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A Cross-Context Analysis of Civic Engagement Linking CIVED and U.S. Census Data

This study investigates direct and indirect family, peer, school, and neighborhood effects on adolescents' civic engagement utilizing data from the 1999 IEA Civic Education Study and the U.S. Census. The nationally representative sample consists of 2,729 students from 119 schools in the U.S. Multi-level regression techniques provide precise estimates of the separate and shared impact of each context on adolescents' civic engagement. Individual students' civic experiences and discourse in school and at home predict higher civic engagement, although the effects of these experiences vary based on the larger school and neighborhood contexts. Overall, interactive effects indicate that students who may traditionally be deemed at a disadvantage (either because of poor school or neighborhood conditions) experience more benefits from increases in civic learning opportunities than do more advantaged students. Suggestions are made for secondary analyses of ICCS (the IEA civic education study of 2009).

Keywords

IEA CIVED, adolescents, civic engagement, political socialization, socioeconomic factors, neighborhood context, school climate

1 Introduction

Competencies for informed civic engagement are important for all youth just as competent citizens are important for successful democracies. Yet we know that groups of young people display differential preparedness for citizenship. On national and international assessments of civic knowledge in the United States, white and Asian students score higher than African American, Latino, and American Indian students (Lutkus, Weiss 2007). Considering immigrant status, in comparison to Latino native-born youth, Latino immigrants have higher civic content knowledge but lower civic skills (Torney-Purta, Barber, Wilkenfeld 2006). Higher parental education and family income are both associated with higher civic knowledge across countries (Lutkus, Weiss 2007; Wilkenfeld 2009). Similar findings exist for participation in civic behavior. Youth from impoverished families report lower levels of current volunteerism and lower intentions to participate in future volunteer work and to vote once eligible (Spring, Dietz, Grimm 2007).

The development of civic knowledge, democratic attitudes, and participation in civic activities requires constructive educational and out-of-school experiences. Many contexts provide the experiences that foster civic development. Parents provide models of civic behavior (McIntosh, Hart,

Youniss 2007) and peer groups maintain norms that support participation (Harell, Stolle, Quintelier 2008). Schools provide learning opportunities by teaching political topics (Niemi, Junn 1998; Torney-Purta, Barber, Wilkenfeld 2007), an influence which appears to be sustained over time (Amnå, Zetterberg 2010). Aspects of the neighborhood context also are related to youth civic engagement, including the level of poverty (Atkins, Hart 2003) and the proportion of college-educated residents (Theokas, Lerner 2006).¹ The tendency to ignore the full range of contexts and their interaction when interpreting individuals' behavior has been noted by Shinn and Toohey (2003), who call this systematic tendency the "context minimization error."

Prior research has generally focused on one or two contexts, instead of examining a comprehensive model of youth civic engagement that includes predictors from as many as four contexts. Examinations of adolescent development in fields such as psychology, sociology, and education policy have found that these contexts often converge in their relations with adolescents' psychological (Wilkenfeld, Moore, Lippman 2008) and academic outcomes (Pong, Hao 2007). When examining adolescent civic development it is important to consider several contexts for their influence, including the way in which those contexts are related to each other. This study extends previous research by simultaneously examining the family, peer, school, and neighborhood contexts, including how contexts are interrelated in their influence on civic engagement.

Civic engagement is a multifaceted construct that encompasses civic knowledge, skills, attitudes, and participation. Civic knowledge often refers to the comprehension of facts pertaining to domestic and international history and government (Rubin 2007), as well as fundamental democratic principles (Torney-Purta 2002). Civic skills involve monitoring news and current events as well as interpreting public and political communication (McIntosh et al. 2007; Zhang, Torney-Purta, Barber 2012). Civic attitudes pertain to beliefs about democratic societies, including the rights and responsibilities of the government and members of society. Finally, civic participation or civic behavior refers to formal and informal involvement in political and civic institutions, including activities such as voting, volunteering, and attending a political rally. In this study we focus on civic knowledge and civic participation, which are interrelated aspects of civic engagement (Galston 2001).

The two civic outcomes examined are a measure of adolescents' civic knowledge and a measure of adolescents' anticipated participation in community and volunteer activities. Given that certain aspects of engagement may have more salience for particular groups, it is important to examine multiple ways in which young people may be civically engaged. Additionally, each context may affect aspects of civic engagement differently (e.g., school practices having a stronger relation to knowledge than behavior). Therefore it is more useful in deriving policy and practice implications to consider more than one civic outcome.

