



HHS Public Access

Author manuscript

Dev Psychol. Author manuscript; available in PMC 2018 December 01.

Published in final edited form as:

Dev Psychol. 2017 December ; 53(12): 2397–2408. doi:10.1037/dev0000377.

The developmental course of community service across the transition to adulthood in a National U.S. sample

Laura Wray-Lake,

University of California, Los Angeles

John Schulenberg,

University of Michigan

Katherine M. Keyes, and

Columbia University

Jennifer Shubert

University of Rochester

Abstract

Despite the potential importance of community service for the well-being of individuals and communities, relatively little is known about the developmental course of community service during the transition to adulthood (TTA). Our study tested competing hypotheses about change in community service across the TTA by estimating latent growth models from ages 18 to 26 in a nationally representative sample. We situated youth community service participation in historical context by testing for cohort differences in community service, and we examined differences in developmental trajectories by socioeconomic status, gender, grades, religiosity, race/ethnicity, college expectations, and college degree attainment. Using Monitoring the Future data from 1976 to 2011, we found that the best-fitting latent growth model for community service was quadratic: Community service declined from age 18 to 24 and leveled off thereafter. Cohort differences in intercepts indicated that age 18 community service increased over historical time; developmental declines in community service were consistent over the four decades. Parent education predicted higher community service at age 18, but did not predict growth parameters. Community service trajectories varied by gender, high school grades, religiosity, and educational attainment, although all groups declined. Overall, findings contribute to civic developmental theory by clarifying age and cohort effects in community service. Rising levels of community service at age 18 may reflect increased focused on service in high schools, yet these increases do not mitigate the decline across the TTA.

Keywords

socioeconomic status; volunteering; high school; college; growth curve; civic engagement

Concerns about low civic engagement among today's youth still reverberate in the media and public discourse since Putnam's (2000) claims that the U.S. is experiencing a crisis of community. Yet, community service – one type of civic engagement that is defined as unpaid work in communities intended to benefit others and is synonymous with volunteering – has

been rising among high school seniors in recent years (Syvertsen et al., 2011). As youth transition from high school into adulthood, life paths become heterogeneous (Schulenberg, Bryant, & O'Malley, 2004), and it is unclear whether to expect age-related gains or losses in community service across this period. Furthermore, persistent socioeconomic (SES) differences suggest that more advantaged individuals engage in more community service (Rotolo & Wilson, 2012; Schlozman, Verba, & Brady, 2012), and this social inequality may increase across the transition to adulthood (Institute of Medicine, 2014). Using Monitoring the Future nationally representative data from multiple cohorts of youth (from 1976 to 2011) followed longitudinally from ages 18 to 26, this study primarily examines developmental change and SES differences in community service and situates both in the context of historical change.

Community Service during the Transition to Adulthood

Community service has long been considered the backbone of American communities, as helping others is associated with increased social capital, lowered community-level crime and violence, and improvements in health and well-being (Piliavin & Siegl, 2007; Putnam, 2000; Sampson, McAdam, MacIndoe, & Weffer-Elizondo, 2005; Schreier, Schonert-Reichl, & Chen, 2013). Given its potential societal and personal benefits, community service is a central focus of policy recommendations to support young adults' health and development (Institute of Medicine, 2014). Community service has been the subject of considerable research in adolescence and adulthood (van Goethem et al., 2014; Wilson, 2000). Longitudinally, community service in late adolescence predicts civic engagement in adulthood, up to 20 years later (e.g., Bekkers, 2005; Smith, 1999; Hart, Donnelly, Youniss, & Atkins, 2007). What is missing is research on developmental patterns of change in community service across the transition to adulthood and whether such patterns are changing across historical time. National multi-cohort longitudinal data spanning the transition to adulthood are needed to elucidate the developmental course of community service during this period.

The transition to adulthood (TTA) is a salient time for examining developmental change. With identity development still in progress, many youth enter the TTA with more autonomy to explore their worldviews, values, and interests (Côté, 2006; Schwartz et al., 2013). Over the last few decades, youth are increasingly delaying social roles such as stable career, marriage, and parenthood, and more are living with parents and attending school longer (Arnett, 2014; Settersten & Ray, 2010). The TTA is one of the most heterogeneous developmental periods; there is wide variability in life paths regarding school, work, residential and financial independence, and marriage and parenthood (Schulenberg & Schoon, 2012).

Extant literature suggests three hypotheses regarding how civic engagement (including community service) should change during the TTA. The political life cycle model argues that civic engagement increases as part of becoming an adult (Kinder, 2006). Youth are expected to gradually increase their sense of responsibility and independence into and across adulthood, which would likely translate into greater community involvement. Several studies have found that community service increases across adolescence (Kerestes et al., 2004; Zaff

et al., 2011). Rosenthal et al. (1998) found a slight increase in community service from ages 18 to 21 using two waves of data. In midlife, age was also associated with more community service (Matsuba et al., 2007; Wilson, 2000). Thus, community service may increase monotonically with age.

Others suggest declines in civic engagement as competing responsibilities – such as the “big 5” transition markers of work, education, romantic relationships, parenthood, and living independently – take priority (Wilson, 2000). Stresses of learning to navigate new social roles may disrupt earlier patterns of civic engagement, suggesting drops in community service after high school (Oesterle, Johnson, & Mortimer, 2004). Following a community-based Minnesota sample from 18 to 27 (spanning 1992–2000), Oesterle et al. found declines in community service. Moreover, institutional opportunities for community service vary depending on college, work, and community experiences, and may decline with age (Finlay, Wray-Lake, & Flanagan, 2010); this heterogeneity may mean fewer norms for engaging in community service. Thus, a second hypothesis is that community service declines steadily across the TTA.

A third hypothesis argues that youth are delaying civic involvement, just as youth are delaying entry into adult roles like marriage and parenthood (Flanagan & Levine, 2010). Youth may postpone steady civic involvement until life stabilizes and adult roles are established. Flanagan and Levine showed this trend with voting, where recent cohorts of youth are waiting longer to start voting, which then becomes more habitual. This idea suggests that declines are temporary and anticipates a curvilinear pattern such that community service declines after high school yet increases in young adulthood as life becomes more stable. Insofar as successive cohorts of youth increasingly experience delay in social roles, this pattern should be particularly true for more recent cohorts. The expected curvilinear pattern of decline with subsequent increase in young adulthood has been found with social trust and prosociality (Jennings & Stoker, 2004; Luengo Kanacri et al., 2013), which are associated with community service. This pattern may be particularly true for recent cohorts, who experience more delays in social roles (Settersten & Ray, 2010). No known research carefully tests the delay hypothesis for community service, likely because this thesis is intertwined with arguments of historical change and data enabling comparison of age and cohort effects are generally lacking (Neundorf & Niemi, 2014).

