Civic Engagement as a Function of Parental and School Socialization and Social Media Use among School Adolescents: The Mediating Role of Perceived Competence for Civic Action

By

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Abstract

The main purpose of the study was to examine the civic engagement of school adolescents as a function of parental and school civic socialization, and social media with the mediating role of perceived competence for civic action. The research employed a correlational design. Participants were 1530 school adolescents in Addis Ababa aged 15-to-19-years (Mean age was 17.7) drawn through multi-stage sampling procedures.Findings indicated that all the three independent variables (parental civic socialization, school civic experience and social media use) were able to exert statistically significant positive direct and indirect effects on civic engagement. Specific indirect (mediated) effects of parental civic socialization, school civic experience and social media to civic engagement mediated by adolescents' perceived competence for civic action. All the predictors of civic engagement reached level of significance and explained more than a quarter of its variance. The highest influence on civic engagement was exerted by parental civic socialization. Parental civic socialization and adolescent's social media use (pairwise) contributed the largest variance in civic engagement followed by parental civic socialization and school civic experience. When combined, parental civic socialization, school civic experience and social media use contributed nearly a quarter of the variance in civic engagement. Conclusions and implications for practice and future research were drawn.

Key Words: Parental and School Socialization, Social Media, Adolescent Civic Engagement

Introduction

Civic engagement has emerged over the past two decades as a substantive subfield within developmental science (Hart & Kirshner, 2009; Zaff et al., 2010). According to Flanagan and Christens (2011), the development of civic engagement is understood as one dimension of human development. Civic engagement is behaviorally expressed mainly in social interactions and involvement in the social world, engagement in volunteering, informal helping, community-based campaigning, and civic activism, and a means to facilitate citizens' participation in democratic processes, and foster adolescents' holistic development (Pancer, 2015; Sherrod, 2015).

Adolescence is considered as a critical period for civic development and when civic values, skills and commitments take shape (Amna, 2012; Finlay, Wray-Lake & Flanagan, 2010; Metzger & Ferris, 2013). Civic engagement during adolescence can predict their

continued civic engagement into adulthood (Eckstein, Noack, & Gniewosz, 2012; Finlay & Flanagan 2013). Adolescents explore socio-political ideas, exposed to social networks, and transition into roles providing societal continuity such as voting (Buchmann & Kriesi, 2011; Chan, Ou & Reynolds 2014). Research on engaged citizenship revolves largely around opportunities for adolescents and youth to demonstrate their capacities to participate as social and political actors in society (Zaff et al., 2010; Zaff et al., 2011). In doing so, they engage in a bidirectional relations with others in their community, giving opportunities for positive civic engagement to enable them to thrive within the framework of developmental science (Lerner et al., 2014).

To understand which factors can foster civic engagement, it is key to considerer that adolescent development takes place within social groups and communities. Civic engagement is facilitated in family, school, peer group, community contexts, and media (Flanagan & Levine, 2010; Wilkenfeld &Torney-Purta, 2012). Family and schools help adolescents acquire civic knowledge, skills, attitudes, and behaviors to become agents of social change (Lenzi, Vieno, Perkins, et al., 2012; Rossi et al., 2016). Parent-adolescent discussion on social and political matters was positively associated with a range of civic values and behaviors (Boyd et al., 2011; Hooghe & Boonen, 2015) and is a stronger predictor of political behaviors (Roman & Esau, 2015; Wray-Lake & Sloper, 2016). Schools can facilitate civic engagement both through formal civic education that facilitate democratic discourse and through extracurricular and community-related after-school activities (Syvertsen et al., 2009; Youniss, 2011). School based civic activities could foster a democratic climate and have an important influence on present and future civic engagement (Kim et al., 2015). Furthermore, social media advances informed civic engagement and empowers young people (Middaugh et al., 2017; Theocharis & Quintelier, 2016) and fosters young people's participation in civic activities (Kirshner, 2015; Ozer et al., 2013).

