The role of parents, schools, and social media use in influencing civic engagements of school adolescents in government schools in Addis Ababa

Azmeraw Belay Bogale (Ph.D.) iD
Assistant Professor, School of Psychology, Addis Ababa University

Belay Tefera Kibret (Ph.D.) iD
Professor of Psychology, School of Psychology, Addis Ababa University

Abstract

The study examined how parents, schools and social media use influenced civic engagements of school adolescents. It also assessed the mediation role of sense of community and perceived civic competence. Participants were 960 school adolescents (mean age = 17.7, range: 15-19 years; 53.5% females) who were selected using multistage sampling technique. The study employed a correlational design, conducted confirmatory factor analysis, and used structural equation modeling to investigate the direct and indirect (mediated) effects of parental civic socialization, school civic experiences and social media, and independent and combined contributions of predictors on civic engagement. Results have shown that parental civic socialization influenced more on perceived civic competence than sense of community connectedness. School civic experience had a direct influence both on students' sense of community connectedness and perceived civic competence. The influence of social media use on sense of community and perceived civic competence was not significant. All variables, except school civic experience predicted civic engagement. Parental civic socialization and school civic experience showed statistically significant indirect (mediated) effects on civic engagement, through sense of community and perceived civic competence. Social media use influenced civic engagement directly; however, the mediated effect of sense of community connectedness and perceived civic competence was not statistically significant. Conclusions and recommendations in light of the implications of findings for educational practice and parenting are drawn.

Introduction

Civic engagement has emerged over the past two decades as a substantive subfield within developmental science (Youniss, 2009; Zaff, Boyd, Li, Lerner & Lerner, 2010). It is a dimension of human development behaviorally expressed by involving in the social world, a means to facilitate citizens' participation in democratic processes, and it fosters adolescents' development (Flanagan & Christens, 2011; Pancer, 2014; Sherrod, 2015). It entails participation in voluntarism and informal helping (Horn, 2012), involvement in civic institutions, consuming civic and political information, and political socialization (Wilkenfeld, 2009; Karakos, 2015), and future voting (Eckstein, Noack, & Gniewosz, 2012). Others (Zaff

et al., 2010; Zaff et al., 2011) indicated that civic engagement involves individual and collective activities that intend to address issues of public concern and enhance the well-being of society. Adolescence is a critical period for civic development when civic values, skills and commitments take shape (Amna, 2012; Finlay, Wray-Lake, & Flanagan, 2010; Metzger & Ferris, 2013), and transition into roles providing societal continuity such as voting (Buchmann & Kriesi, 2011). Civic engagement serves as key contextual influences in promoting adolescent development (Mahoney, Vandell, Simpkins & Zarrett, 2009). Factors that necessitated studying civic engagement of school adolescents include increased awareness on the rights of adolescents, growing concerns about the apparent decline in the levels of civic engagement (Amna, 2012), and the impact of this decline on governance of society at all levels (Bermudez, 2012).

To understand which factors can foster adolescent civic engagement, it is key to considerer that adolescent development takes place within social contexts. Community connection contributes to developing relationships that are beneficial for adolescents' adaptive development (Lerner, Wang, Champine, Warren, & Erickson, 2014) and furthermore, it is this sense of community connectedness (SCC) which leads to common interests and actions that foster adolescent's sociopolitical participation (Schulz, Ainley, Fraillon, Kerr, & Losito, 2010). Speer, Peterson, Armstead, and Allen (2013) define SCC as a connection of an individual to communities through experiencing sense of belonging that foster a sense of common purpose and shared interests. SCC develops through positive experiences with peers and significant adults, contributes to the development of personal and social identities, sense of belonging, and positive developmental outcomes (Torney-Purta, Amadeo, & Andolina, 2010; Cicognani, Zani, & Albanesi, 2012; Wilkenfeld, Lauckhardt, & Torney-Purta, 2010).

Furthermore, SCC enhances shared emotional connection with peers (Chiessi, Cicognani, & Sonn, 2010; Speer et al., 2013) and reinforces adolescents' involvement in civic activities that benefit themselves and communities (Flanagan, Cumsille, Gill, & Gallay, 2007). The second precursor of civic engagement is perceived competence for civic action. Matthews, Hempel, and Howell (2010) indicated that civic discussion was positively associated with adolescents perceived civic competence. Civic competencies are prerequisites to develop active citizenship (Grütter & Buchmann, 2021) and perceived civic competence was associated with future intention to participate in civic activities (Lenzi, et al., 2015).

Research conducted in different socio-cultural contexts revealed the influence of developmental contexts on adolescent's sense of community, perceived civic competence and civic engagement. Family and schools help adolescents to acquire civic knowledge, skills, attitudes, and behaviors to become agents of social change (Lenzi et al., 2012; Rossi, Lenzi, Sharkey, Vieno, & Santinello, 2016). The family is the primary socializing unit and a source of social capital–understood as norms, institutions, and organizations that foster trust and cooperation among family members, neighborhoods, communities, and society– as well as an institution playing a fundamental role in accessing social networks, neighborhood, or school (Steinberg & Silk, 2002; Collins & Laursen, 2004). Parents can support adolescent civic engagement by instilling civic values (Kim, Flanagan, & Pykett, 2015) and socializing and encouraging to engage in civic activities (Cicognani, et al., 2012; Quaranta & Sani, 2016).

Schools can provide adolescents with opportunities to develop civic competence and sense of belonging (Prati, Cicognani, & Albanesi, 2018), strengthen interpersonal relationships

and community partnerships (Wang & Degol, 2016). Schools can offer students an environment for expressing opinions, debating on socio-political issues, and participate in school governance which increase their future commitments towards their community (Flanagan, et al., 2007). Furthermore, teachers' encouragement of student participation enhances students' sense of belonging (Chiu & Churchill, 2016). In a nutshell, schools can help adolescents to develop civic skills, values, and behaviors needed for civic engagement through a formal civic education as well as through extracurricular and community-based activities (Hess, 2009; Youniss, 2011).