Overall, there are competing ideas and inconsistent evidence about age-related change in community service across the TTA. Many studies are cross-sectional and do not account for non-linear patterns or historical change. Rigorous longitudinal analysis can chart the developmental course of community service, enriching theory and research that seeks to describe and explain changes in community service across the TTA. Using multi-cohort national samples of U.S. youth followed from ages 18 to 26, we examined the trajectory of community service to inform theories of developmental change.

Historical Change

Lifespan and life course theoretical perspectives emphasize the importance of historical change for properly studying human development in context (Baltes, 1987; Elder, 1998).

Most studies of developmental processes do not consider historical context, either due to lack of available data or assumptions that psychological processes do not vary across historical time. However, research has found that a range of developmental constructs show subtle and dramatic changes sparked by historical events (e.g., Conger & Elder, 1994; Crockett & Silbereisen, 2000; Keyes, Jager, Hamilton, O'Malley, Miech, & Schulenberg, 2015; Keyes, Maslowsky, Hamilton, & Schulenberg, 2015).

Historical trends in civic engagement have been of interest to scholars across disciplines (Flanagan & Levine, 2010; Jennings & Niemi, 2014; Putnam, 2000; Stolle & Hooghe, 2005; Syvertsen et al., 2011; Twenge et al., 2012; Wattenberg, 2016). Whereas several forms of political participation have declined, community service has increased in recent decades. High school seniors and college freshmen have increased in community service since around 1990 (Lopez, 2004; Syvertsen et al., 2011). Various explanations for this rise have been offered, such as school policies emphasizing mandatory service or service learning and heightened demand for more service on résumés to facilitate college admissions (Youniss & McIntosh, 2010).

Only a few studies have endeavored to disentangle developmental and cohort effects in community service (e.g., Jennings & Stoker, 2004), although advances are being made with other types of civic engagement such as political attitudes and trust (Hooghe et al., 2015; Jennings et al., 2009; Neundorf et al., 2013). Accounting for historical change can add precision to the study of age-related change. When following a single cohort – or group of individuals born around the same time – longitudinally, age-related change is confounded with period and cohort effects (Glenn, 2003; Yang & Land, 2013). In other words, longitudinal age-based findings may not always be attributable to developmental processes, and age patterns may not generalize across cohorts. Panel data on multiple cohorts is needed for simultaneous estimation of age effects (e.g., developmental change) and cohort effects (e.g., political or sociohistorical phenomena). Emerging work in other domains, such as substance use, shows that developmental changes can vary across cohorts (Jager, Schulenberg, O'Malley, & Bachman, 2013).

Our study is the first of its kind to test for cohort differences in age-related change in community service across the TTA. Given historical changes in the timing of social role acquisitions (Arnett, 2014; Schulenberg, Maslowsky & Jager, in press), recent cohorts may have different developmental experiences across the TTA compared to earlier cohorts. For example, U.S. youth are coming of age in times of economic uncertainty, such as the Great Recession, and have more financial worry than past cohorts (Kalil, 2013). Economic concerns have been noted as obstacles to civic engagement (Rotolo & Wilson, 2014; Son & Wilson, 2015). Thus, recent cohorts may experience steeper declines or less positive slopes in community service.

Socioeconomic Disparities

Persistent socioeconomic inequalities in civic engagement have been extensively documented in adulthood (Schlozman et al., 2012), and are thought to emerge in childhood and adolescence (Atkins & Hart, 2003; Levinson, 2010). More socioeconomically

shed new light on the relative roles of selection effects of college attendance and educational attainment on community service (Campbell, 2009). In addition, girls and youth that are White, have higher grades, are religious, and plan to or have attained a college degree may show more growth (or less negative declines) over time in community service. Examining these factors as predictors of developmental change will contribute new knowledge to the field.

The Current Study

This study aims to contribute to developmental theory and research on civic engagement by documenting age-related change in community service across the TTA. Estimating latent growth models across ages 18 to 26, separately by cohorts spanning 1976 to 2011, allowed us to describe age and cohort-based historical change in community service and test competing hypotheses about how community service changes during the TTA. Building on work showing SES disparities, we also examined SES differences in community service and tested whether SES differences varied by cohort or emerged in developmental trajectories. Finally, we examined gender, ethnicity, high school grades, religiosity, and college expectations and degree attainment as predictors of initial levels and age-related change in community service.

Method

Respondents and Procedure

Monitoring the Future (MTF) is an ongoing national study of the epidemiology and etiology of drug use among adolescents and adults. Each year since 1976, nationally representative samples of about 16,000 12th graders have been drawn from about 135 public and private schools; approximately 2400 respondents are randomly selected for follow-up and illicit drug users at baseline are oversampled (Johnston et al., 2016). Follow-ups occur via mail surveys. One random half of each cohort is surveyed one year after high school and the other half is surveyed two years after high school; each half was followed biennially thereafter and combined for analyses.

In the present study, we used MTF panel data spanning ages 18 to 26. Respondents were, on average, 18 years old at Wave 1, 19–20 at Wave 2, 21–22 at Wave 3, 23–24 at Wave 4, and 25–26 at Wave 5. Respondents were high school seniors in 1976 through 2011 who provided data at one or more follow ups. Measures used here were included on one of six randomly assigned questionnaire forms at 12th grade, providing us with one-sixth of the panel sample ($N=15,822$).

The retention rate between Waves 1 and 5 was 57.07%. Attrition analyses indicated that those retained through Wave 5 were more likely to be female, White, live in non-urban areas, have higher high school GPA, have more educated, affluent and married parents, and report lower senior year substance use, including binge drinking. Attrition rates were slightly higher among recent cohorts. To account for missing data patterns, we used full information maximum likelihood (FIML) estimation.

Measures

Community service was operationalized by the one item, “How often do you participate in community affairs or volunteer work?” Single item measurement is standard in the literature (Johnson et al., 1998; Putnam, 2000). Response options were *never* (1), *a few times a year* (2), *once or twice a month* (3), *at least once a week* (4), and *almost every day* (5).

