participation was required by school, church, or families were significantly less likely to participate in volunteer activities as a young adult. More specifically, the odds of participation for adolescents who participated in community activities only because it was required of them were half of those for an adolescent who participated voluntarily. However,

when examining participants who reported that they engaged in activities that were voluntary *and* that were required by an outside agency, the likelihood of participation was significantly higher than those who only engaged voluntarily. More specifically, participants whose adolescent involvement was both voluntary and required by school/church/family were 1.60 times as likely to participate at Wave III than were the strictly voluntary adolescent participants, while participants whose involvement was voluntary and court-ordered (with or without additional outside requirements) were 1.71 times as likely to participate compared to the volunteer group.

Next, when examining extracurricular activity participation, several types of adolescent involvement are predictive of future community engagement. More specifically, community engagement as a young adult was 1.22 times more likely among those participate in instrumental extracurricular activities than it was among non-participants, while young adult participation was 1.17 times more likely among participants in expressive activities than among those who do not participate. Athletes were also 1.17 times more likely to participate than were non-participants. In addition, students who participated in hobbies more regularly were more likely to volunteer as young adults: for every 1 SD increase in self-reported hobby participation, students were 14% more likely to participate in activities as a young adult. However, neither time spent watching television nor time spent with friends was significantly related to future community engagement.

Turning to in-school experiences, although there was significant between-school variability in the likelihood of an adolescent continuing to participate in community activities as a young adult, neither school SES or school sector served to explain this variability. At the individual level, both sense of belonging and academic performance positively related to continued participation as a young adult. With each standard deviation increase in academic achievement, adolescents are 1.25 times more likely to serve as young adults, while odds of participation increased by 8% for each standard deviation increase in feelings of belongingness in school.

Wave I religiosity was also significantly related to community engagement at Wave III. With each standard deviation increase in religious involvement, adolescents' likelihood of serving as young adults increased by 15%. Friends' extracurricular activities, GPA, and sense of belonging were all non-significant predictors of young adult participation. However, students with parents who participated in civic activities were 1.20 times more likely to participate themselves as young adults.

Finally, in an attempt to determine whether any of the contextual predictors moderated the statistically significant effect of maternal education on young adults' community participation, we tested a series of interaction terms. None of the tested terms were statistically significant; therefore, they were left out of this final model.

Discussion

The purpose of this study was to examine factors predicting whether an individual exposed to community engagement activities as an adolescent would report participation as a young adult. We conceptualised such continued participation as an indication of a sense of purpose surrounding community participation; in that spirit, we drew upon Damon et al.'s (2003) conceptualisation of purpose and previous literature on civic engagement to identify predictors of interest. In this sense, the findings shed new light on how we may consider volunteerism as a form of purpose.

First, it is notable that demographic variables were not predictive of engagement at Wave III. The likelihood of continued community engagement did not differ by race, SES (as assessed by mother's education), or gender. In considering SES, it is possible that the effect was non-significant due to the inclusion of education in the block of control variables. In other words, adolescents with more educated mothers were more likely to be highly educated as young adults. At that point, it is an individual's own level of education, and not their mother's, that has the most bearing on their engagement in volunteer activities, possibly because universities themselves can serve as contexts supporting community engagement (Astin, 1993). The findings related to gender, and to a lesser extent race/ethnicity, are somewhat more perplexing and could be contributed to a few factors. First, it is possible that the demographic differences seen in previous research pertain primarily to how individuals are selected into volunteerism in the first place. In this sense, these findings suggest that contingent on some initial introduction into volunteerism, there is no one demographic group that is more likely than another to continue this work. Second, it is possible that racial/ethnic and gender differences are more closely related to specific types of activities selected. In fact, further analysis looking more specifically at predictors of various types of volunteerism (e.g., hospitals, schools, church organisations), several racial/ethnic and gender differences become apparent (Barber, Ogata, & Mueller, 2010). Overall, this suggests that differences lie not in terms of who finds purpose in community engagement, but rather more specifically in how that purpose is manifested.