This type of analysis is particularly important because insufficient civic learning opportunities in schools and neighborhoods may prevent adolescents from disadvantaged backgrounds from being adequately

¹ Although not examined here, features and policies of more distal systems such as the school district, state, and nation are associated with adolescents' civic engagement as well (Campbell 2007; Hart, Atkins, Markey, Youniss 2004; Hooghe, Wilkenfeld 2008; Torney-Purta, Wilkenfeld, Barber 2008).

prepared for citizenship (Atkins, Hart 2003; Kahne, Middaugh 2008). Indeed, groups that are the most socially and economically disadvantaged have the lowest levels of civic knowledge and engagement, and therefore are also politically disadvantaged (Delli Carpini, Keeter 1996; Lutkus, Weiss 2007). The irony is that it is students in disadvantaged schools, and adolescents in disadvantaged neighborhoods, who would especially benefit from being part of an informed and engaged citizenry. This is described as constituting a “civic empowerment gap” in young people by Levinson (2010), and similar processes have also been studied as related to a lack of political agency in young African-American adults by Chung and Probert (2011).

In the current study potential explanations for disparities in adolescent civic engagement are examined through a comprehensive analysis of context effects, including a focus on the mechanisms by which schools and neighborhoods collectively and interactively facilitate civic engagement. Identifying the specific characteristics, practices, and processes of schools that help or hinder diverse groups of adolescents can suggest promising ways to enhance civic engagement for young people of a particular demographic background or in a particular neighborhood environment. Demonstrating this in one nation may suggest modes of analysis for future research and in other national contexts.

2 Method

In this study the relations between multiple contexts and adolescent civic engagement were analyzed using data from the U.S. sample of the 1999 IEA Civic Education Study (CIVED; Torney-Purta, Lehmann, Oswald, Schulz 2001) merged with data from the 2000 U.S. Census.² Census data were linked to CIVED data through school zip-codes, obtained by license from the U.S. Department of Education, National Center for Education Statistics. The large majority of students in the U.S. attend neighborhood schools. CIVED is a study of approximately 90,000 adolescents in 28 countries, including nearly 3,000 14-year-olds in the United States. The U.S. Census reports the demographic, social, and economic composition for every zip-code in the United States.

2.1 Background

The CIVED Study was conducted in 1999 by the International Association for the Evaluation of Educational Achievement (IEA), a consortium of governmental agencies and research institutions founded for the purpose of conducting comparative education studies. The theoretical background for the study is described in the context of several other theories by Wilkenfeld, Lauckhardt, and Torney-Purta (2010), as well as in Torney-Purta et al. (2001).

² The United States did not participate in the International Civics and Citizenship Study conducted in 2009 so these data are the most recently available data of this scope.

Two instruments were utilized in the CIVED: an assessment of students' knowledge of fundamental democratic principles and skills in applying such knowledge, and a survey of students' attitudes toward civic issues, conceptions of democracy and citizenship, and expected civic participation. The administration of the assessment and survey to a representative sample of 14-year-olds occurred in 28 countries in 1999. In the United States the data were collected in October, 1999. Students were given two hours during class to complete the assessment and survey, which also included several measures of students' perceptions of their schools.

2.2 Current Study

The U.S. sample of the CIVED is the focus of the current study; the analytic sample contains 2,729 ninth-grade students in 119 schools nationwide. Because it is a nationally representative sample of schools and a class was randomly selected within the school, findings can be generalized to the national population of ninth graders (or 14-year-olds in the United States). Utilizing a large dataset with advanced statistical techniques (including hierarchical linear modeling [HLM]; Raudenbush, Bryk, Cheong, Congdon 2004) enables the appropriate examination of students within schools and students between schools. This is particularly important if one wishes to examine not only characteristics of contexts, but the interactions between those contexts.

- Outcomes

Given the multidimensional nature of civic engagement, the current study considered context effects related to two distinct aspects of civic engagement. These were civic content knowledge (an internationally developed measure consisting of 25 test items) and anticipated community participation (a 3-item scale assessing adolescents' expectations for informal civic participation in subsequent years). These measures were scaled using IRT methodology and had high alphas when classical measurement theory was used. All had been analyzed for national differences and gender differences in the summary report of CIVED (Torney-Purta et al. 2001) or in the supplementary CEDARS report (Husfeldt, Barber, Torney-Purta 2005). The two outcome variables are described further in Appendix A and descriptive statistics of the measures (and the predictors discussed below) are illustrated in Table 1.

- Predictors

Predictor variables pertaining to the adolescent, social interactions with parents and peers, the school, and the neighborhood were included in the analysis. The first set of predictors were demographic characteristics of students, including *gender* (male or female), *race* (white, black, Latino, Asian, multiracial, and American Indian), *immigrant status* (born in the U.S.

or not born in the U.S.), and *socioeconomic status (SES)*. Here, SES is conceptualized as exposure and access to intellectual and material resources. The SES measure can also be thought of as family educational resources because the construct is a combination of maternal education, paternal education, and books in the home. It is relevant to note that adolescents' demographic characteristics were not considered merely as control variables, but rather were specifically examined for interactions with context variables.