Socioeconomic status was assessed with parental education at base year (age 18), measured by averaging youth reports of mother and father education. Gender was coded as *female* (1) and *male* (0). Race/ethnicity was self-reported and coded into Black, Hispanic, and Other (with White as reference). High school letter grades were reported on a 1 (*mostly Ds*) to 9 (*mostly As*) scale. Religiosity was measured by standardizing and averaging two items – frequency of attending religious services (1(*rarely*) to 4(*once a week or more*)) and importance of religion in one’s life (1(*not important*) to 4(*very important*)). College expectations at base year were coded into three mutually exclusive groups: no college plans (i.e., definitely or probably will not graduate from a two- or four-year college), two-year college plans (i.e., definitely or probably will graduate from a two-year but not a four-year college), and four-year college plans (i.e., definitely or probably will graduate from a four-year college). The reference category was four-year plans. College degree attainment was assessed as the highest degree attained by the end of Wave 5. Responses ranged from 1 (*less than high school diploma*) to 6 (*PhD or equivalent*), and were centered at 2 “high school diploma” for analyses.

Analytic Plan

Data were structured to examine age-as-time in the growth model. Participants were assumed to be 18 at base year (the majority were), and a community service variable was created for each discrete age from 18 to 26. Using *Mplus 7.4*, we identified the best-fitting latent growth models (LGM) for the full sample. Fit was determined based on a non-significant chi-square statistic, a RMSEA of .05 or lower, and a CFI and TLI of .90 or greater (Hu & Bentler, 1999).

To examine moderation by cohort, we conducted multigroup models using the best-fitting growth parameters from the full sample unconditional model described above and with cohort as a categorical grouping variable. Cohorts were grouped in five-year increments, a grouping that optimized sample sizes for analysis while providing detail on potential cohort changes over time. We conducted sensitivity analyses with larger groupings (6 year groups) and results did not change; thus, here we report results from five-year groups. We first estimated a configural model, in which the growth parameters (intercept, linear slope, quadratic slope) from the full-sample unconditional growth model were allowed to vary across cohort groups. We compared this model to a constrained model, in which intercept and growth parameter means, variances, and covariances were constrained to be equal across cohort groups. Following the approach outlined by Cheung and Rensvold (2002), change in CFI of .01 or greater was used to evaluate significant differences in overall model comparisons, given that chi square tests are sensitive to sample size. Modification indices were used to determine parameter differences, and parameters were considered significantly different at $p < .002$ (Little, 2013).

After determining cohort differences in growth parameters, all covariates were entered into the multiple group model as predictors of the intercept and growth parameters. Constrains across cohorts for the growth parameters were maintained. Cohort differences in parameter estimates were evaluated as described above for growth parameters.

Results

First, the full sample LGM for community service was estimated with intercept at age 18 (base year) and intercept and growth factors correlated. The quadratic model was chosen because it fit the data better than the linear growth model, $\chi^2(4) = 298.45, p < .001$ and had a good fit overall, $\chi^2(20) = 103.43, p < .001$, RMSEA = .02; CFI = .99; TLI = .99. The intercept mean indicated that 18-year olds participated in community service on average around once or twice per month ($\alpha = 2.09, p < .001$). Significant linear ($\alpha = -.01, p < .001$) and quadratic ($\alpha = .01, p < .001$) growth means suggested that on average, community service declined after high school and leveled off around age 24. Intercept was negatively correlated with linear slope ($r = -.04, p < .001$) and positively correlated with quadratic slope ($r = .002, p = .003$), indicating that youth who started higher on community service declined at a faster rate initially and recovered over time. A negative correlation between linear and quadratic slopes ($r = -.005, p < .001$) indicated that individuals with more positive (i.e., less negative) slopes had flatter, or less quadratic, trajectories. Variances indicated significant individual differences in initial levels ($\psi = .45, p < .001$), linear ($\psi = .04, p < .001$), and quadratic slopes ($\psi = .001, p < .001$).

Cohort Differences in Community Service

The unconditional quadratic growth model was estimated in a multiple group model with five-year cohort groupings. Comparing configural and constrained models revealed evidence of moderation by cohort, CFI = .040 (Table 1). Modifications showed that four cohort group intercepts needed to be freed: 1991–1995, 1996–2000, 2001–2005, and 2006–2011. Tests of equality constraints showed that intercepts for 2001–2005 and 2006–2011 cohorts did not differ, and 1991–1995 and 1996–2000 intercepts did not differ (Table 1). The intercept for 1991–2000 was significantly lower than that of the 2001–2011 cohorts. Cohort differences indicated successive increases in community service at age 18 over historical time (Figure 1).

Linear and quadratic slopes did not differ across cohort groups; the developmental trajectory of community service – with a pattern of decline followed by leveling off in the 20s – was invariant across cohorts, indicating a similar developmental course in community service across the past four decades (Figure 1). Intercept, linear, and quadratic variance estimates did not differ across cohorts, indicating that individual variability in intercepts and growth parameters remained relatively stable across historical time. Covariances among growth parameters did not differ across cohorts, and interpretation remained the same as described above.

Predictors of Community Service Intercept and Slopes

Next, all covariates were added to the multiple group model as predictors of intercept and growth factors. Model comparisons showed no differences by cohort in any pathways; thus, results described below hold across cohort groups (Table 2). Parental education was associated with the intercept only ($B = .048, p < .001$), showing that youth with more educated parents reported more community service at age 18. Compared to boys, girls started higher in community service ($B = .091, p < .001$), declined at a steeper rate after high school ($B = -.053, p < .001$), and recovered slightly more in young adulthood ($B = .005, p < .001$). Similarly, youth reporting higher religiosity reported higher community service at age 18 ($B = .233, p < .001$) and declined more steeply after high school ($B = -.020, p < .001$), and then recovered slightly more ($B = .002, p < .05$). Youth with higher high school grades reported more community service at age 18 ($B = .052, p < .001$), but declined slightly more right after high school ($B = -.008, p < .01$). Youth self-reporting an ethnicity other than White, Black, and Hispanic reported higher community service than White youth at age 18 ($B = .073, p < .01$), but there were no other racial/ethnic differences. Lower community service at age 18 was associated with no college plans ($B = -.144, p < .001$) and two-year college plans ($B = -.111, p < .001$), compared to four-year college plans. Youth with no college plans declined more slowly after high school ($B = -.042, p < .01$), but did not differ in quadratic change. Youth who attained more college education had less negative decline in community service after age 18 ($B = .031, p < .001$) and a less quadratic pattern ($B = -.003, p < .001$). Thus, their trajectory was more positive and linear.