Next, we added predictors related to the context in which adolescents' engagement in the community was conducted. This analysis supports prior research by finding that, compared to students who were engaged in their community in a truly voluntary manner, students who completed activities in their community to fill a requirement (whether for school, church, or courts) were less likely to continue with it. However, one of the strongest positive predictors of continued involvement was the combination of required and voluntary activities. Although these findings indicate independent activities are important for continued volunteerism, this is not meant to discount the role of schools in encouraging students to become more engaged. Some theories of motivation not typically considered in civic engagement research, such as self-determination theory (Ryan & Deci, 2000) may help to explain how external factors foster the self-motivation that appears necessary for continued community engagement. According to self-determination theory, self-motivation is enhanced when individuals are situated in contexts that provide feelings of competency, autonomy, and relatedness. In this sense, schools (and other educational organisations) may contribute to individuals' self-motivation for future voluntary activities by providing activities in which students can experience feelings of competence, and in which they can develop a sense of relatedness by interacting with others who have similar interests. This importance of engaging in a supportive community is similarly illustrated by the fact that parental civic engagement and religious involvement were predictive of young people's continued activity as young adults.

One limitation of this study, and of other studies employing similar designs, is that data on these predictors were all collected at the same time, which negates the possibility of examining temporal order. For the group of students who participate in both mandatory and voluntary community engagement activities, further research determining which activities were introduced first would be warranted in order to

understand the processes at play. If students typically chose to participate in truly voluntary activities after participation in mandatory ones, it would speak to the role of schools in introducing otherwise non-engaged students into the community via the mechanisms described above. The question then becomes how best to design such programmes to encourage students to want to take this on individually. However, even if those participating in both types started out as voluntary before fulfilling mandatory duties, these findings speak to the role of schools in facilitating more sustainable interest in wanting to be engaged in one's community.

Similarly, individuals were more likely to continue volunteering in communities if they had been exposed to extracurricular activities in school. Simple participation – including participation in individual hobbies and athletics – was predictive of community engagement as a young adult. Only activities which could be potentially hypothesised to negatively relate to engagement – hanging out with friends and watching TV – bore no relation to future volunteerism. Further, while Hart et al. (2007) found that instrumental activities were significantly more predictive of engagement than were expressive activities, the effects of the two types of activities displayed here suggest that the effects of the two are similar, with instrumental having only a slightly larger effect size than expressive activities (1.22 vs. 1.17, respectively). One explanation could be that extracurricular activities or hobbies, regardless of type, represent an additional context in which identities can be established. In this sense, students who participate in more contexts beyond school, family, and religion are more likely to volunteer (as was also seen in a study of Dutch youth by van Goethem et al., 2012). Another conclusion to take from this work could be that simply finding an activity of personal importance is more crucial for the development of a sense of purpose than is participating in a specific type of activity, suggesting that schools and other educational institutions should keep an open mind in terms of considering the many forms that community engagement may take. Follow-up work on specific activities suggests that involvement in certain activities may lead to continued engagement in those specific areas (Barber et al. 2010); while athletics or music organisations may not immediately strike one as being for 'the greater good', a young person may find purpose in translating these interests and talents into activities with broader impact. One implication for schools and other institutions, then, is to recommend avenues for community engagement that correspond to interests that students demonstrate.

Other school-related predictors were also salient in predicting continued community involvement. Students who earned better grades in school and who had a greater sense of belonging to their schools were more likely to serve as adults, suggesting that engagement in the school community is predictive of engagement in the broader community upon entry into young adulthood. As stated before, this is in keeping with the Communities of Practice paradigm (Wenger, 1998), which states that engagement in small communities prepares a young person for broader engagement later. This engagement has both behavioural and affective components, as indicated here. The relation of grades to community engagement in young adulthood could also be indicative of a cognitive component of continued volunteerism, as suggested by previous work that found correlations between cognitive ability and engagement (e.g. Rosenthal et al., 1998).