The broader concept of social interactions was captured with the specific measures of discourse with parents, discourse with peers, and time spent with peers in the evening. *Political discourse with parents* is a two-item scale measuring the frequency with which students discussed national and international politics with their parents. Similarly, *political discourse with peers* is a two-item scale measuring how often students discussed national and international politics with their peers. *Evening time spent with peers* is a single item measuring how often students spent time with peers in the evening outside the home.

We also included three predictors pertaining to students' civic experiences in school, as reported by the students. *Student confidence in the effectiveness of participation in school processes* is a four-item IRT scale measuring real-world experiences of democratic processes and participation in school (e.g., whether electing student representatives to inform school change makes schools better). *Perception of the openness of classroom climate for discussion* is a six-item IRT scale assessing whether students have had opportunities to express and understand different sides of social issues in class (e.g., students feel free to express opinions in class even when their opinions are different from most of the other students). *Civic curriculum* is a six-item scale assessing students' exposure to learning about democratic practices and ideals (e.g., to cooperate in groups with other students or to learn about one's own or other countries).

The three measures of students' civic experiences in school were aggregated in order to capture the average level of civic experiences within each school. The aggregate measures (*school confidence in participation, school open climate, and school civic curriculum*) were treated as level-2 predictors and were used to examine contextual effects. *School SES* (an aggregate of student SES within a school) was also utilized as a level-2 predictor.

The final set of predictors pertains to the neighborhood context. U.S. Census data were used to construct measures of *neighborhood affluence* (a three-item factor comprised of the proportion of high school or college educated, high-income, and professional residents), *neighborhood poverty* (four-item factor comprised of the proportion of residents living below the poverty line, unemployed, receiving public assistance, and in female-headed households), *neighborhood racial diversity* (heterogeneity based on the proportion of residents from different racial and ethnic backgrounds), and *neighborhood immigrant population* (one-item measure of the proportion of foreign-born residents). See Table 1 for descriptive statistics of predictor variables and Appendix A for specific items in each scale.

Table 1. Descriptive statistics of outcome and predictor variables (weighted)

Variable	M	SD	Minimum	Maximum
Outcomes				
Civic knowledge ^a	.00	1.00	-3.89	2.32
Community participation ^a	.00	1.00	-2.64	2.27
Level- 1 variables				
Student demographics				
Female ^c	.52	.50	.00	1.00
White ^c	.63	.48	.00	1.00
Latino ^c	.14	.34	.00	1.00
Black ^c	.12	.33	.00	1.00
Asian ^c	.05	.22	.00	1.00
Multiracial ^c	.04	.20	.00	1.00
American Indian ^c	.01	.09	.00	1.00
Immigrant ^c	.11	.31	.00	1.00
SES ^b	.00	1.00	-3.09	1.46
Social relationships				
Discuss politics with parents	2.48	.90	1.00	4.00
Discuss politics with peers	1.90	.80	1.00	4.00
Time spent with peers at night	2.91	.92	1.00	4.00
School civic experiences				
Confidence in participation ^a	.00	1.00	-3.07	1.85
Open climate for discussion ^a	.00	1.00	-3.55	2.24
Civic curriculum ^b	.00	1.00	-4.01	2.15
Level- 2 variables				
School demographics				
School SES	-.10	.49	-1.28	1.17
School civic environment				
School confidence in participation	-.04	.32	-.87	.83
School open climate for discussion	-.04	.33	-.59	.97
School civic curriculum	-.01	.29	-.82	.75
Neighborhood characteristics				
Affluence ^b	.00	1.00	-2.09	3.11
Poverty ^b	.00	1.00	-1.45	4.43
Racial diversity ^b	.00	1.00	-1.49	2.58
Foreign-born residents ^d	.11	.12	.00	.54

^aVariable is an IRT scale that was standardized for the analytic sample.

^bVariable is standardized for the analytic sample.

^cDichotomous variable where the mean indicates the proportion represented in the sample of 2,729 students.

^dDichotomous variable where the mean indicates the proportion represented in the sample of 119 schools.

- Analysis

In order to examine the influence of multiple contexts on civic outcomes, while also accounting for the nested nature of the data, we employed HLM, which is a multilevel regression procedure. Through this statistical procedure we were able to examine main effects, inter-level interactive effects, and intra-level interactive effects on the two civic outcomes. In a statistical interaction two predictors have a combined relation with the outcome, which provides a more nuanced understanding of the process of adolescent development. From an applied perspective, a statistical analysis of interactions can indicate whether specific educational practices are more effective for particular groups of young people (for example, conditional on students' demographic characteristics or neighborhood conditions). Therefore, we examined interactions between individual characteristics of adolescents and their environments, as well as interactions between the school context and the neighborhood context. Examining how youth are differentially responsive to environmental influences can also provide evidence for ways in which adolescents actively contribute to their own civic development. Previous studies typically have not tried to distinguish whether there are aspects of the environment that are more beneficial for students of different demographic groups (often because the samples tested are not large enough or constructed in a way to allow this kind of analysis).