Social media is the third contextual factor. Taking a social-functional perspective, Mauss et al. (2011) argue that establishing a sense of social connectedness is an integral aspect of human life. Previous research (Sheldon, Abad, & Hinsch, 2011; Ahn & Shin, 2013; Grieve, Indian, Witteveen, Tolan, & Marrington, 2013) recognized that social media use provides opportunities for adolescents to share civic information. Quinn and Oldmeadow (2013) indicated that sense of community can be promoted through engagement in appropriate social media platforms. Lenzi et al. (2015) found out that Facebook informational use was associated with higher levels perceived competence to engage in civic action, both directly and indirectly through the mediation effect of civic discussion with their parents and friends (offline) among 14-17 years old school adolescents. Higher level of perceived civic competence among adolescents was associated with higher intention to participate in civic activities in the future. Furthermore, adolescents' use of social media facilitates informed civic engagement and empowerment of young people (Jugert, Eckstein, Noack, Kuhn, & Benbow, 2013; Theocharis & Quintelier, 2016; Middaugh, Clark, & Ballard, 2017), and fosters their civic participation in the future (Gil de Zúñiga, Jung, & Valenzuela, 2012; Ozer, Newlan, Douglas, & Hubbard, 2013). Participation in peer-based social networks increases connection and engagement in school settings by teaching them about social issues. In Ethiopia, a study by Feyisa and Dawit (2018) on "Perceived benefits and risks of social media" found out that 70.6% of the 500 school adolescents aged 14-19 years reported using social media for social networking and entertainment purposes.

Despite many studies identifying influences of contextual factors on adolescents' civic engagement in other countries, studies analyzing the role of family, schools, and social media use in influencing the civic engagement of school adolescents in Ethiopia is rare. Except few studies (Belay & Yekoyalem, 2015; Yekoyalem, 2020), research conducted on adolescents and youth have heavily focused on the problems of young people than their capacities. Furthermore, an evaluation study on the effectiveness of adolescent empowerment project in Addis Ababa revealed that school adolescents have developed confidence and communication skills. However, the study did not explore the role of schools and families in facilitating the civic participation of adolescents (Save the Children, 2014). Disengagement or destructive engagement are common among adolescents in Ethiopia. A report by the then Ministry of Women, Children and Youth Affairs revealed that adolescents' and youth civic participation was still low and called on families, schools, and communities to support their civic participation (MoWCY, 2018).

Examining civic engagement among school adolescents appears even more pressing within the contexts of the current socio-political landscape of Ethiopia. Adolescents constituting a significant proportion of the population of Ethiopia, adolescence being a critical

period of civic development, and civic engagement being a core component of human development justify the need for examining civic engagement as a timely issue.

Thus, the purpose of this study was to examine how parents, schools and social media use influence civic engagements of school adolescents and the mediation role of sense of community and perceived civic competence. To closely examine the issue, this study addressed the following basic research questions.

1. Do parental civic socialization, school civic experience, and social media use predict civic engagement of school adolescents?
2. Do sense of community connectedness and perceived competence for civic action play a statistically significant role in mediating the relationship between parental civic socialization and adolescent civic engagement?
3. Do sense of community connectedness and perceived competence for civic action mediate the relationship between school civic experience and adolescent civic engagement?
4. Do sense of community connectedness and perceived competence for civic action mediate the relationship between social media use and adolescent civic engagement?
5. What are the individual and combined contributions of parental civic socialization, school civic experiences, and social media to civic engagement of school adolescents?

Methods

Design

The research employed a correlational design as the main purpose is to describe the relationship between the predictor variables (parental civic socialization, school civic experience, and social media use) and civic engagement of school adolescents. The purpose was to investigate non-causal relationships among variables and make predictions (Bhandari. 2022). This research also examined the mediating role of sense of community connectedness and perceived civic competence in the relationship between the variables studied.

Sampling

Participants were 960 urban school adolescents (53.5% female and 46.5% male, mean age=17.7, ages 15-19 years) who were attending classes in grades 9-12 in three secondary schools in Gulele Sub-City in Addis Ababa. Of the 10 Districts, five districts (1, 5, 7, 9 &10) were purposely targeted in the study where the six public secondary schools are located. Of the 6 secondary schools with total student population of 11, 300 (5, 198 males), three schools were selected using simple random sampling. Then, 18 sections from grade 9-12 were selected using simple random sampling. Each section having 50-60 students, a total of 960 students completed the questionnaire correctly. Inclusion criteria include school adolescents (males and females) whose ages ranged from 15-19 years, attending their education in grades 9-12, school adolescents who lived with one or both of their parents; students who had no severe disability, and those who were able to read and write Amharic (the national working language of Ethiopia), and students who were willing to spend at least one hour to participate in the research project.

Data Collection Procedures

Prior to initiating the study, the research project was approved, and ethical clearance was secured from the Research Ethics Committee of the School of Psychology, College of Education and Behavioral Studies, Addis Ababa University. The research project was approved on 11 August 2022, with Reference Number: Ref: SoP-Eth Co/004/2022. Then, the researcher contacted Gulele Sub-City Education Department which further connected the researcher with the sample schools. The researchers contacted school directors and got the necessary support to collect primary data from students. Surrogate consent was obtained from school directors and oral consent was obtained from all participants prior to data collection from students. The purpose of the study was explained to the participants, their participation in the research was totally voluntary, and they were informed that they would not get any direct benefit from their participation.

Instruments

Content validity of items was assessed by eight Developmental Psychologists. Content Validity Index (CVI) of items was computed to assess the validity of each item using Lawshe's content validity assessment method (Lawshe, 1975). Items with a Content Validity Ratio (CVR) of 0.75 and above were retained. In addition, Confirmatory Factor Analysis (CFA) was conducted to confirm the factors identified through the Exploratory Factor Analysis. The following self-report questionnaires were completed by participants.

Civic engagements
It refers to the behavioral aspect of civic engagements (reported civic actions) as measured by the existing sources and adapted scale: *Adolescents' Involvement in Community Services and Informal Helping* (Kahne, Middaugh, & Schutjer-Mance, 2005; Zaff et al., 2010; Wray-Lake, Metzger, & Syvertsen, 2017). It has 13 items (7 items measuring adolescents' engagement in community services and 6 items measuring their engagement in informal helping activities). Responses were rated from 0=*Never* to 4=*Always.* Alpha reliability for the scale was .843.

Parental civic socialization
It refers to adolescents' communication with their parents about social and political issues, and parental modeling of civic behaviors as measured by a five-point scale scored from 0-4, which is adapted from earlier researchers (Kahne et al., 2005; Syvertsen, Wray-Lake, & Metzger, 2015). Reliability of the items was reported to be α = .750

School civic experience
Refers to adolescents' perceived confidence in the effectiveness of school participation, perception of openness of classroom climate for discussion, and student exposure to civic learning as measured by student reports. It was measured using a five-point Likert scale adapted from Wilkenfeld (2009) and Schulz, et al. (2010), and responses were rated from 1 = *strongly disagree* to 5 = *strongly agree*. The scale had α=.828

Social media use

Measured how often adolescents share civic related messages using social media especially Facebook. Adolescents were asked to indicate their level of agreement (0 = never, 1 = rarely, 2 = sometimes, 3 = often, 4= Always). Items were adapted from Social Media Engagement Scale for Adolescents (Ni, et al., 2020), and the scale had a reliability value of α=0.86.