However, more contextual aspects of school were not significant predictors of community engagement as young adults. Friends' reports of school engagement were not predictive of an individual's future behaviour, nor were the type of school

attended or the SES of the students attending that school. This is not to say that these factors do not matter; rather, it is possible that the factors examined here were not closely enough related to community engagement to make an impact in this arena after an individual has left school. Or, as stated previously, the effect on continued community engagement comes less from simply having engaged friends, and more from how their engagement fosters motivation to continue on one's own. Again, models conceptualising personal motivations as mediators of the association between contextual factors and engagement outcomes may provide more insight into the specific mechanisms at work here.

Finally, other individual predictors, including well-being, self-concept, and general motivation in school, were not predictive of continued engagement. This lends some support to Damon et al.'s statement that purpose (and in particular, any specific manifestation of purpose) is not necessarily linked to more general psychological well-being.

Limitations

In interpreting the analyses presented here, it is worth noting that the criterion for inclusion in this study was an affirmative response to a retrospective question on one's activities between the ages of 12 and 18: a span of six years. To contrast, the majority of the predictors considered here were collected during Wave I data collection, which happened at a single time point in the 1994–95 school year. Therefore, the attitudes and activities reported by participants and considered as predictors may not necessarily be those that they had at the exact time that they participated in community engagement activities as adolescents.

A second limitation of this study is that the outcome item only asks participants to indicate whether they had participated in voluntary community activities during the year prior to Wave III data collection. It is possible that some respondents participated in isolated activities during this time that do not represent a broader commitment; likewise, it is possible that some individuals who find purpose in serving others in their community would have been prevented from doing so in that year due to life events. Truly longitudinal studies (in comparison with the cross-lagged analysis presented here) would allow for the identification of individuals who consistently serve across multiple data points.

There are also some limitations more generally related to the use of a pre-existing data set. Using the AddHealth data is advantageous in that it allows us to track a sample of participants drawn from across the United States out of school and into young adulthood. However, analyses are limited to the variables made available in the dataset. Thus, while a sense of purpose may be implied by examining the long-term nature of participants' involvement, we cannot measure it directly. Damon et al. summarise several self-report measures designed to assess youth purpose that could be employed in future work to assess the role of purpose as mediator in the relations described here.

Further research

In addition to areas of further research indicated above, there are several areas of future study suggested by this work. First, one could consider in greater depth how experiences after high school may further shape one's desire to continue volunteer-

ing. Combining this work with the current work could provide a truly developmental picture of youth purpose as manifested in community engagement. That said, work on the role of universities can only inform us about the development of young people who attend them. One finding here was that an individual's level of education was one of the strongest predictors of continued engagement. Therefore, a second potential area of research could be related to how young people who do not pursue postsecondary education come to be engaged in their communities.

In addition, this study only follows individuals through their young adulthood, with the oldest participants at the age of 26. Further research should examine who continues this intent to serve the community through the transition to middle adulthood. A fourth wave of data is currently available from the AddHealth study; however, researchers did not pose the same questions related to civic engagement that were posed in Wave III.

Finally, further work should be conducted cross-nationally in order to ascertain the extent to which these findings are replicable in other contexts. The United States, as acknowledged earlier, has an especially established history of volunteerism (Snyder & Omoto, 2008), and organisational supports may for community engagement may function differently in countries without this history.

Conclusion

In sum, this analysis illustrates several characteristics of voluntary community engagement as a specific manifestation of purpose. It does not appear to be a purpose that is especially relevant to one demographic or another, although the exact nature of how this purpose is manifested may differ and is worthy of further exploration. It is more likely to be seen among individuals who have found constructive uses for their time as adolescents, be it in traditional civic-minded activities or in more individual sorts of activities. It is best cultivated through nurturing individual interest in volunteer activities with the support of parents, schools, church, and other social organisations in which young people may become engaged.