While developmental contexts influence civic engagement of adolescents, there are precursors that could mediate the relationship between contextual factors and civic engagement. Adolescents' perceived civic competence for civic action is considered as a precursor of civic engagement. Previous studies (Jennings et al., 2009; Matthews et al., 2010) indicated that civic discussions were positively associated with adolescents' perceived competence for civic action. Discussions creates exposure to others' perspectives, reflection over different sides of civic issues, exchange of ideas with individuals, and increased opportunities to develop civic competencies, confidence about those skills. Civic competencies are essential prerequisites for adolescents' active citizenship (Grütter & Buchmann, 2021) and positive association between perceived civic competence and future intention to participate in civic activities was found (Lenzi, et al., 2015).

The social development model (SDM; Catalano & Hawkins, 1996) as a theoretical framework explains adolescent development within multiple social contexts and can thus help identify which factors might promote civic development. The SDM posits the multilevel developmental contexts and processes, and how adolescents learn patterns of behavior through their interactions with multiple socializing units, such as family, school, peer groups, and community (Wilkenfield, 2009).

According to the theory, four components are involved during the socialization process, helping to understand the development of civic behaviours in developmental contexts, and describe how the theory supports the current research (conceptual model): (a) perceived opportunities for involvement in activities and interactions with others (family and school level); (b) the degree of involvement and interaction of adolescents in civic engagement

opportunities (family, school, community contexts, and local government levels); (c) the individuals' civic skills and behaviors acquired to participate in these interactions-considered as civic engagement (individual level); and (d) the reinforcement that adolescents perceive from this involvement and interaction. This socialization process promotes the creation of a bond between adolescents and the various socializing units, allowing the transmission of norms, values, and behaviors (Rossi, et al., 2016).

Purpose of the Study

Studying adolescents' civic engagement is a contemporary imperative in Ethiopia. Adolescents within the age group of 15-19 account for 11% of the total population (CSA, 2018). Despite a well-documented evidence on the importance of developmental contexts (family, schools, social media) during adolescence, their influence on civic engagement has not been studied in Ethiopian context. Except for few studies (Tefera & Desie, 2015; Desie, 2020) previous research conducted on adolescents and youth focused on the problems of young people than their capacities. Moreover, although some research was conducted analyzing perceived civic competence, this study examined it as precursor of civic engagement influenced by developmental contexts and as well as mediator between contextual factors and civic engagement of school adolescents aged 15-19 years.

The main purpose of the study was to examine the civic engagement of school adolescents as a function of parental and school civic socialization, and social media use, with the mediating role of perceived competence for civic action. The present research addressed the following basic research questions.

1. Does perceived competence for civic action mediate the relationship between parental civic socialization, school civic experience, the use of social media, and civic engagement of adolescents?
2. What are the individual and combined contributions of parental civic socialization, school civic experiences, social media, and perceived competence for civic action to adolescent civic engagement?

Methods

Design

The research employed a correlational design to examine the civic engagement of school adolescents as a function of parental and school civic socialization, and social media (independent variables). It also examined the mediating role of perceived competence for civic action in the relationship between the independent variables and civic engagement; and contributions of independent variables to civic engagement.

Participants and Sampling

Participants were 1530 adolescents aged 15-to-19-years (Mean age was 17.7) from Addis Ababa selected using multiple stages of sampling procedures. From among the 11 Sub-Cities in Addis Ababa City administration, Gulele and Yeka Sub-Cities were selected as a geographic Primary Sampling Unit (PSU) using simple random sampling. In the second stage, District 1, 5, 7, 9 and 10 in Gulele Sub-City and District 2, 5, 6, 8, 10, 11 &12 from Yeka Sub-City were selected using convenience sampling because these are the Districts where public secondary schools were found. From among the different secondary schools, six schools were selected in the two sub-cities using simple random sampling.

The sample comprised of both male and female adolescents who were attending grades

9-12 in six secondary schools. A total of 28 sections in all grades (8 sections in grade 9; 6 sections in grade 10, 8 sections in grade 11, and 6 sections in grade 12) selected using random sampling. Each section has 50-60 students and all students in the selected sections from each grade level completed the civic engagement questionnaire. Of the total 1650 sampled students, 1530 students (93%) completed the questionnaire correctly. Inclusion criteria include: adolescents (males and females) whose age ranges from 15-19 years attending their education in grades 9-12; and students with no disability, adolescents who were living with one or both of their parents; be 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.