Discussion

The present study was undertaken to examine the normative developmental trajectory of community service across late adolescence and the transition to adulthood, focusing on cohort variation and demographic differences in trajectories. Using multicohort U.S. national panel data, we found that community service decreased after senior year of high school and leveled off after age 24. This developmental course across the transition to adulthood has been remarkably consistent across nearly four decades, but showed variability by gender, religiosity, school achievement, and educational attainment. Despite the consistency in developmental course across cohorts, evidence indicated that community service in high school has increased in recent years. Taken together, results significantly advance theory of civic development by supporting the hypotheses that civic engagement in high school has been increasing, that it declines across the TTA, and that this developmental course has been invariant across cohorts. Results pave the way for further consideration of mechanisms that explain this decline in community service.

Developmental Trajectory of Community Service

This study shed new light on the nature of age-related change in community service participation during the transition to adulthood, supporting the decline hypothesis. Oesterle et al. (2004) found declines in community service from age 18 to 27 for a single cohort, and we significantly add to their finding with our nationally representative sample and by situating developmental change in historical context. Given that we found no cohort differences in trajectories, the age-related decline in community service after high school

appears robust to historical change, remaining consistent across nearly four decades. Thus, our evidence for community service supports the idea that civic engagement declines during the TTA as other responsibilities take priority (Wilson, 2000). There was no evidence of increases proposed by the political life cycle model (Kinder, 2006), and no firm evidence of a rebound or recovery as proposed by the delay hypothesis (Flanagan & Levine, 2010). Some suggest that rises in community service may not happen until later in adulthood (Wilson, 2000).

Thus, we present strong evidence in favor of a normative age-related decline in the U.S. up through the mid-20s, and these findings significantly clarify civic developmental theory and lay the groundwork for further research to assess whether declines continue across adulthood and hold for other forms of civic engagement. More research is also needed to investigate the specific developmental processes that underlie such declines. For example, shifting priorities to romantic relationships or to work or career goals may reduce focus on community service (Oesterle et al., 2004). Feelings of transience and lack of community connections may be experienced by many youth during the TTA (Finlay, Wray-Lake, & Flanagan, 2010), and may also underlie this normative pattern of decline in community service.

This study also contributes new information on interindividual differences in age-related change, which fits with current developmental theorizing that there may not be a one-size-fits-all trajectory of youth civic engagement (Lerner et al., 2014; Wray-Lake et al., 2014). Findings for community service at age 18 (i.e., intercept) were largely expected: For youth who are girls, other ethnic minorities, more religious, higher grade-earning, and have higher parent education, community service was higher than average at age 18. These expected findings replicate previous cross-sectional research with adolescents and likely have roots in socialization factors (cf. Pancer, 2015). Most notably, several subgroups – youth who are girls, religious, higher grade-earning, report no college plans, and attained a higher degree – deviated from the average pattern of developmental change in community service, although all experienced decline. Girls and religious and higher grade-earning youth declined more steeply after high school, which suggests a powerful pull of normative developmental forces, as these factors that heighten community service in high school seem to do little to mitigate the age-related decline. Moreover, women also had a more positive quadratic trajectory and caught up with men's levels of community service by age 26. The reasons for these different patterns are unclear, but these results conflict with closely related research on prosocial behavior showing females start and remain higher on prosocial behavior across young adulthood (Luengo Kanacri et al., 2013). Youth who reported no college plans experienced less decline than average after high school; this pattern is unexpected based on prior research, but could be due to the low starting level at age 18. Overall, our work newly points to individual variability in patterns of trajectories of community service, which is important for situating development in context (Lerner et al., 2014).

College degree attainment is considered one of the strongest contributors to higher civic engagement later in life (Cambell, 2009; Nie et al., 1996; Putnam, 2000; Verba et al., 2003). Our research builds on this past interdisciplinary work by demonstrating that greater educational attainment was associated with a less negative slope and flatter trajectory for

community service, which translates into higher levels of community service at every age and thus more modest decline over time. This pattern is especially notable in that it held true after accounting for college expectations. Youth with no plans to attend a four-year college reported less community service at age 18. Compared to these peers, youth planning to attend four-year institutions may differ on a number of personal and environmental factors before they attend college, reflecting selection or effects of higher education attainment on civic engagement (Campbell, 2009). Examples include résumé-building motivations, interest and opportunities for civic-related coursework in high school, and differential exposure to civically involved adults and peers in their daily environments (Youniss & McIntosh, 2010).

Colleges are one of the few institutions that consistently support civic development during the TTA, and may do this via offering more opportunities for community service on campus, analyzing social issues and community problems in coursework and activities, and espousing social responsibility and helping others through campus culture (Billig & Waterman, 2014; Checkoway, 2001; Finlay et al., 2010; Pascarella & Terenzini, 2005). Future work should tease apart aspects of college (degree attainment vs. attendance vs. college experiences) to better understand the precise ways that college experiences bolster community service motivations and behaviors and further consider causality, as has been done with college and political behavior (Campbell, 2009; Hooghe et al., 2014; Persson, 2012). Combined with the larger body of work, our findings suggest the value of college for civic development and underscore the need to consider post-high school institutional opportunities for youth who are not college bound.

History / Cohort Effects

Our results showed historical increases in community service at age 18 as well as developmental declines, suggesting that developmental processes and historical moments are distinct forces that shape community service. This study joins previous work in showcasing the value of examining age and historical effects simultaneously for understanding civic engagement and many other constructs (Jager et al., 2013; Neundorf & Niemi, 2014). Our finding of heightened community service over historical time aligns with research showing increases in community service for recent cohorts of high school seniors and college freshmen (Lopez, 2004; Syvertsen et al., 2011). These increases are likely due to increased service-related efforts and policies in high schools around the country and increased demand for service on college entrance applications (Youniss & McIntosh, 2010). Historical increases offer good news that such policies and practices are moving the needle on high school seniors' community service. Yet, we also found that higher starting values for community service were linked to steeper declines across the TTA. Thus, an increased focus on high school service is unlikely to be sufficient to mitigate declining community service during young adulthood. It was somewhat surprising to find no evidence of moderation by cohort for age trends or any covariate. This lack of cohort differences suggests that there are powerful, consistent socialization and developmental forces at play that set the stage for community service across the TTA for youth since the 1970s.