Sense of community connectedness

Measured using a 26 item five-point scale adapted Sense of Community Scale for Adolescents (Cicognani et al., 2012). The scale had excellent internal consistency (α=0.92). Responses were rated from 0 = *not true at all for me* to 4=*I definitely can.*

Perceived competence for civic actions

An adapted version of the competence for civic action scale (Flanagan, Syvertsen, & Stout, 2007) was a 7-item scale measuring adolescents' perceived ability to engage in civic action. Responses were rated from 0 =*I definitely can't* to 4=*I definitely can*. The items had a reliability of Cronbach's alpha 0.73.

Data Analysis

The first group of latent (predictor) variables of interest are parental civic socialization, school civic experience, and social media use. Sense of community connectedness and perceived competence for civic action are the second group of latent (mediating) variables. Civic engagement is the other latent (predicted) variable. The items in the different measures are observed variables. The data were analysed by Statistical Package for Social Sciences (SPSS) version 24 and Amos 26. Multicollinearity assumption was checked by computing Zero Order Correlations (Pearson r_s) between variables without controlling the influence of any other variables. The result shows that none of the r_s are greater than .47. Thus, the assumption of multicollinearity to conduct factor analysis was tenable. Confirmatory Factor Analysis (CFA) was conducted to confirm the factors, tested the hypothesized measurement model, and confirmed the use of structural equation modeling.

Structural equation modeling (with maximum likelihood estimation) was used to investigate the direct and indirect (mediated) effects of parental civic socialization, school civic experiences and social media, and independent and combined contributions of predictors on civic engagement. Kline (2005) suggested this model allows for the simultaneous estimation of all unknown parameters. It estimates the multiple and interrelated dependence in a single analysis, tests the fit of the model to the data, and specifies statistical models that more closely align with theory. As recommended by Byrne (2010), five model fit indices: Model Chi-Square (CMIN), The (Adjusted) Goodness of Fit (AGFI), Goodness of Fit Index (GFI), Comparative Fit Index (CFI), and The Root Mean Square Error of Approximation-RMSEA were used to test the general model adjustment. The value of CMIN/DF was < 5; AGFI, GFI, and CFI had values > .9 and RMSEA was <.08 for civic engagement, school civic experiences, parental civic socialization, social media, sense of community and perceived civic competence. According to Hair, Black, Babin, and Anderson (2010), if any 3-4 of the Goodness-of-Fit indices are within the threshold, then fitness of the entire model is regarded as acceptable.

Results

Socio-Demographic Characteristics

Participants were 960 adolescents (53.5% female) whose ages ranged from 15-19 years. About 40.7% were 18 years, 22.8% were aged 19, 21% were 17 years, and 14.6% of them were 16 years old. Only .9% of the adolescent respondents were aged 15 years old. About 42% were in grade 12, 27.5% in grade 11, 19.5% in grade 9 and 11% in grade 10.

Result of Mediation Analysis

In order to test the direct and indirect (mediated) effects of parental civic socialization (PCS), school civic experiences (SCE) and social media use (SMU) on civic engagement, as well as the direct effect of PCS, SCE, and SMU on mediating variables (sense of community connectedness and perceived competence for civic action), structural-equation modeling was used. Factors identified through exploratory factor analysis (EFA) and confirmed via confirmatory factor analysis (CFA) were employed and the following Path Model was identified.

Figure 1

Path Model
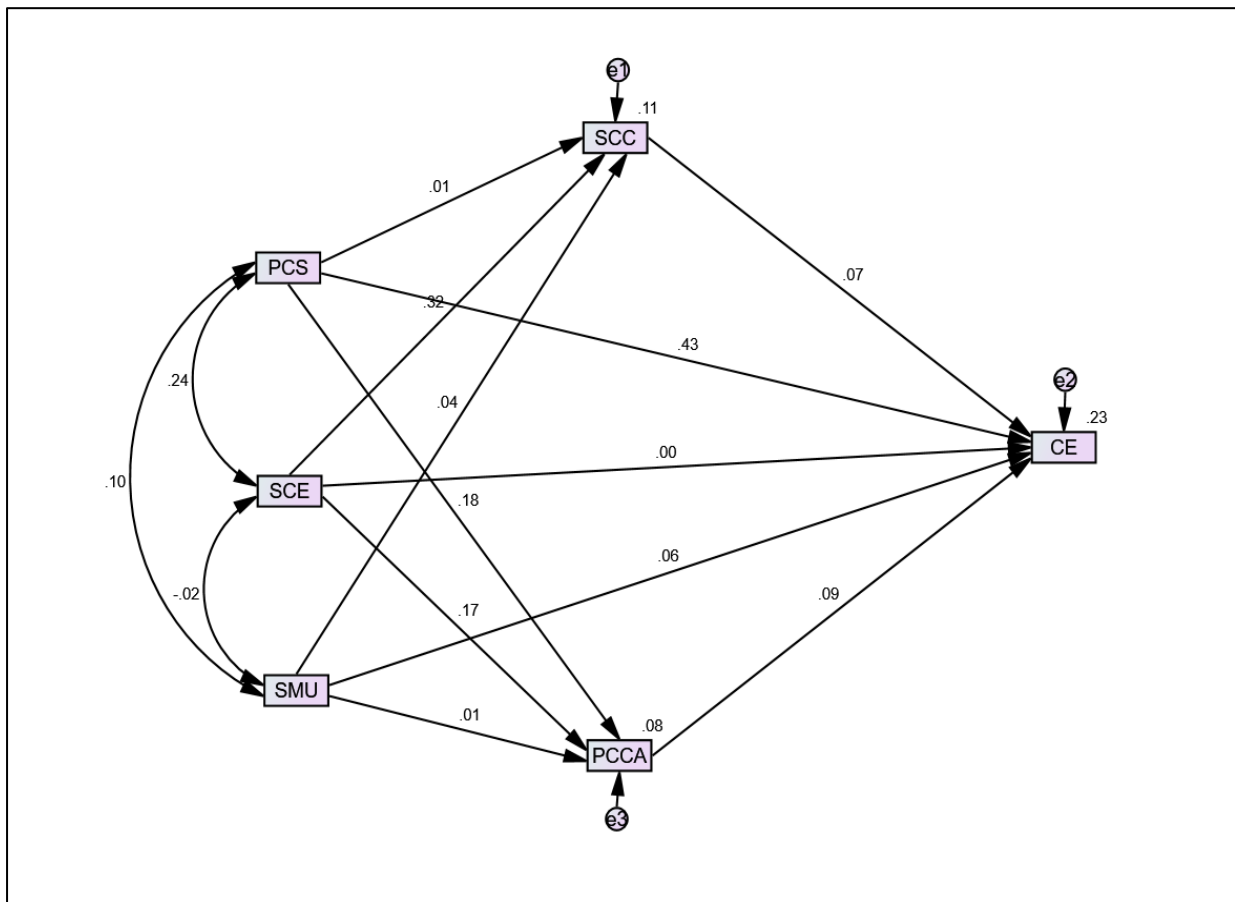
Note: PCS-Parental Civic Socialization, SCE-School Civic Experience, SMU-Social Media Use, SCC-Sense of Community Connectedness, PCCA-Perceived Competence for Civic Action, and CE-Civic Engagement

Direct Effects of Parental Civic Socialization, School Civic Experience and Social Media Use on Mediating Variables

This section presents the direct effects of parental civic socialization, adolescents' school civic experience and social media use on the mediating variables.