3 Results

Before examining aspects of different contexts that relate to civic engagement it was necessary to determine whether students differed in civic outcomes based on their demographic characteristics. For each civic outcome, we compared students based on gender, race, immigrant status, and socioeconomic status. Mean scores on the civic outcomes by demographic group are depicted in Table 2 (as well as results of t-tests and ANOVAs). There were apparent group differences in the civic outcomes of interest, indicating gaps in civic knowledge and behavior based on student demographics. Overall, the differences in students' civic knowledge were larger than anticipated community participation. Students who were white, Asian, native-born, and of high-SES consistently had higher scores on civic knowledge; females and high-SES students had higher scores on anticipated community involvement. These findings are consistent with prior research on civic engagement.

Table 2. Mean scores on civic outcomes based on adolescents' demographic characteristics

Demographic characteristic (n)	Civic knowledge	Anticipated community participation
Gender^a		
Female (1,388)	.02 (.92)	.24 (.91)***
Male (1,300)	-.01 (1.07)	-.26 (1.02)
Immigrant status^a		
Immigrant (286)	-.35 (.95)	.09 (1.10)
Native-born (2,400)	.05 (1.00)***	.00 (.98)
Race^b		
White (1,704)	.22 (1.03)abc	-.04 (1.00)
Latino (373)	-.42 (.79)ade	-.03 (1.04)
Black (330)	-.57 (.67)bf	.09 (.91)
Asian (142)	-.03 (1.04)df	.17 (1.07)
Multiracial (114)	.02 (1.06)eg	.14 (1.14)
American Indian (20)	-.55 (.99)c	.30 (.67)
Socioeconomic status^b		
Low SES (455)	-.53 (.74)a	-.11 (.99)a
Average SES (1,728)	-.02 (.95)a	.02 (.98)
High SES (506)	.58 (1.10)a	.06 (1.07)a

Note. Under demographic characteristic, the number of students in each demographic group is noted in parentheses. Under each civic outcome, standard deviations are noted in parentheses.

^a For gender and immigrant comparisons, *** indicates significant differences at $p < .001$.

^b For race and SES comparisons, categories with the same letter following the standard deviation statistic are statistically different from each other at $p < .05$. For example, white students have significantly higher civic knowledge than Latino (indicated by the a), Black (indicated by the b), and American Indian (indicated by the c) students.

Having determined that a civic engagement gap existed between students based on demographic characteristics, the next step was to employ multilevel regression techniques to examine how potentially influential contexts were related to the gaps. In each step of the analysis we examined change in the within-school and between-school variance components to determine whether the family, peer, school, and neighborhood contexts explained any of the original variance in the outcome. The results of the HLM analysis of students' civic knowledge and anticipated community participation (including significant interactions) are depicted in Table 3 and Table 4.

Table 3. Multilevel model of students' civic knowledge (n = 2,704)

	Model 1: Student characteristics	Model 2: Social relationships	Model 3: School experiences	Model 4: School environment	Model 5: Neighborhood environment
FIXED EFFECTS					
Intercept	-.04	-.02	.00	-.10**	-.06
School confidence				.06	
School climate				.35**	
School curriculum				.01	
School SES				.87***	
Neighborhood affluence					.17*
Neighborhood poverty					-.15**
Neighborhood race diversity					-.06
Neighborhood foreign-born residents					-.59
POVxSchConf					
DIVxSchClim					
Female	-.01	-.07*	-.09*		
Latino	-.20**	-.20**	-.20**		
Black	-.44***	-.40***	-.44***		
Asian	.01	-.04	-.03		
Multiracial	-.02	.01	.06		
American Indian	-.51**	-.60*	-.62**		
Immigrant	-.12*	-.12*	-.14**		
SES	.24***	.21***	.20***		
Discuss with parents		.15***	.14***		
Discuss with peers		-.01	-.02		
Evening with peers		-.12***	-.12***		
Confidence in participation			.04*		
Open climate			.09***		
Civic curriculum			-.03		

Note. The table contains HLM coefficients (under fixed effects) and variance components (under random effects). All variables have been centered on their grand mean.