Socioeconomic Disparities

Research has documented persistent inequalities such that more advantaged individuals tend to be more civically engaged (Schlozman, Verba, & Brady, 2012). This study similarly showed SES differences in age 18 community service, as assessed by parent education that holds after accounting for multiple covariates. The significant findings for parent education on age 18 community service but not on the growth factors underscore that SES disparities in civic engagement likely have early origins (Atkins & Hart, 2003; Levinson, 2010). We were surprised by the lack of cohort moderation for SES effects; rather, effects of SES on community service appeared consistent over historical time. This is particularly unexpected given other work showing increasing disparities in civic engagement (including community service) across historical time (Syvertsen et al., 2011; Wray-Lake & Hart, 2012). Whether SES disparities in community service (or other forms of civic engagement) are growing in recent years merits additional research to arrive at a more conclusive answer.

Limitations

Although single item self-report measures of community service are standard (Pancer, 2015), our study's largest limitation is the lack of additional descriptive information about community service, such as type of service, motivations, and whether service was required. This limitation is outweighed by the unparalleled data source that follows a nationally representative sample of youth developmentally from ages 18 to 26 and historically from 1976 to 2011. Nonetheless, future research that could examine community service over time in more depth would be worthwhile. We were unable to further analyze nuances among racial/ethnic groups, leaving findings with race/ethnicity somewhat inconclusive. Furthermore, these trajectories may not generalize to other countries. Norms of community service vary across countries and demographics may have different associations with community service in different contexts (Hart & Sulik, 2014; Wilson, 2000). Finally, the sample was restricted to high school graduates, thus excluding the increasingly diminishing subsample of high school drop outs.

Implications

Downward trends for positive behaviors tend to sound alarms, and it is disconcerting that youth during the TTA are declining in their community service, a pattern that has held fairly constant over the past four decades. Because civic engagement relates to higher health and well-being (Institute of Medicine, 2014), these declines likely have implications for optimal development of young adults. In addition, communities need engaged citizens to thrive, and communities with high numbers of young adults may suffer from lower engagement. Findings have bearing on civic education policy: Secondary schools and colleges increasingly emphasize community service and implement service policies and opportunities to encourage youth to get involved in their communities (Gould et al., 2011); these efforts may be increasing high school seniors' community service over historical time, but more concerted policy efforts are needed that create opportunities for sustained participation in community during young adulthood.

Acknowledgments

This work was funded by Spencer Foundation Grant #201500138. The Monitoring the Future data were collected under research grants R01DA001411 and R01DA016575.

References

- Arnett, J.J. *Emerging adulthood: The winding road from the late teens through the twenties*. OUP Us; 2014.
- Atkins R, Hart D. Neighborhoods, adults, and the development of civic identity in urban youth. *Applied Developmental Science*. 2003; 7:156–164. DOI: 10.1207/S1532480XADS0703_6
- Baltes PB. Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology*. 1987; 23(5):611. doi:0.1037/0012-1649.23.5.611.
- Bekkers R. Participation in voluntary associations: Relations with resources, personality, and political values. *Political Psychology*. 2005; 26(3):439–454. DOI: 10.1111/j.1467-9221.2005.00425.x
- Billig, S.H., Waterman, A.S., editors. *Studying service-learning: Innovations in education research methodology*. Routledge; 2014.
- Campbell, D.E. What is education's impact on civic and social engagement?. In: Desjardins, R., Schuller, T., editors. *measuring the effects of education on health and civic/social engagement*. OECD/CERI; Paris: 2006. p. 25-126.
- Campbell D.E. Civic engagement and education: An empirical test of the sorting model. *American Journal of Political Science*. 2009; 53(4):771–786. DOI: 10.1111/j.1540-5907.2009.00400.x
- Checkoway B. Renewing the civic mission of the American Research University. *The Journal of Higher Education*. 2001; 72(2):125–147. DOI: 10.2307/2649319
- Cheung GW, Rensvold RB. Evaluating goodness of fit indexes for testing measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*. 2002; 9:23–255. DOI: 10.1207/S15328007SEM0902_5
- Clary EG, Snyder M, Stukas AA. Volunteers' motivations: Findings from a national survey. *Nonprofit and Voluntary Sector Quarterly*. 1996; 25:485–505. DOI: 10.1177/0899764096254006
- Crockett, L.J., Silbereisen, R.K. *Negotiating adolescence in times of social change*. Cambridge University Press; 2000.
- Côté, J.E. Emerging adulthood as an institutionalized moratorium: Risks and benefits to identity formation. In: Arnett, J.J., Tanner, J.L., editors. *Emerging adults in America: Coming of age in the 21st century*. Washington, DC: American Psychological Association; 2006. p. 85-116.
- Conger, R.D., Elder, G.H., Jr. Families in troubled times: The Iowa young and family project. In: Conger, R.D., Elder, G.H., editors. *Families in troubled times: Adapting to change in rural America*. Hawthorne, NY: Aldine De Gruyter; 1994. p. 3-19.
- Eisenberg, N., Morris, A.S., McDaniel, B., Spinrad, T.L. Moral cognitions and prosocial responding in adolescence. In: Lerner, R.M., Steinberg, L., editors. *Handbook of adolescent psychology*. New York, NY: John Wiley & Sons; 2009. p. 229-265.
- Elder G.H. The life course as developmental theory. *Child development*. 1998; 69(1):1–12. DOI: 10.1111/j.1467-8624.1998.tb06128.x [PubMed: 9499552]
- Finlay, A.K., Wray-Lake, L., Flanagan, C.A. Civic engagement during the transition to adulthood: Developmental opportunities and social policies at a critical juncture. In: Sherrod, L.R., Torney-Purta, J., editors. *Handbook of research on civic engagement in youth*. Hoboken, NJ: John Wiley; 2010. p. 277-305.
- Flanagan C, Levine P. Civic engagement and the transition to adulthood. *The Future of Children*. 2010; 20(1):159–179. DOI: 10.1353/foc.0.0043 [PubMed: 20364626]
- Foster-Bey, J. Do race, ethnicity, citizenship and socio-economic status determine civic engagement?. Medford, MA: Center for Information and Research on Civic Learning and Engagement, Jonathan M. Tisch College of Citizenship and Public Service, Tufts University; 2008. (CIRCLE Working Paper No. 62)
- Glenn, N. Distinguishing age, period, and cohort effects. In: Mortimer, J.T., Shanahan, M.J., editors. *Handbook of the life course*. New York, NY: Plenum; 2003. p. 465-476.