Table 1

Summary of Structural Coefficients for the Path Model (Direct Effects of Independent Variables on Mediating Variables)

Independent Variables	Mediating Variables	Standardized Structural Coefficients (β)
Path From ⟶ To		
Parental Civic Socialization (PCS)	Sense of Community Connectedness	.013
	Perceived Competence for Civic Action	.185***
School Civic Experience (SCE)	Sense of Community Connectedness	.322***
	Perceived Competence for Civic Action	.167***
Social Media Use (SMU)	Sense of Community Connectedness	.035
	Perceived Competence for Civic Action	.010

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

As depicted in Table 1, parental civic socialization influences more on adolescents perceived civic competence (β =.185, p<.001) than sense of community connectedness (β =.013, p >.05). Although both regression coefficients reached level of statistical significance, school civic experience had greater influence on adolescents' sense of community connectedness (β =.322, p<.001) than perceived civic competence (β = .167, p<.001). The influence of social media use on adolescents' sense of community connectedness and perceived civic competence did not reach level of significance.

Direct Effects of the Predictor Variables on Civic Engagement of School Adolescents

This section presents the direct effects of parental civic socialization, school civic experience, social media use, sense of community connectedness, and perceived competence for civic action on civic engagement of school adolescents.

Table 2

Summary of Structural Coefficients for the Path Model (Direct Effects of Predictor Variables on Civic Engagement)

Predictor Variables	Dependent Variable	Standardized Structural Coefficients (β)
From ⟶	To	
Parental Civic Socialization	Civic Engagement	.431***
School Civic Experience	Civic Engagement	.000
Social Media Use	Civic Engagement	.059*
Sense of Community connectedness	Civic Engagement	.067*
Perceived Competence for Civic Action	Civic Engagement	.093**

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

As shown in Table 2, the direct effects of all predictors except school civic experience on civic engagement reached level of significance i.e., predicted civic engagement of school adolescents. Of the predictors of civic engagement, the highest influence was exerted by parental civic socialization (β = .431, p<.001), followed by perceived civic competence (β = .093, p<.01), then sense of community (β = .067, p<.05) and social media use (β = .059, p<.05). Compared to the other variables in the model, the direct influence of school civic experience on civic engagement of school adolescents was found to be minimal and not statistically significant.

Indirect Effects of Parental Civic Socialization, School Civic Experience and Social Media on Civic Engagement of School Adolescents

This section presents the mediational effect of sense of community connectedness and perceived competence for civic actions in the relationship between parental civic socialization, adolescents' school civic experience and social media use, and civic engagement.

Table 3

Summary of Results of Mediational Analyses

Relationship between Variables	Standardized Effects (β)		
	Direct	Indirect	Total
PCS ➔ (SCC, PCCA) ➔CE	.431***	.018**	.449***
SCE ➔(SCC, PCCA) ➔CE	.000	.037***	.037
SMU ➔(SCC, PCCA) ➔CE	.059*	.003	.062*

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

Table 3 shows that two of the three independent variables were able to exert statistically significant indirect effects on civic engagement. The indirect effect of parental civic socialization-PCS (β = .018. p < .01) on civic engagement was found to be positive and statistically significant. It means the mediated effect of sense of community connectedness and

perceived competence for civic action was found to be statistically significant. Further, the direct effect of PCS (β =.431 p < .001) on civic engagement and total regression effect of PCS (β =.449. p < .001) on civic engagement were found to be positive and statistically significant. It is interesting to note that school civic experience transferred all its effects to civic engagement indirectly (β =.037. p < .001). This means the sense of community and perceived civic competence as mediating variables fully mediated the relationship between school civic experience and civic engagement of school adolescents.

On other hand, adolescents' social media use influenced civic engagement directly (β =.059 P<.05). This means the mediation effect of sense of community connectedness and perceived civic competence in the relationship between social media and civic engagement is not statistically significant. The total regression effect of social media use on civic engagement was found to be positive and statistically significant (β =.062, P<.05). However, PCS was found to operate both directly and indirectly, with positive and significant effects on civic engagement.

Individual and Combined Contributions of Independent Variables on the Dependent Variable

This section presents the separate, pairwise, and combined contributions of the independent and mediating variables to civic engagement of school adolescents.

Table 4

Separate, Pairwise and Combined Contributions of Independent Variables to Civic Engagement

Contributions	Variables	R^2
Separate	PCS	.216
	SCE	.021
	SMU	.012
Pairwise	PCS, SCE	.217
	SCE, SMU	.033
	PCS, SMU	.219
Combined	PCS, SCE, SMU	.221

As can be seen in Table 4, parental civic socialization explained the largest proportion of variance (R^2 = 21.6%) in civic engagement followed by school civic experience (R^2 = 2.10%) and social media use (R^2 = 1.20%). Looking into the pairwise contributions, parental civic socialization, and social media use jointly contributed the largest variance (R^2 = 21.9%) in civic engagement, followed by parental civic socialization and school civic experience which contributed (R^2 = 21.7%) in civic engagement, and school civic experience and social media use jointly contributed the least (R^2 = 3.3%). As to the combined contributions of variables, parental civic socialization, school civic experience and social media use jointly contributed (R^2 = 22.1%) to the variance in civic engagement. According to Cohen's interpretation of effect size of R^2 (Cohen, 1988), R^2 between 0.13 <= R2 < 0.26 is considered as moderate. Overall, it

is parental civic socialization that accounted for the largest variance in the civic engagement of school adolescents.

Discussion

The results have shown that, parental civic socialization predicted civic engagement of school adolescents. The direct, indirect (mediated), and total effect of parental civic socialization on civic engagement were found to be positive and statistically significant. The role of family in influencing civic engagement of school adolescents is recognized in the previous research (Rossi, et al., 2016; Taylor et al., 2019). Parents are socializing agents in communicating civic values and messages with adolescents (Lenzi, Vieno, Santinello, Nation, & Voight, 2014). Discussion on social and political issues was associated with a range of civic values and behaviors (Hooghe & Boonen, 2015). Further, parental civic modeling was an important predictor of civic participation among adolescents (McLntosh, Hart & Younis's, 2007).