* p < .10, * p < .05, ** p < .01, *** p < .001

3.1 Civic Knowledge

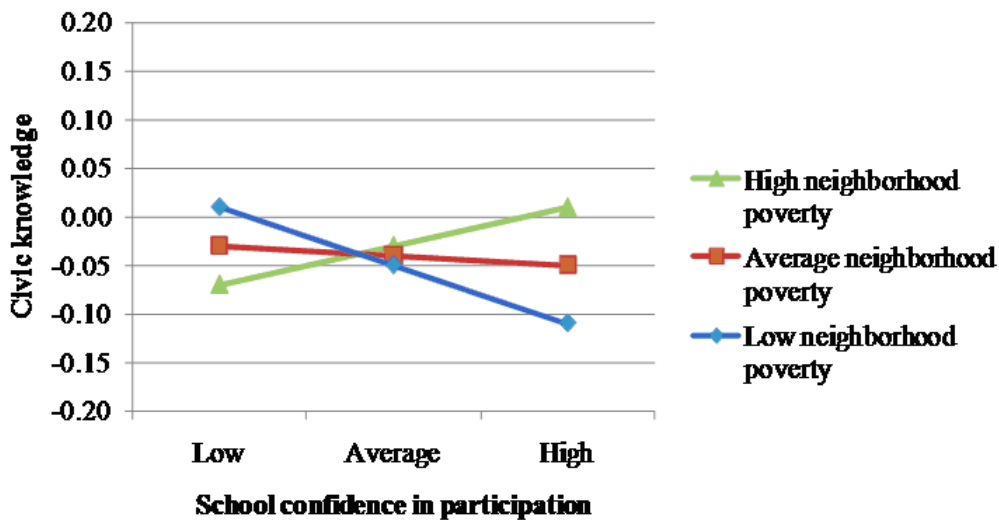
Characteristics of adolescents and measures of the family, peer, school, and neighborhood contexts predicted students' civic knowledge. Discourse with parents was related to higher knowledge levels, discourse with peers was not related, and extensive time spent with peers during the evenings was associated with lower knowledge. Students' civic-related experiences in school were weak predictors of student knowledge. The experience of an open classroom climate for discussion was positively associated with knowledge, however, confidence in school participation and civic curriculum experiences were not significant predictors. At level 2, the aggregate school climate was a positive predictor of civic knowledge.

The nature of the relation between student demographics and the outcomes sometimes changed when variables pertaining to other contexts were included. For instance, once the positive influences of parental discourse and civic experiences in school (and the negative influence of evening time spent with peers) were accounted for, boys had higher knowledge levels than girls. Similarly, once the influence of the school environment was accounted for, Latino students had knowledge levels comparable to white students. Methodologically, these findings illustrate the importance of including predictors from multiple contexts when examining youth outcomes. Practically, they indicate that features of these systems of influence and opportunity are partly responsible for civic engagement gaps.

There were interesting interactions between contexts in their relation to civic knowledge. For example, the relation between the average level of student confidence in participation and students' civic knowledge differed

according to the level of neighborhood poverty (this interaction is illustrated with point estimates of students' civic knowledge in Figure 1). In neighborhoods with high poverty levels, the confidence in the value of school participation on the part of students was positively associated with their civic knowledge. Although the differences in student knowledge were not large (approximately .10 SD), the interaction does indicate that this aspect of the school civic environment is particularly beneficial for students attending schools in high-poverty neighborhoods. In other words, schools in disadvantaged communities can have a larger impact on students by enhancing schools' democratic civic environments.

Figure 1. Interaction between neighborhood poverty and school confidence in participation on students' civic knowledge



3.2 Anticipated Community Participation

The findings for anticipated community participation were comparable to civic knowledge in that many characteristics of adolescents and their relationships and experiences related to the outcome. Female gender was consistently a positive predictor of community participation, but the strength of the relation was influenced by characteristics of the school environment that either attenuated or amplified the gender effect.

Multiracial and American Indian students were more likely to expect to participate in this civic activity, while black and Asian students were not once neighborhood and school environment variables were held constant. A separate analysis examining neighborhood effects on the Latino slope found that neighborhood racial diversity benefitted Latinos by enhancing their anticipated civic participation (table not included).

Table 4. Multilevel model of students' anticipated community participation (n = 2,439)

	Model 1: Student characteristics	Model 2: Social relationships	Model 3: School experiences	Model 4: School environment	Model 5: Neighborhood environment	Model 6: Full model	Model 7: Full model + interactions
FIXED EFFECTS							
Intercept	.01	.00	.00	-.01	.01	.00	.01
School confidence				.11		-.03	-.09
School climate				.02		-.05	-.02
School curriculum				.35**		.26*	.27*
Mean female enrollment				.43*		.43*	.41*
School SES				-.06		-.09	-.06
Neighborhood affluence					.03	.05	.06
Neighborhood poverty					.05	.05	.08
Neighborhood race diversity					-.04	-.04	-.04
Neighborhood foreign-born residents					.41	.25	.19
POVxSchCurr							.14*
Female ^a	.47***	.46***	.38***			.39***	.37***
School SES							.29*
School climate							-.32*
Latino	.05	.01	.02			-.01	.00
Black	.08	.14*	.13*			.12	.11
Asian	.20*	.20*	.14*			.12	.11
Multiracial	.16	.17	.24*			.24*	.23*
American Indian	.32*	.31*	.32*			.34*	.37*
Immigrant	.08	.03	.03			.02	.01
SES	.07**	.02	.00			.01	.01
Discuss with parents		.24***	.17***			.17***	.16***
Discuss with peers		.14***	.11**			.11**	.11**
Evening with peers		.02	.02			.03	.03
Confidence in participation			.13***			.12***	.12***
Open climate			.07**			.07*	.07*
Civic curriculum ^a			.15***			.15***	.16***
Foreign-born							.57**
RANDOM EFFECTS							
Between-school (Intercept)	.03***	.03***	.03***	.01*	.02***	.02***	.02***
Female	.10***	.09***	.08**			.08**	.07**
Civic curriculum			.02**			.02**	.02**
Within-school	.87	.78	.70	.97	.97	.69	.69