- Gould, J., Jamieson, KH., Levine, P., McConnell, T., Smith, DB., McKinney-Browning, M., Cambell, K. Report for the Campaign for the Civic Mission of Schools. Philadelphia, PA: University of Pennsylvania Leonore Annenberg Institute for Civics; 2011. Guardian of Democracy: The civic mission of schools.
- Hart D, Donnelly TM, Youniss J, Atkins R. High school community service as a predictor of adult voting and volunteering. *American Educational Research Journal*. 2007; 44(1):197–219. DOI: 10.3102/0002831206298173
- Hart, D., Sulik, MJ. The social construction of volunteering. In: Padilla-Walker, L., Carlo, G., editors. *Prosocial development: A multidimensional approach*. Oxford: Oxford Press; 2014. p. 393-432.
- Hooghe M, Dassonneville R, Marien S. The impact of education on the development of political trust: Results from a five-year panel study among late adolescents and young adults in Belgium. *Political Studies*. 2015; 63(1):123–141. DOI: 10.1111/1467-9248.12102
- Hu LT, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*. 1999; 6(1):1–55. DOI: 10.1080/10705519909540118
- Institute of Medicine. Investing in the health and well-being of young adults. Washington, DC: The National Academies Press; 2014. <http://iom.edu/Reports/2014/Investing-in-the-Health-and-Well-Being-of-Young-Adults.aspx>
- Jager J, Schulenberg JE, O'Malley PM, Bachman JG. Historical variation in drug use trajectories across the transition to adulthood: the trend toward lower intercepts and steeper, ascending slopes. *Development and Psychopathology*. 2013; 25(02):527–543. DOI: 10.1017/S0954579412001228 [PubMed: 23627961]
- Jennings MK, Stoker L. Social trust and civic engagement across time and generations. *Acta Politica*. 2004; 39(4):342–379. doi:0.1057/palgrave.ap.5500077.
- Jennings MK, Stoker L, Bowers J. Politics across generations: Family transmission reexamined. *The Journal of Politics*. 2009; 71(03):782–799. DOI: 10.1017/s0022381609090719
- Jennings, MK., Niemi, RG. Generations and politics: A panel study of young adults and their parents. Princeton University Press; 2014.
- Johnson MK, Beebe T, Mortimer JT, Snyder M. Volunteerism in adolescence: A process perspective. *Journal of Research on Adolescence*. 1998; 8(3):309–332.
- Kalil A. Effects of the Great Recession on child development. *Annals of the American Academy of Political and Social Science*. 2013; 650(1):232–249. DOI: 10.1177/0002716213500453
- Kerestes M, Youniss J, Metz E. Longitudinal patterns of religious perspective and civic integration. *Applied Developmental Science*. 2004; 8(1):39–46. DOI: 10.1207/S1532480XADS0801_5
- Keyes KM, Jager J, Hamilton A, O'Malley PM, Miech R, Schulenberg JE. National multi-cohort time trends in adolescent risk preference and the relation with substance use and problem behavior from 1976 to 2011. *Drug and Alcohol Dependence*. 2015; 155(1):267–274. DOI: 10.1016/j.drugalcdep.2015.06.031 [PubMed: 26254018]
- Keyes KM, Maslowsky J, Hamilton A, Schulenberg J. The great sleep recession: Changes in sleep duration among US adolescents, 1991–2012. *Pediatrics*. 2015; 135(3):460–468. [PubMed: 25687142]
- Kinder DR. Politics and the life cycle. *Science*. 2006; 312(5782):1905–1908. DOI: 10.1126/science.1127891 [PubMed: 16809527]
- Lerner RM, Wang J, Champine RB, Warren DJ, Erickson K. Development of civic engagement: Theoretical and methodological issues. *International Journal of Developmental Science*. 2014; 8(3):69–79. DOI: 10.3233/DEV-14130
- Levinson, M. The civic empowerment gap: Defining the problem and locating solutions. In: Sherrod, L.Torney-Purta, J., Flanagan, C., editors. *Handbook of research on civic engagement in youth*. Hoboken, NJ: John Wiley; 2010. p. 331-362.
- Little, TD. *Longitudinal structural equation modeling*. New York, NY: Guilford Press; 2013.
- Lopez, MH. *Volunteering among young people*. College Park, MD: Center for Information and Research on Civic Learning and Engagement; 2004.