Parental civic socialization influenced civic engagement indirectly through influencing participants' perceived civic competencies and sense of community connectedness. During adolescence, sense of community develops due to positive experiences with family, peers and significant others and contribute to the development of personal and social identity and to positive developmental outcomes (Torney-Purta et al., 2010; Wilkenfeld, Lauckhardt, & Torney-Purta, 2010). Flanagan et al. (2007) found out that sense of community predicted adolescents' civic engagement by reinforcing adolescents; commitment to engage in civic activities. Sense of community has positive correlations with both civic activism and prosocial-oriented civic engagement, and has been linked to perceptions of belonging, community connectedness, group membership and civic engagement (Albanesi, Cicognani, & Zani, 2007). Further, when school adolescents participate in community decision-making, they develop greater confidence and agency, increased community connections, and higher level of empowerment (Krauss et al., 2014).

The findings revealed that school civic experience did not directly influence civic engagement of school adolescents. However, the effect of school civic experience on sense of school and community, and perceived competence for civic action (efficacy for civic engagement) reached level of significance. The effect of sense of community and perceived civic competence on civic engagement of school adolescents was also significant. Thus, although school civic experience did not directly influence their civic engagement, it has influenced indirectly through the mediated effect of sense of community and perceived civic competence. It seems that schools have played an important role in helping school adolescents to develop sense of community and school, boosting their perceived civic competence through civic education, civic discussion and facilitating extracurricular activities.

Consistent with the current finding, previous research (Ahmad, Rahim, Pawanteh, & Ahmad, 2012; Prati et al., 2018) revealed that schools can help adolescents develop perceived civic competence, develop sense of community connections, and play active role in their school governance and community-based civic initiatives. When students learn in a classroom that meets one's psychological and social needs, they are likely to experience greater well-being

and develop sense of community benefits from involvement in participatory practices (Mazzoni, Cicognani, Albanesi, & Zani, 2014). Furthermore, a study by Vieno, Perkins, Smith, and Santinello (2005) on democratic school climate and sense of community in school examined individual and school-level predictors of sense of community among adolescents aged 10 to18 years. The result showed that individual and contextual measures of perception of a democratic school climate were each significant predictor of school sense of community.

Schools civic experience did not directly influence civic engagement of adolescents. It appears that schools have exerted limited effort in helping students to engage directly in school and community-based civic activities such as school governance, participation in school and district child parliaments, voluntarism, informal helping activities, helping the most vulnerable students, and promoting awareness on the rights of adolescents. One's interest to participate in civic engagement activities may not necessarily lead to action due to structural and perceived barriers. Contrary to the current finding, Rossi et al. (2016) found out that schools can facilitate participation-based educational experiences such as student councils that promote the development of civic behaviors. Schools promote civic engagement by offering opportunities to learn civic values and skills and creating a democratic climate to engage in civic discussions (Lenzi et al., 2014). Activities implemented within the school could foster a democratic climate for participation and influence their present and future civic engagement (Kim et al., 2015).

Social media use had a significant positive (direct) effect on adolescent civic engagement; its total regression effect was also positive and statistically significant. However, social media use did not predict sense of community and perceived civic competence, and the mediated (indirect) effect on civic engagement was also not significant. A positive and direct influence on civic engagement implies that adolescents use social media to share civic messages with less emphasis on critically analyzing information to boost their knowledge and skills and develop sense of community connectedness and civic competence. Previous research (Theocharis & Quintelier, 2016: Middaugh et al., 2017) indicated that the use of social media advances informed and effective civic engagement of adolescents. Participation in peer-based or youth-based social networks using social media channels increases connection and their engagement helps them to share information and influence on social issues.

The indirect effect of social media use (i.e., through the mediating effect of sense of community connectedness and perceived competence, on civic engagement) on civic engagement of school adolescents was not significant. Evidence from previous research shows relationships between social media use and social connectedness (Sheldon et al., 2011; Ahn & Shin, 2013; Grieve et al., 2013; Allen, Ryan, Gray, McInerney, & Waters, 2014). Digital mediums facilitate opportunities for young people to interact with others and establish a sense of social connectedness. Lenzi et al. (2015) found out that Facebook informational use was associated with higher levels of perceived civic competence, which in turn was associated with a stronger intention to participate in the civic actions in the future. This entails Facebook could provide adolescents with additional tools to learn civic activities or develop the skills necessary to participate in civic platforms at the school and community in the future.

Conclusions and Recommendations

Conclusions

The study revealed the direct effects of parental civic socialization and school civic experience on the mediating variables, which are considered as precursors of civic engagement for school adolescents. Parental civic socialization influenced more on adolescents perceived civic competence than sense of community connectedness. School civic experience had a significant direct influence both on sense of community and perceived civic competence, exerting greater influence on sense of community than perceived civic competence of school adolescents. The influence of social media use on sense of community connectedness and perceived competence for civic action was not significant. All variables, except school civic experience predicted adolescents' civic engagement reaching statistical level of significance. The highest influence was exerted by parental civic socialization. The direct influence of school civic experience on the civic engagement of school adolescents was minimal and not statistically significant.

Parental civic socialization and school civic experience had significant indirect effects on civic engagement of school adolescents. Adolescents' sense of community and perceived competence for civic action played a statistically significant mediational role in mediating the relationship between parental civic socialization, school civic experience and adolescent civic engagement. Although social media use influenced adolescents' civic engagement directly and the total regression effect on civic engagement was positive and statistically significant, the mediation effect of sense of community and perceived competence for civic action on civic engagement was not statistically significant.

Parental civic socialization and social media use influenced civic engagement directly, and both parental civic socialization and school civic experience affected civic engagement indirectly through the mediated effect of sense of community connectedness and perceived competence for civic action, which are precursors of civic engagement.

Parental civic socialization (individual) explained the largest proportion of variance in civic engagement; parental civic socialization and social media use (pairwise) contributed the largest variance in civic engagement. The three predictor variables i.e., parental civic socialization, school civic experience and social media use jointly contributed ($R^2 = 22.1\%$) to the variance in civic engagement.

This study has certain limitations. Although the finding shows parental civic socialization, school civic experience and social media influenced adolescent civic engagement, it is not possible to establish cause and effect relationships between variables as this is fundamentally a correlational study. The use of self-report measures may be susceptible to social desirability. Some adolescents might have responded in a socially desirable way to present themselves, their parents, and schools in a positive way. Nonetheless, all the instruments used were based on a demonstrated reliability and validity in adolescent populations. Future researchers should collect data from family. teachers, and friends to have a comprehensive understanding of contextual factors influencing civic engagement.