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References

- Adler, N. E., & Snibbe, A. C. (2003). The role of psychosocial processes in explaining the gradient between socioeconomic status and health. *Current Directions in Psychological Science*, 12, 119–123.
- Amná, E. (2012). How is civic engagement developed over time? Emerging answers from a multidisciplinary field *Journal of Adolescence*, 35, 611–627.

- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52*, 1–26.
- Barber, C., Ogata, S., & Mueller, C. T. (2010). *Finding youth purpose through multiple domains of community engagement*. Roundtable presented at the American Educational Research Association Annual Conference, Denver, CO.
- Bornstein, M. H. & Bradley, R. H. (2003). Socioeconomic status, parenting, and child development: An introduction. In M. H. Bornstein & R. H. Bradley (Eds.), *Socioeconomic status, parenting, and child development* (pp. 1–10). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Coleman, J. S. (1988). Social capital and the creation of human capital. *American Journal of Sociology*, *94*, S95–S120.
- Crocetti, E., Pahromi, P., & Meeus, W. (2012). Identity and civic engagement in adolescence. *Journal of Adolescence*, *35*, 521–532.
- Cruce, T. M., & Moore, J. V. (2007). First-year students' plans to volunteer: An examination of the predictors of community service participation. *Journal of College Student Development*, *48*, 655–673.
- Damon, W., Menon, J., & Cotton Bronk, K. (2003). The development of purpose during adolescence. *Applied Developmental Science*, *7*, 119–128.
- Duke, N. N., Skay, C. L., Pettingell, S. L., & Borowsky, I. W. (2009). From adolescent connections to social capital: Predictors of civic engagement in young adulthood. *Journal of Adolescent Health*, *44*, 161–168. doi: 10.1016/j.jadohealth.2008.07.007.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York, NY: Norton.
- Garland, D. R., Meyers, D. M., & Wolfer, T. A. (2008). Social work with religious volunteers: Activating and sustaining community involvement. *Social work*, *53*, 255–265.
- Harris, K. M. (2008). *The national longitudinal study of adolescent health (Add Health), Waves I & II, 1994–1996; Wave III, 2001–2002 [machine-readable data file and documentation]*. Chapel Hill, NC: Carolina Population Center, University of North Carolina at Chapel Hill.
- 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*, 197–219. doi: 10.3102/002831206298173.
- Hawkins, M. T., Letcher, P., Sanson, A., O'Connor, M., Toumbourou, J. W., & Olsson, C. (2011). Stability and change in positive development during young adulthood. *Journal of Youth and Adolescence*, *40*, 1436–1452. doi: 10.1007/s10964-011-9635-9.
- Henderson, A., Brown, S. D., Pancer, S. M., & Ellis-Hale, K. (2007). Mandated community service in high school and subsequent civic engagement: The case of the 'double cohort' in Ontario, Canada. *Journal of Youth and Adolescence*, *36*, 849–860. doi: 10.1007/s10964-007-9207-1.
- Kerestes, M., Youniss, J., & Metz, E. (2004). Longitudinal patterns of religious perspective and civic integration. *Applied Developmental Science*, *8*, 39–46.
- Lopez, M. H., Levine, P., Both, D., Kiesa, A., Kriby, E., & Marcelo, K. (2006). *The 2006 civic and political health of the nation: A detailed look at how youth participate in politics and communities*. College Park, MD: The Center for Information and Research on Civic Learning and Engagement.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology*, *3*, 551–558.
- Marzana, D., Marta, E., & Pozzi, M. (2012). Social action in young adults: Voluntary and political engagement. *Journal of Adolescence*, *35*, 497–507.
- McFarland, D. A., & Thomas, R. J. (2006). Bowling young: How youth voluntary associations influence adult political participation. *American Sociological Review*, *71*, 401–425.
- McLellan, J. A., & Youniss, J. (2003). Two systems of youth service. Determinants of voluntary and required community service. *Journal of Youth and Adolescence*, *32*, 47–58.
- Metz, E. C., & Youniss, J. (2005). Longitudinal gains in civic development through school-based required service. *Political Psychology*, *26*, 413–437.