Note. The table contains HLM coefficients (under fixed effects) and variance components (under random effects). Unless otherwise stated, variables have been centered on the grand mean.

^aVariable is centered on the group mean.
+ p < .10, * p < .05, ** p < .01, *** p < .001

Political discourse with parents and peers and civic-related experiences in schools and classrooms all were directly related to higher expectations of community participation. School and neighborhood environment variables interacted with each other, with other contexts, and with the adolescent for a differential effect on anticipated community participation.

The school civic curriculum was positively related to students' anticipated community participation across neighborhood contexts. However, in high-poverty neighborhoods the beneficial influence of school civic curriculum was even more apparent (illustrated in Figure 2). In high-poverty neighborhoods, students attending schools with high mean civic curriculum had community participation expectations that were .24 SD higher than students attending schools with low mean civic curriculum. In low-poverty neighborhoods, the difference based on school civic curriculum was much smaller at .08 SD. Therefore, in terms of the relation to the civic outcome of participation in community activities, higher levels of school average civic curriculum are beneficial for all students, but are particularly beneficial for

students attending schools in high-poverty neighborhoods.

There was another significant interaction pertaining to the civic curriculum in schools, but at the student level rather than the school level. This cross-level interaction captured the random effect of student experiences of a civic curriculum in school. Student exposure to a strong civic curriculum (including both local and global aspects) was positively associated with anticipated community participation, but the strength of the relation was stronger in neighborhoods with higher proportions of foreign-born residents (see Figure 3). This interaction indicates that the beneficial effect of exposure to a strong civic curriculum is more pronounced in neighborhoods with higher proportions of immigrants. Experiencing a civic curriculum in which students learn about cooperation, their communities, and other countries appears to broaden students' perspectives and civic commitment in these particular environments. The significance of the combined predictors' indirect effect demonstrates the importance of looking at interactions between contexts for their mutual influence on adolescents' outcomes.

Figure 2. Interaction between neighborhood poverty and school curriculum on students' anticipated community participation

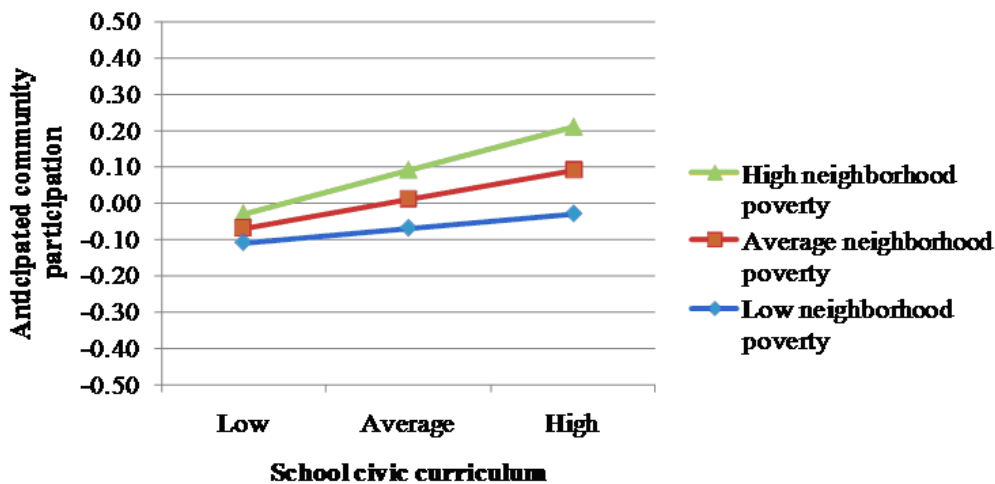
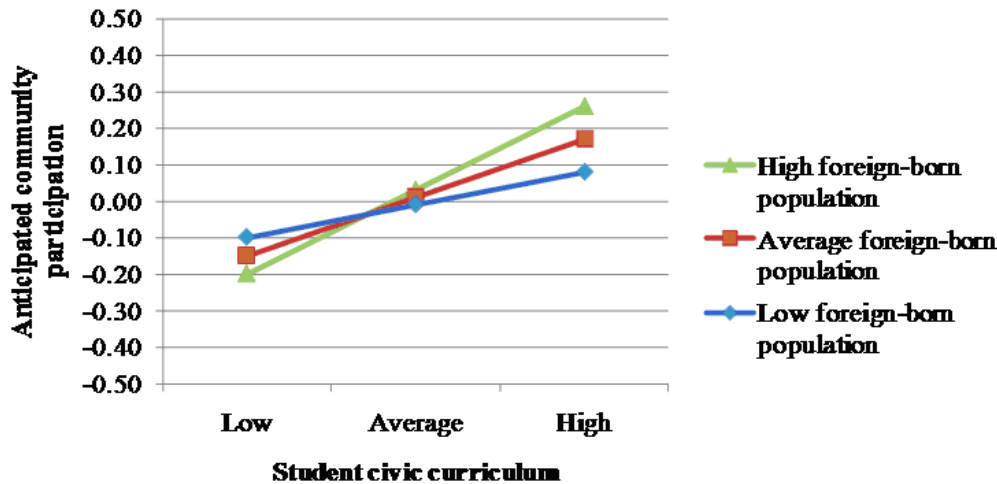