Recommendations

The finding shows the significant role of parents in helping civic development of school adolescents. The role of parents in helping adolescents to develop civic responsibility is indicated in the National Child Policy (MoWCY, 2017). Thus, policy makers and implementers (government, civil society organizations and other stakeholders) need to support parents through training and mentoring to help school adolescents develop civic responsibilities, prevent them from engaging in socially destructive behaviors and help them become productive members of the society.

Schools can foster civic engagement of school adolescents not only by teaching rigorously civic content and skills but also by creating an open classroom climate for discussing democratic ideals and social issues, and through extracurricular after-school activities that seek to cultivate adolescents' interest and commitment to participate in civic engagement activities. Furthermore, schools can establish partnerships with key stakeholders to enhance students' civic participation that would lead to positive outcomes such as civic development, an active school and public life, and prosocial behaviors.

Schools, in addition to teaching civic contents which constitute democratic ideals, civic teachers should complement civic learning with practical exercises and projects that enhance students' civic skills and participation. This could include facilitating students' participation in school governance, participate as active member or a leader of school clubs and Woreda child parliaments, and engage in community-based awareness raising on the rights of school adolescents.

Parents and schools can encourage school adolescents to join adolescent/youth-led structures, which could help them to acquire knowledge and skills on their rights and responsibilities, exercise democratic participation, and leadership skills.

Reading news posted by social media such as through Facebook friends might not be sufficient to develop critical thinking to develop their civic knowledge and skills for school adolescents. This is true especially if adolescents do not question the reliability of the information. Thus, as part of civic education or social studies, schools should teach students how they can use social media information to stimulate offline discussion, verify and enrich the information gathered online through face-to-face interactions.

Along its contribution, the present study also acknowledged that there was scanty of research, therefore future researchers should collect data from family, teachers, and friends to have a comprehensive understanding of contextual factors influencing civic engagement.

The study was conducted in urban school adolescents with little consideration of other variables which could influence their civic engagement. Future research should consider rural and non-student adolescent population from different socioeconomic strata.

Although social media use influenced civic engagement of school adolescents directly, there may be a potential of using disinformation that might occur online and use it to engage in socially destructive behaviors. Thus, future researchers should develop a simplified and contextualized measure of social media informational use.

Funding

Acknowledgement

The authors thank the study participants for their responses. Our deepest gratitude also goes to school directors for facilitating the data collection.

References

Ahmad, A. L., Rahim, S. A., Pawanteh, L., & Ahmad, F. (2012). The understanding of environmental citizenship among Malaysian youths: A study on perception and participation. *Asian Social Science*, *8* (5), 85–92. https://doi.org/10.5539/ass.v8n5p85

Ahn, D., & Shin, D. H. (2013). Is the social use of media for seeking connectedness or for avoiding social isolation? Mechanisms underlying media use and subjective well-being. *Computers in Human Behavior*, *29* (6), 2453-2462. https://doi.org/10.1016/j.chb.2012.12.022

Albanesi, C., Cicognani, E., & Zani, B. (2007). Sense of community, civic engagement, and social well-being in Italian adolescents. *Journal of Community & Applied Social Psychology*, *17* (5), 387-406. https://doi.org/10.1002/casp.903

Allen, K. A., Ryan, T., Gray, D. L., McInerney, D. M., & Waters, L. (2014). Social media use and social connectedness in adolescents: The positives and the potential pitfalls. *The Educational and Developmental Psychologist*, *31*(1), 18-31.

Amna, E. (2012). How is civic engagement developed over time? Emerging answers from a multidisciplinary field. *Journal of Adolescence*, *35* (3), 611-627. https://doi.org/10.1016/j.adolescence.2012.04.011

Belay Tefera & Yekoalem Desie (2015). Exploring youth development in Ethiopia: An alternative strength-based perspective. *Ethiopian Journal of Development Research*, *37* (1), 41-89. https://www.ajol.info/index.php/ejdr/article/view/149199

Bermudez, A. (2012). Youth civic engagement: decline or transformation? A critical review, *Journal of Moral Education*, *41* (4), 529-542. https://doi.org/10.1080/03057240.2012.732296

Bhandari, P. (2022, December 05). *Correlational Research: When & How to Use.* https://www.scribbr.com/methodology/correlational-research

Buchmann, M. C., & Kriesi, I. (2011). Transition to adulthood in Europe. *Annual Review of Sociology*, *37*, 481–503. https://doi.org/10.1146/annurev-soc-081309-150212

Byrne, B. M. (2010). *Structural Equation Modeling with AMOS: Basic Concepts, Applications and Programming (2nd ed.).* Lawrence Erlbaum Associates, Inc.

Chiessi, M., Cicognani, E., & Sonn, C. (2010). Assessing sense of community on adolescents: Validating the brief scale of sense of community in adolescents. *Journal of community psychology*, *38*(3), 276-292. https://DOI: 10.1002/jcop.2036

Chiu, T. K., & Churchill, D. (2016). Adoption of mobile devices in teaching: Changes in teacher beliefs, attitudes, and anxiety. *Interactive Learning Environments*, *24* (2), 317–327. https://doi.org/10.1080/10494820.2015.1113709

Cicognani, E., Zani, B. & Albanesi, C., (2012). Sense of community in adolescence. *Global Journal of Community Psychology Practice*, *3* (4), 120-125.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Routledge.

Collins, W. A., & Laursen, B. (2004). Parent-adolescent relationships and Influences. *Handbook of adolescent psychology*, *2*, 331-362. https://doi.org/10.1002/9780471726746.ch11

Eckstein, K., Noack, P., & Gniewosz, B. (2012). Attitudes toward political engagement and willingness to participate in politics: Trajectories throughout adolescence. *Journal of adolescence*, *35*(3), 485-495. https://doi.org/10.1016/j.adolescence.2011.07.002

Feyisa Mulisa & Dawit Asrat Getahun (2018). Perceived benefits and risks of social media: Ethiopian secondary school students' perspectives. *Journal of technology in behavioral science*, *3* (4), 294-300. https://doi.org/10.1007/s41347-018-0062-6

Finlay, A., Wray-Lake, L., & Flanagan, C. (2010). Civic engagement during the transition to adulthood: Developmental opportunities and social policies at a critical juncture. *Handbook of research on civic engagement in youth*, 277-305.