Procedures

Prior to initiating the study, the research project was approved by the Research Ethics Committee of Addis Ababa University, College of Education and Behavioral Studies, School of Psychology, and secured ethical clearance. The research project was approved on 11 August, 2022, with Reference Number: Ref: SoP-EthCo/004/2022. The researcher obtained permission from the school directors to administer questionnaires during class time. As guardians of students, the school directors were provided with written information about the research and were asked for their consent for students to participate. Students were informed about the study and asked whether they wished to participate. Data were collected from adolescents in school setting from August to September 2022.

Instruments/Measures

The following self-report questionnaires were completed by adolescents.

Civic engagement: measured the behavioral aspect of civic engagement (reported civic actions) as measured by adapted scale: *Adolescents' Involvement in Community Services and Informal Helping* (Zaff et al., 2010; Wray-Lake et al., 2017). It has 15 items (8 items measuring adolescents' engagement in community services and 7 items measuring their engagement in informal helping activities). Responses were rated from, 0=*Never* to 4=*Always.* Alpha reliability for the scale was .87. The inter-correlation of the two sub-scales was found to be high, r (960)= .88, P<0.01. Thus, a composite measure was created by summing students' responses to the civic engagement scale.

*Parental civic socialization***:** 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 (Syvertsen et al., 2015). Reliability of the items was reported to be α = .77

*School civic experience***:** measured 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 students' 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 has α=.88

*Social media use***:** Measured how often adolescents share civic related messages using social media, with responses rated from 1 = *strongly disagree* to 5 =*strongly agree*. The scale has internal consistency of Cronbach's alpha of .89.

*Perceived competence for civic action***:** An adapted version of the perceived competence for civic action scale (Flanagan et al., 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 0.80.

Instrument adaptation: Content validity of items was checked by eight Applied Developmental Psychologists. Content Validity Index (CVI) of items was computed to check the validity of items using Lawshe's content validity assessment method (Lawshe, 1975). Items with Content Validity Ratio (CVR) of 0.75 and above were retained. In addition, the results of Exploratory Factor Analysis found out the the existence of the factor structures of each construct and Confirmatory Factor Analysis (CFA) to confirm the factors identified through the Exploratory Factor Analysis.

Data Analysis

The data were analysed by Statistical Package for Social Sciences (SPSS) version 24, and Amos 26. In addition, since AMOS program could not run specific indirect effects, Mplus version 7.4 which is a highly flexible, powerful statistical analysis software program was used.

Structural equation modeling (SEM) was carried out to examine the direct and indirect effects of predictor variables. As recommended by Bryne (2010) and Kline (2015), the following model fit indices were checked to test the general model adjustment and reported. This include: Model Chi-Square (CMIN), The (Adjusted) Goodness of Fit (AGFI), Goodness of Fit Index (GFI), Comparative Fit Index (CFI), the Incremental Fit Index (IFI), The Root Mean Square Error of Approximation-RMSEA, Standardized Root Mean Squared Residual (SRMR) were used to test the general model adjustment.

The results of the assessment of the Goodness of Fit of the Structural Model showed most of the Goodness-of-Fit Indices were adequate: the Chi-squared test -$\chi 2$ (CMIN) value was .664, df=1, p-value=.415, GFI=1.00, AGFI=.997, CFI=1.00, IFI=1.00, and RMSEA=.000. According to Hair et al. (2009) if any 3-4 of the Goodness-of-Fit indices are within the threshold, then the entire model is fit, therefore, the structural model for the main study fits the data.

Results

Socio-demographic characteristics

Participant were Participants were 1530 school adolescents (50.3% females) whose age ranges from 15-19 years (Mean age = 17.7, SD=1.4), attending grades 9-12 in six (6) public schools. Nearly equal proportion of participants were selected from each age group (19.2% age 15, 20% age 16, 20.1% age 17, 20.5% age 18, and 20.2% age 19). About 24.3% were from grade 9, 21.2% were grade 10, 25.1% were in grade 11, and 29.4% were grade 12.