- Mistry, R. S., Biesanz, J. C., Chien, N., Howes, C., & Benner, A. D. (2008). Socioeconomic status, parental investments, and the cognitive and behavioral outcomes of low-income children from immigrant and native households. *Early Childhood Research Quarterly*, 23, 193–212.
- Mustillo, S., Wilson, J., & Lynch, S. M. (2004). Legacy volunteering: A test of two theories of intergenerational transmission. *Journal of Marriage and Family*, 66, 530–541.
- Penner, L. A. (2004). Volunteerism and social problems: Making things better or worse? *Journal of Social Issues*, 60, 645–666.
- Population Research Center, University of Texas at Austin (n.d.) *AHAA: Adolescent health and academic achievement study*. Retrieved 13 April 2010 from <http://www.laits.utexas.edu/ahaa/users/primarydata>
- Raudenbush, S., Bryk, A., Cheong, Y. F., & Congdon, R. (2004). *HLM 6: Hierarchical linear and nonlinear modeling*. Lincolnwood, IL: Scientific Software International.
- Reinders, H., & Youniss, J. (2006). School-based required community service and civic development in adolescents. *Applied Developmental Science*, 10, 2–12.
- Rosenthal, S., Feiring, C., & Lewis, M. (1998). Political volunteering from late adolescence to young adulthood: Patterns and predictors. *Journal of Social Issues*, 54, 477–493.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78.
- Seider, S. (2007). Catalyzing a commitment to community service in emerging adults. *Journal of Adolescent Research*, 22, 612–639. doi: 10.1177/0743558407306347.
- Sherrod, L. (2007). Civic engagement as an expression of positive youth development. In R. K. Silbereisen & R. M. Lerner (Eds.), *Approaches to positive youth development* (pp. 59–74). London: Sage.
- Snyder, M., & Omoto, A. M. (2008). Volunteerism: Social issues perspectives and social policy implications. *Social Issues and Policy Review*, 2, 1–36.
- Torney-Purta, J., Amadeo, J., & Richardson, W. (2007). Civic service among youth in Chile, Denmark, England and the United States: A psychological perspective. In M. Sherraden & A. McBride (Eds.), *Civic service worldwide: Impacts and inquiries* (pp. 95–132). Armonk, N.Y: M.E. Sharpe.
- van Goethem, A. A. J., van Hoof, A., van Aken, M. A. G., Raaijmakers, Q. A. Q., Boom, J., & deCastro, B.O. (2012). The role of adolescents' morality and identity in volunteering. Age and gender differences in a process model. *Journal of Adolescence*, 35, 509–520.
- Vogelgesang, L. J. & Astin, A. W. (2005). *Post-college civic engagement among graduates*. (HERI Research Report No. 2). Los Angeles, CA: Higher Education Research Institute of the University of California, Los Angeles.
- Wenger, E. (1998). *Communities of Practice. Learning, Meaning and Identity*. Cambridge, MA: Cambridge University Press.
- Williams, A. M., Muhajarine, N., Randall, J., Labonte, R., & Kitchen, P. (2008). Volunteerism and residential longevity in Saskatoon, Saskatchewan, Canada. *Social Indicators Research*, 85, 97–110. doi: 10.1007/s11205-007-9122-6.
- Windsor, T. D., Antsey, K.J., & Rodgers, B. (2008). Volunteering and psychological well-being among young-old adults: How much is too much? *The Gerontologist*, 48, 59–70.
- Yates, M., & Youniss, J. (1996). A developmental perspective on community service in adolescence. *Social Development*, 5, 85–111. doi: 10.1111/j.1467-9507.1996.tb00073.x.
- Yates, M., & Youniss, J. (1998). Community service and political identity development in adolescence. *Journal of Social Issues*, 54, 495–512.