Flanagan, C. A. & Christens, B. D. (2011). Youth civic development: Historical context and emerging issues. *New Directions for Child and Adolescent Development*, *2011*(134), 1-9. https://doi.org/10.1002/cd.307

Flanagan, C. A., Cumsille, P., Gill, S., & Gallay, L. S. (2007). School and community climates and civic commitments: Patterns for ethnic minority and majority students. *Journal of Educational Psychology, 99*(2), 421-431. https://doi.org/10.1037/0022-0663.99.2.421

Flanagan, C. A., Syvertsen, A. K., & Stout, M. D. (2007). Civic measurement models: Tapping adolescents' civic engagement. *Center for Information and Research on Civic Learning and Engagement*. https://files.eric.ed.gov/fulltext/ED497602.pdf

Gil de Zúñiga, H., Jung, N., & Valenzuela, S. (2012). Social media use for news and individuals' social capital, civic engagement, and political participation. *Journal of computer-mediated communication*, *17* (3), 319-336. https://doi.org/10.1111/j.10836101.2012.01574.x

Grieve, R., Indian, M., Witteveen, K., Tolan, G. A., & Marrington, J. (2013). Face-to-face or Facebook: Can social connectedness be derived online? *Computers in human behavior*, *29*(3), 604-609. https://doi.org/10.1016/j.chb.2012.11.017

Grütter, J.,& Buchmann, M. (2021). Civic competencies during adolescence: Longitudinal associations with sympathy in childhood. *Journal of Youth and Adolescence*, *50*(4), 674-692. https://doi.org/10.1007/s10964-020-01240-

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*. Upper Saddles fiver.

Hess, D. E. (2009). *Controversy in the classroom: The democratic power of discussion*. Routledge.

Hooghe, M., & Boonen, J. (2015). The intergenerational transmission of voting intentions in a multiparty setting: An analysis of voting intentions and political discussion among 15-year-old adolescents and their parents in Belgium. *Youth & Society*, *47*(1), 125-147. https://doi.org/10.1177/0044118X13496826

Horn, A. S. (2012). The cultivation of a prosocial value orientation through community service: An examination of organizational context, social facilitation, and duration. *Journal of Youth and Adolescence*, *41*(7), 948-968. https://doi.org/10.1007/s10964-011-9714-y

Jugert, P., Eckstein, K., Noack, P., Kuhn, A., & Benbow, A. (2013). Offline and online civic engagement among adolescents and young adults from three ethnic groups. *Journal of Youth and Adolescence*, *42*(1), 123-35. https://doi.org/10.1007/s10964-012-9805-4

Kahne, J., Middaugh, E., & Schutjer-Mance, K. (2005). *California civic index* [Monograph]. Carnegie Corporation and Annenberg Foundation.

Karakos, H. L. (2015). *Understanding civic engagement among youth in diverse contexts*. Vanderbilt University. https://ir.vanderbilt.edu/xmlui/bitstream/handle/1803/10817/

Kim, T., Flanagan, C. A., & Pykett, A. A. (2015). Adolescents' civic commitments in stable and fledgling democracies: The role of family, school, and community. *Research in Human Development*, *12*(1–2), 28–43. https://doi.org/10.1080/15427609.2015.1010344

Kline, T. J. (2005). *Psychological testing: A practical approach to design and evaluation*. Sage Publications.

Krauss, S. E., Collura, J., Zeldin, S., Ortega, A., Abdullah, H., & Sulaiman, A. H. (2014). Youth–adult partnership: Exploring contributions to empowerment, agency, and community connections in Malaysian youth programs. *Journal of Youth and Adolescence*, *43*, 1550-1562. https://DOI/10.1007/s10964-013-0027-1

Lawshe, C.H. (1975). A quantitative approach to content validity. *Personnel Psychology*, *28*(4), 563-575.

Lenzi, M., Vieno, A., Altoé, G., Scacchi, L., Perkins, D. D., Zukauskiene, R., & Santinello, M. (2015). Can Facebook informational use foster adolescent civic engagement? *American Journal of Community Psychology*, *55*(3), 444-454. https://onlinelibrary.wiley.com/doi/pdf/10.1007/s10464-015-9723-1

Lenzi, M., Vieno, A., Perkins, D. D., Santinello, M., Elgar, F. J., Morgan, A., & Mazzardis, S. (2012). Family affluence, school and neighborhood contexts and adolescents' civic engagement: A cross-national study. *American journal of community psychology*, *50*(1-2), 197-210. https://doi.org/10.1007/s10464-012-9489-7

Lenzi, M., Vieno, A., Santinello, M., Nation, M., & Voight, A. (2014). The role played by the family in shaping early and middle adolescent civic responsibility. *The Journal of Early Adolescence*, *34*(2), 251-278. https://doi.org/10.1177/02724316134858

Lerner, R. M., Wang, J., Champine, R. B., Warren, D. J., & Erickson, K. (2014). Development of civic engagement: Theoretical and methodological issues. *International Journal of Developmental Science*, *8*(3-4), 69-79.

Mahoney, J. L., Vandell, D. L., Simpkins, S. D., & Zarrett, N. R. (2009). Adolescent out-of-school activities. Handbook of adolescent psychology. *Contextual influences on adolescent development*, *2* (3): 228–267.

Matthews, Hempel, & Howell (2010). Gender and the transmission of civic engagement: Assessing the influences on youth civic activity. *Sociological Inquiry*, *80* (3), 448–474. https://onlinelibrary.wiley.com/doi/org/10.1111/j.1475-682X.2010.00342.x

Mauss, I. B., Shallcross, A. J., Troy, A. S., John, O. P., Ferrer, E., Wilhelm, F. H., & Gross, J. J. (2011). Don't hide your happiness! Positive emotion dissociation, social connectedness, and psychological functioning. *Journal of personality and social psychology*, *100*(4), 738-748. https://doi.org/10.1037/a0022410

Mazzoni, D., Cicognani, E., Albanesi, C., & Zani, B. (2014). Quality of the experience of participation and sense of community: effects on the social well-being of adolescents and young people. *Italian Journal of Psychology*, *41*(1), 205-228. https://rivisteweb.it/doi/10.1421/77213

McLntosh, H., Hart, D., & Youniss, J. (2007). The influence of family political discussion on youth civic development: Which parent qualities matter? *PS: Political Science and Politics*, *40*(3), 495-499. https://www.jstor.org/stable/20452003

Metzger, A., & Ferris, K. (2013). Adolescents' domain-specific judgments about different forms of civic involvement: variations by age and gender. *Journal of Adolescence*, *36* (3), 529-538. https://doi.org/10.1016/j.adolescence.2013.03.003

Middaugh, E., Clark, L. S., & Ballard, P. J. (2017). Digital media, participatory politics, and positive youth development. *Pediatrics*, *140* (Supplement 2), S127-S131. https://doi.org/10.1542/peds.2016-1758Q

MoWCY. F. (2018). *Adolescent and youth status report 2018*. FDRE-Ministry of Women, Children and Youth.

MoWCY, F. (2017). *National child policy*. FDRE- Ministry of Women, Children and Youth.