- Luengo Kanacri BP, Pastorelli C, Eisenberg N, Zuffianò A, Caprara GV. The development of prosociality from adolescence to early adulthood: The role of effortful control. *Journal of Personality*. 2013; 81(3):302–312. DOI: 10.1111/jopy.12001 [PubMed: 22924862]
- Matsuba MK, Hart D, Atkins R. Psychological and social-structural influences on commitment to volunteering. *Journal of Research in Personality*. 2007; 41(4):889–907. DOI: 10.1016/j.jrp.2006.11.001
- Metz E, McLellan J, Youniss J. Types of voluntary service and adolescents' civic development. *Journal of Adolescent Research*. 2003; 18(2):188–203. DOI: 10.1177/0743558402250350
- Muthén, L., Muthén, B. *Mplus user's guide*. 7. Los Angeles, CA: Muthén & Muthén; 1999–2013.
- Neundorff A, Niemi RG. Beyond political socialization: new approaches to age, period, cohort analysis. *Electoral Studies*. 2014; 33(1):1–6. DOI: 10.1016/j.electstud.2013.06.012
- Nie, NH., Junn, J., Stehlik-Barry, K. *Education and democratic citizenship in America*. University of Chicago Press; 1996.
- Oesterle S, Johnson MK, Mortimer JT. Volunteerism during the transition to adulthood: A life course perspective. *Social Forces*. 2004; 82(3):1123–1149. DOI: 10.1353/sof.2004.0049
- Pascarella, ET., Terenzini, PT. *How college affects students: A third decade of research*. 2. San Francisco, CA: Jossey-Bass; 2005.
- Patrick ME, Schulenberg JE, O'Malley PM. High school substance use as a predictor of college attendance, completion, and dropout: A national multicohort longitudinal study. *Youth & society*. 2013 0044118X13508961.
- Persson M. Does type of education affect political participation? Results from a panel survey of Swedish adolescents. *Scandinavian Political Studies*. 2012; 35(3):198–221. DOI: 10.1111/j.1467-9477.2012.00286.x
- Piliavin JA, Siegl E. Health benefits of volunteering in the Wisconsin longitudinal study. *Journal of Health and Social Behavior*. 2007; 48(4):450–464. DOI: 10.1177/002214650704800408 [PubMed: 18198690]
- Pancer, SM. *The psychology of citizenship and civic engagement*. Oxford University Press; USA: 2015.
- Putnam, RD. *Our kids: The American dream in crisis*. New York, NY: Simon & Schuster; 2015.
- Rosenthal S, Feiring C, Lewis M. Political volunteering from late adolescence to young adulthood. *Journal of Social Issues*. 1998; 54(3):477–493. DOI: 10.1111/j.1540-4560.1998.tb01231.x
- Rotolo T, Wilson J. State-level differences in volunteerism research in the United States. *Nonprofit and Voluntary Sector Quarterly*. 2012; 41(3):452–473. DOI: 10.1177/0899764011412383
- Rotolo T, Wilson J. Social heterogeneity and volunteering in US cities. *Sociological Forum*. 2014 Jun; 29(2):429–452).
- Rotolo, T., Wilson, J., Hughes, ME. *Sociological Forum*. Vol. 25. Blackwell Publishing Ltd; 2010. Homeownership and Volunteering: An alternative approach to studying social inequality and civic engagement; p. 570-587.
- Sampson RJ, McAdam D, MacIndoe H, Weffer-Elizondo S. Civil Society Reconsidered: The Durable Nature and Community Structure of Collective Civic Action. *American Journal of Sociology*. 2005; 111(3):673–714. DOI: 10.1086/497351
- Schlozman, KL., Verba, S., Brady, HE. *The unheavenly chorus: Unequal political voice and the broken promise of American democracy*. Princeton, NJ: Princeton University Press; 2012.
- Schreier HM, Schonert-Reichl KA, Chen E. Effect of volunteering on risk factors for cardiovascular disease in adolescents: A randomized controlled trial. *JAMA Pediatrics*. 2013; 167(4):327–332. DOI: 10.1001/jamapediatrics.2013.110 [PubMed: 23440253]
- Schulenberg JE, Bryant AL, O'malley PM. Taking hold of some kind of life: How developmental tasks relate to trajectories of well-being during the transition to adulthood. *Development and Psychopathology*. 2004; 16(04):1119–1140. DOI: 10.1017/S0954579404040167 [PubMed: 15704830]
- Schulenberg, JE., Maslowsky, J., Jager, J. Substance use and abuse during adolescence and the transition to adulthood are developmental phenomena: Conceptual and empirical considerations. In: Fitzgerald, HE., Puttler, LI., editors. *Developmental perspectives on alcohol and other addictions over the life course*. New York, NY: Oxford University Press; forthcoming

- Schulenberg J, Schoon I. The transition to adulthood across time and space: Overview of special section. *Longitudinal and Life Course Studies*. 2012; 3:164–172. DOI: 10.14301/lcls.v3i2.194 [PubMed: 26473017]
- Schwartz SJ, Zamboanga BL, Luyckx K, Meca A, Ritchie RA. Identity in emerging adulthood reviewing the field and looking forward. *Emerging Adulthood*. 2013; 1(2):96–113. DOI: 10.1177/2167696813479781
- Settersten RA Jr, Ray B. What's going on with young people today? The long and twisting path to adulthood. *The Future of Children*. 2010; 20(1):19–41. DOI: 10.1353/foc.0.0044 [PubMed: 20364620]
- Smith ES. The effects of investments in the social capital of youth on political and civic behavior in young adulthood: A longitudinal analysis. *Political psychology*. 1999; 20(3):553–580. DOI: 10.1111/0162-895X.00156
- Son J, Wilson J. The psycho-social processes linking income and volunteering: Chronic financial strain and well-being. *Sociological Forum*. 2015; 30(4):1059–1081. DOI: 10.1111/sof.12208
- Stolle D, Hooghe M. Inaccurate, exceptional, one-sided or irrelevant? The debate about the alleged decline of social capital and civic engagement in Western societies. *British Journal of Political Science*. 2005; 35(01):149–167. DOI: 10.1017/S0007123405000074
- Syvertsen AK, Wray-Lake L, Flanagan CA, Wayne Osgood D, Briddell L. Thirty-year trends in US adolescents' civic engagement: A story of changing participation and educational differences. *Journal of Research on Adolescence*. 2011; 21(3):586–594. DOI: 10.1111/j.1532-7795.2010.00706.x [PubMed: 21860583]
- Twenge JM, Campbell WK, Freeman EC. Generational differences in young adults' life goals, concern for others, and civic orientation, 1966–2009. *Journal of Personality and Social Psychology*. 2012; 102(5):1045. doi: 10.1037/a0027408 [PubMed: 22390226]
- Van Goethem AA, Van Hoof A, van Aken MA, de Castro BO, Raaijmakers QA. 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*. 2014; 35(2):94–101. DOI: 10.1016/j.appdev.2013.12.003
- Verba S, Burns N, Schlozman KL. Unequal at the starting line: Creating participatory inequalities across generations and among groups. *The American Sociologist*. 2003; 34(1–2):45–69. DOI: 10.1007/s12108-003-1005-y
- Wattenberg, MP. *Is voting for young people?*. New York: Routledge; 2016.
- Wilson J. Volunteering. *Annual Review of Sociology*. 2000; 26:215–240.
- Wray-Lake L, Rote W, Victorino C, Benavides CM. Examining developmental transitions in civic engagement across adolescence: Evidence from a national U.S. sample. *International Journal of Developmental Science*. 2014; 8:95–104. DOI: 10.3233/DEV-14142
- Wray-Lake L, Hart D. Growing social inequalities in youth civic engagement? Evidence from the National Election Study. *PS: Political Science and Politics*. 2012; 45:456–461. DOI: 10.1017/S1049096512000339
- Yang, Y., Land, KC. *Age-Period-Cohort Analysis: New models, methods, and empirical applications*. Dana Point, CA: Chapman & Hall/CRC Press; 2013.
- Youniss, J., McIntosh, H. Trends in political and civic behavior in emerging adults. *The Changing Spirituality of Emerging Adults Project*. 2010. Retrieved from <http://www.changingsea.net/essays/Youniss.pdf>
- Youniss J, McLellan JA, Yates M. Religion, community service, and identity in American youth. *Journal of Adolescence*. 1999; 22(2):243–253. DOI: 10.1006/jado.1999.0214 [PubMed: 10089122]
- Zaff JF, Kawashima-Ginsberg K, Lin ES, Lamb M, Balsano A, Lerner RM. Developmental trajectories of civic engagement across adolescence: Disaggregation of an integrated construct. *Journal of Adolescence*. 2011; 34(6):1207–1220. DOI: 10.1016/j.adolescence.2011.07.005 [PubMed: 22118512]