Figure 3. Interaction between neighborhood foreign-born population and student civic curriculum on students' anticipated community participation



4 Discussion

Four consistent patterns emerged from this analysis. First, the analysis confirms a civic engagement gap among adolescents in the United States associated with students' demographic characteristics. The most disadvantaged groups are African American, American Indian, immigrant, and low-SES youth. Males are also disproportionately part of the group with low community involvement. Although civic learning opportunities and experiences in multiple settings narrow some of these gaps, many still persist. Clearly there are groups of young people who are not adequately prepared to be functioning members of the polity and society. Additionally, there are likely to be cumulative effects for young people who are represented in more than one of the disadvantaged groups (for instance, low-SES African Americans). Other studies have identified group differences in civic engagement, however research on the demographic characteristics associated with civic outcomes typically has not examined characteristics and experiences beyond individual demographics that could explain the engagement gap. The next reasonable line of inquiry was to examine whether specific experiences within contexts, as well as characteristics of different contexts, were related to the civic engagement gap.

Second, civic learning opportunities in many contexts are related to the civic engagement of young people. Parental discourse about national and international politics and civic experiences in school provide learning opportunities that are consistently beneficial. Through discourse with parents, adolescents construct knowledge and internalize civic values and beliefs. Civic experiences in school enable adolescents to learn through social and democratic processes. Once inequalities in civic experiences in

school and the overall school environment are controlled for, the civic engagement gaps between racial minority and white students (and between low-SES and high-SES youth) are greatly reduced. For example, the gap between Latino and white students in civic knowledge becomes insignificant if individuals' civic experiences, and schools' civic and socioeconomic environments are equalized statistically.

Third, contextual effects for characteristics of the school such as school SES and school climate for open discussion in the classroom are found over and above individual effects. For example, attending a school with a high-SES population is associated with higher civic knowledge even after the individual's own SES has been taken into account. Attending a school where an open classroom climate for discussing issues is reported by many students is associated with higher civic knowledge even after the individual's own report of class climate is taken into account.

Fourth, aspects of the neighborhood context influence adolescents' civic outcomes through interactions with the school environment, students' civic experiences, and students' demographic characteristics. The interactive effects indicate that students who may traditionally be deemed at a disadvantage (either because of poor school or neighborhood conditions) experience more benefits from increases in civic learning opportunities than do more advantaged students.

The findings of this study have implications for the conceptual understanding of development within context, methodological considerations, and educational practice. Adolescents' civic outcomes varied as a function of characteristics of the person and of multiple systems of influence. In particular, there are processes inherent in each context that can account for the ways in which environments influence adolescents' development. The processes that seem to be most important pertain to aspects of interpersonal relationships with parents (especially the level of discourse), patterns of activity within schools, institutional resources within neighborhoods, and the collective socialization that occurs in neighborhoods. This study has provided empirical evidence for processes related to human development proposed by theorists such as Bronfenbrenner (1979), Lave and Wenger (2002), and Jencks and Mayer (1990). Torney-Purta and Barber (2011) present a model for visualizing neighborhoods as providing developmental niches for developing participatory citizenship and avoiding alienation among adolescents.