Ni, X., Shao, X., Geng, Y., Qu, R., Niu, G., & Wang, Y. (2020). Development of the Social Media Engagement Scale for Adolescents. *Frontiers in psychology*, *11*, 7 https://doi.org/10.3389/fpsyg.2020.00701

Ozer, E. J., Newlan, S., Douglas, L., & Hubbard, E. (2013). "Bounded" empowerment: Analyzing tensions in the practice of youth-led participatory research in urban public schools. *American journal of community psychology*, *52* (1), 13-26. https://onlinelibrary.wiley.com/doi/pdf/10.1007

Pancer, S. M. (2014). *The psychology of citizenship and civic engagement*. Oxford University Press.

Prati, G., Cicognani, E., & Albanesi, C. (2018). The influence of school sense of community on students' well-being: A multilevel analysis. *Journal of community psychology*, *46*(7), 917-924. https://doi.org/10.1002/jcop.21982

Quaranta, M., & Sani, G. M. D. (2016). The relationship between the civic engagement of parents and children a cross-national analysis of 18 European countries. *Nonprofit and Voluntary Sector Quarterly*, *45*(6), 1091–1112. https://journals.sagepub.com/doi/pdf/10.1177/0899764016628677

Quinn, S., & Oldmeadow, J. A. (2013). Is the generation a 'we' generation? Social networking use among 9-to 13-year-olds and belonging. *British journal of developmental psychology*, *31*(1), 136-142. https://doi.org/10.1111/bjdp.12007

Rossi, G., Lenzi, M., Sharkey, J. D., Vieno, A., & Santinello, M. (2016). Factors associated with civic engagement in adolescence: The effects of neighborhood, school, family, and peer contexts. *Journal of community psychology*, *44*(8), 1040-1058. https://doi.org/10.1002/jcop.21826

Save the Children (2014). *Terminal evaluation of the project 'Enhancing Children's Participation in Kolfe Keranio sub-city of Addis Ababa*. Save the Children

Schulz, W., Ainley, J., Fraillon, J., Kerr, D., & Losito, B. (2010). *ICCS 2009 International Report: Civic knowledge, attitudes, and engagement among lower-secondary school students in 38 countries*. International Association for the Evaluation of Educational Achievement.

Sheldon, K. M., Abad, N., & Hinsch, C. (2011). A two-process view of Facebook use and relatedness need-satisfaction: disconnection drives use, and connection rewards it. *Journal of personality and social psychology*, *100*(4), 766-775. https://doi.org/10.1037/a0022407

Sherrod, L. R. (2015). Recognizing civic engagement as a critical domain of human development. *Research in Human Development*, *12*(3–4), 312–318.

Speer, P. W., Peterson, N. A., Armstead, T. L., & Allen, C. T. (2013). The influence of participation, gender, and organizational sense of community on psychological empowerment: The moderating effects of income. *American Journal of Community Psychology*, *51*(1-2), 103-113. https://onlinelibrary.wiley.com/doi/pdf/10.1007/s10464-012-9547-1

Steinberg, L., & Silk, J. S. (2002). Parenting adolescents. In I. Bornstein (Ed.), *Handbook of parenting (Vol. I. Children and parenting)*. Lawrence Erlbaum Associates.

Syvertsen, A. K., Wray-Lake, L., & Metzger, A. (2015). Youth civic and character measures toolkit. *Search Institute*.

Taylor, L. K., Townsend, D., Merrilees, C. E., Goeke-Morey, M. C., Shirlow, P., & Cummings, E. M. (2019). Adolescent civic engagement and perceived political conflict: The role of family cohesion. *Youth & Society*, *51*(5), 616-637. https://doi.org/10.1177/0044118X17697236

Theocharis, Y., & Quintelier, E. (2016). Stimulating citizenship or expanding entertainment? The effect of Facebook on adolescent participation. *New Media & Society*, *18*(5), 817-836. https://doi.org/10.1177/14614448145490

Torney-Purta, J., Amadeo, J.-A., & Andolina, M. W. (2010). A conceptual framework and multimethod approach for research on political socialization and civic engagement. In L. R. Sherrod, J. Torney-Purta, & C. A. Flanagan (Eds.), *Handbook of research on civic engagement in youth*. John Wiley & Sons, Inc. https://doi.org/10.1002/9780470767603.ch19

Vieno, A., Perkins, D. D., Smith, T. M., & Santinello, M. (2005). Democratic school climate and sense of community in school: A multilevel analysis. *American journal of community psychology*, *36*(3-4), 327-341. https://doi.org/10.1007/s10464-005-8629-8

Wang, M. T., & Degol, J. L. (2016). School climate: A review of the construct, measurement, and impact on student outcomes. *Educational Psychology Review*, *28*(2), 315–352. https://doi.org/10.1007/s10648-015-9319-1

Wilkenfeld, B. (2009). Does context matter? How the family, peer, school, and neighborhood contexts relate to adolescents' civic engagement. *Center for Information and Research on Civic Learning and Engagement*. https://files.eric.ed.gov/fulltext/ED507176.pdf,

Wilkenfeld, B., Lauckhardt, J., & Torney-Purta, J. (2010). The relation between developmental theory and measures of civic engagement in research on adolescents. *Handbook of research on civic engagement in youth*, 193-219.

Wray-Lake, L., Metzger, A., & Syvertsen, A. K. (2017). Testing multidimensional models of youth civic engagement: Model comparisons, measurement invariance, and age differences. *Applied Developmental Science*, *21*(4), 266-284. https://doi.org/10.1080/10888691.2016.1205495

Yekoyalem Dessie (2020). From surviving to thriving: characterizing positive youth development among youth in Ethiopia. *International Journal of Adolescence and Youth*, *25*(1), 200-209. https://doi.org/10.1080/02673843.2019.1608272

Youniss, J. (2009). Why we need to learn more about youth civic engagement. *Social Forces*, *88*(2), 971–975.

Youniss, J. (2011). Civic education: What schools can do to encourage civic identity and action. *Applied Developmental Science*, *15*(2), 98-103. https://doi.org/10.1080/10888691.2011.560814

Zaff, J. F., Kawashima-Ginsberg, K., Lin, E. S., Lamb, M., Balsano, A., & Lerner, R. M. (2011). Developmental trajectories of civic engagement across adolescence: Disaggregation of an integrated construct. *Journal of Adolescence*, *34* (6), 1207-1220 https://doi.org/10.1016/j.adolescence.2011.07.005

Zaff, J., Boyd, M., Li, Y., Lerner, J. V., & Lerner, R. M. (2010). Active and engaged citizenship: multi-group and longitudinal factorial analysis of an integrated construct of civic engagement. *Journal of Youth and Adolescence*, *39* (7), 736-750. https://doi.org/10.1007/s10964-010-9541-6