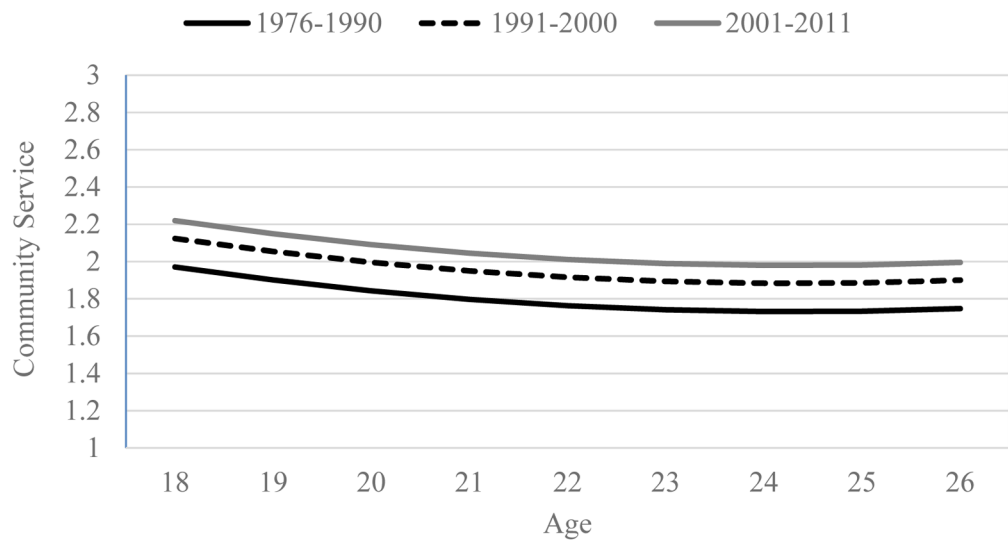


Figure 1.
Developmental Trajectories of Community Service Participation by Cohort

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 1

Multi-group Model Estimates of Cohort Differences in Age-Related Change in Community Service

| | Intercept | Linear Slope | Quadratic Slope | |
|--|---------------|--------------|-----------------|-------|
| Growth Parameters | | | | |
| Mean – 1976–1980 | 1.971 *** | –0.076 *** | 0.006 *** | |
| Mean – 1981–1985 | 1.971 *** | –0.076 *** | 0.006 *** | |
| Mean – 1986–1990 | 1.971 *** | –0.076 *** | 0.006 *** | |
| Mean – 1991–1995 | 2.124 *** | –0.076 *** | 0.006 *** | |
| Mean – 1996–2000 | 2.124 *** | –0.076 *** | 0.006 *** | |
| Mean – 2001–2005 | 2.219 *** | –0.076 *** | 0.006 *** | |
| Mean – 2006–2011 | 2.219 *** | –0.076 *** | 0.006 *** | |
| Variance | 0.419 *** | 0.041 *** | 0.001 *** | |
| Covariances | | | | |
| Intercept with Linear Slope | –.039 *** | | | |
| Intercept with Quad Slope | .002 ** | | | |
| Linear Slope with Quad Slope | –.004 *** | | | |
| Model Comparisons | | | | |
| | χ^2 (df) | $\chi\chi^2$ | CFI | CFI |
| Configural | 210.81(140) | | 0.993 | |
| Constrained | 649.43(194) | 438.63(54) | 0.953 | 0.040 |
| Final Model | 323.33(192) | 112.53(52) | 0.987 | 0.006 |
| Modifications & Equality Checks | | | | |
| | χ^2 (df) | $\chi\chi^2$ | <i>p</i> -value | |
| 1) Free I for 06to11 | 540.98(193) | 108.46(1) | <.001 | |
| 2) Free I for 01to05 | 442.24(192) | 98.74(1) | <.001 | |
| 3) <i>Constrain</i> 06to11 & 01to05 | 443.75(193) | 1.51(1) | .219 | |
| 4) Free I for 96to00 | 374.05(192) | 69.70(1) | <.001 | |
| 5) <i>Constrain</i> 01to11 & 96to00 | 386.75(193) | 12.70(1) | <.001 | |
| 6) Free I for 91to95 | 319.75(191) | 54.56(1) | <.001 | |
| 7) <i>Constrain</i> 91to95 & 96to00 | 323.33(192) | 3.84(1) | .050 | |

Note. The constrained model tested for moderation by cohort for means, variances, and covariances of the growth factors. The final model includes parameters freed based on modifications. Intercepts freed across adjacent cohorts were constrained to test for equality. Significant chi square difference tests indicate that parameters differ across cohorts; non-significant chi square differences indicate equality.

**
p < .01.

p < .001.

Table 2

Full Latent Growth Curve Model with Covariates for Community Service across ages 18 to 26 and by Cohort

| | Intercept | Linear Slope | Quadratic Slope | |
|----------------------------------|---------------------------------|----------------------------|-----------------|------------|
| Covariates | | | | |
| Parent Education | .048 *** | -.002 | .000 | |
| Female | .091 *** | -.053 *** | .005 *** | |
| Black ^b | .025 | .037 | -.003 | |
| Hispanic ^b | -.029 | -.012 | .001 | |
| Other ^b | .073 ** | .007 | -.002 | |
| Grades | .052 *** | -.008 ** | .000 | |
| Religiosity | .233 *** | -.020 *** | .002* | |
| Two-Year Coll Plans ^d | -.111 *** | .022 | -.002 | |
| No College Plans ^a | -.144 *** | .042 ** | -.003 | |
| Highest Degree | .022 | .031 *** | -.003 *** | |
| Model Comparisons | χ^2 (df) | χ^2 | CFI | CFI |
| Configural | 835.26(661) | | 0.988 | |
| Moderation | 1116.54(841) | 281.29(180) | 0.977 | 0.009 |

Note.

**
 $p < .002$,***
 $p < .001$.^aFour-year college plans as the reference group.^bWhite as reference group.

Select correlations between covariates were added to improve model fit but are not pictured here.