Although this analysis was limited to the United States, parallel types of analysis could be conducted with the International Civics and Citizenship Study (ICCS). Schulz et al. (2010) in their recent examination of the influence of one context at a time on civic knowledge and engagement suggest that analyses similar to the one presented here would be a fruitful part of secondary analysis. Their initial analysis of the ICCS data shows that home literacy resources and parents' participation in political discussion with their children play important roles in fostering civic knowledge and intent to participate in the electoral process particularly in the English speaking countries (Ireland and England) and the Nordic countries (Denmark, Estonia, Finland, Norway, and Sweden). Although it may not be possible to link census data (and thus neighborhood factors) to these student outcomes

across all these countries, it would at least be possible to examine the interaction between school, peer, and parent factors (including both those related to socioeconomic status and to parents' political interest). Aggregating SES factors to the school level (or using material from the school questionnaire) might provide an approximation of the neighborhood data examined here. In many countries school track could be added as a predictor. The important aspect of the model used here is that it explicitly examines interactions between variables representing different contexts of influence (rather than controlling for SES, for example).

The current study provides further support for the existence of distinguishable types of civic-related school experiences and the importance of examining multiple contexts of influence on development. Considering other evidence of a civic engagement gap (Levinson 2010) and a civic learning opportunity gap (Kahne, Middaugh 2008), the current findings indicate that the engagement gap can be narrowed when the learning opportunity gap is reduced. Schools, although implicated in the existence of a civic engagement gap, also have the potential to narrow the gaps between different groups of students. Students acquire meaningful concepts, knowledge, and skills through these civic experiences, and schools could better serve students by ensuring that such experiences are available. Effective school practices are especially important in schools located in high-poverty neighborhoods. Civic experiences in schools contribute to the preparation of youth for active citizenship and equal access to these experiences has the potential to reduce civic engagement gaps between students of different demographic groups.

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Appendix: Items and Scales Used in Analyses³

Outcome Variables

Civic knowledge: An item response theory (IRT) scale comprised of 25 test items measuring adolescents' civic content knowledge (i.e., knowledge of fundamental democratic principles).

Anticipated community participation: Three-item IRT scale assessing adolescents' expectations for informal civic participation in the next few years (e.g., "Volunteer time to help people in the community").

Level-1 (L1) Predictor Variables

Student demographic characteristics: Gender (52% of the sample was female), Race (63% White, 14% Latino, 12% African American, 5% Asian, 4% Multiracial, 1% American Indian), Immigrant status (11% immigrant), and Socioeconomic status (a composite of maternal education, paternal education, and books in the home).

Political discourse with parents: Two-item scale measuring how often students discuss national and international politics with their parents.

Political discourse with peers: Two-item scale measuring how often students discuss national and international politics with their peers.

Evening time spent with peers: A single item measuring how often students spend time with peers in the evening outside the home.

Confidence in effectiveness of school participation: Four-item IRT scale assessing real-world experiences of democratic processes and participation in school:

1. Lots of positive changes happen in this school when students work together.
2. Organizing groups of students to state their opinions could help solve problems in this school.
3. Students acting together can have more influence on what happens in this school than students acting alone.
4. Electing student representatives to suggest changes in how the school is run makes schools better.

Openness of classroom climate for discussion: Six-item IRT scale assessing whether students have had opportunities to express and understand different sides of social issues in class:

1. Students feel free to disagree openly with teachers about political and social issues during class.
2. Students are encouraged to make up their own minds about issues.
3. Teachers respect our opinions and encourage us to express them during class.

³ All predictor and outcome variables are from the CIVED except the level-2 neighborhood variables which are from U.S. Census data.

4. Students feel free to express opinions in class even when their opinions are different from most of the other students.
5. Teachers encourage us to discuss political or social issues about which people have different opinions.
6. Teachers present several sides of an issue when explaining it in class.

Civic curriculum: Six-item scale assessing students' exposure to learning about democratic practices and ideals:

1. Learned to understand people who have different ideas.
2. Learned to cooperate in groups with other students.
3. Learned to contribute to solving problems in the community.
4. Learned to be a patriotic and loyal citizen of my country.
5. Learned to be concerned about what happens in other countries.
6. Learned the importance of voting in national and local elections.

Level-2 (L2) Predictor Variables

School SES (aggregate of corresponding L1 variable)

School confidence in participation: Average level of confidence in school participation (aggregate of corresponding L1 variable)

School open climate: Average perception of open classroom climate (aggregate of corresponding L1 variable)

School civic curriculum: Average level of school civic curriculum (aggregate of corresponding L1 variable)

Neighborhood affluence: Three-item factor comprised of the proportion of adult residents in the neighborhood with a high school or college education, in managerial or professional occupations, and with annual incomes greater than \$75,000.

Neighborhood poverty: Four-item factor comprised of the proportion of residents in the neighborhood living below the poverty line, unemployed, receiving public assistance, and living in female-headed households.

Neighborhood racial diversity: Measure of heterogeneity within a neighborhood; computed by combining the proportion of White, Latino, African American, Asian, Multiracial, and American Indian residents using the fractionalization equation $(1 - [\sum s^2])$, where s represents each groups' proportion of the population).

Neighborhood immigrant population: One-item measure of the proportion of foreign-born residents in the neighborhood.