Result of the Mediation Analysis

In order to test the direct and indirect effects of the independent variables (IVs) on the dependent variable (DV), and direct effect of the IVs on the mediating variables, structural-equation modeling was used.
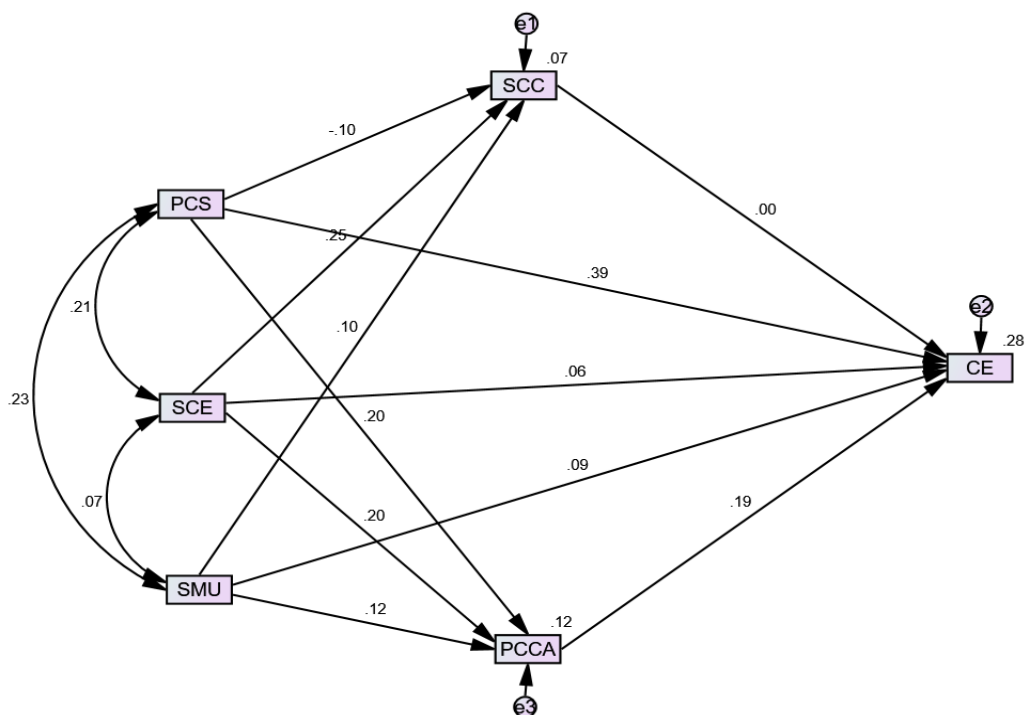
Figure 1: *Path Model. Note: PCS-Parental Civic Socialization, SCE-School Civic Experience, SMU-Social Media Use, SoCC-Sense of Community Connectedness, PCCA-Perceived Competence for Civic Action, , and CE-Civic Engagement*

Direct effects of independent variables on the mediating variable

This section presents the direct effects of Independent Variables (Parental Civic Socialization, Adolescents' School Civic Experience and Social Media Use) on the mediating variable (Perceived Competence for Civic Action).

Table 1 *Summary of structural coefficients for the path model (direct effects of Independent Variables on Mediating Variable)*

Independent Variables	Mediating Variable	Standardized Structural Coefficients (β)
Path From ⟶	**To**	
Parental Civic Socialization	Perceived Competence for Civic Action (PCCA)	.196***
School Civic Experience	Perceived Competence for Civic Action (PCCA)	.196***
Social Media Use (SMU)	Perceived Competence for Civic Action (PCCA)	.115***

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

As depicted in Table 1, the result shows that parental civic socialization significantly influenced perceived competence for civic action (β =.196, p<.001. School civic experience exerted influence on perceived competence for civic action (β = .196, p<.001). Furthermore,

the influence of social media use on perceived competence for civic action (β =.115, p <.001) reached statistical level of significance.

Direct effects of the independent and mediating variables on civic engagement

The direct effects of parental civic socialization, school civic experience, social media, and perceived competence for civic action on civic engagement of school adolescents is depicted in Table 2 below.

Table 2 *Summary of structural* coefficients *for the path model (direct effects of Independent Variables and Mediating Variable on the Dependent Variable)*

Independent and Mediating Variables	Dependent Variable	Standardized Structural Coefficients (β)
Path From ⟶	**To**	
Parental Civic Socialization	Civic Engagement	.386***
School Civic Experience	Civic Engagement	.061***
Social Media Use	Civic Engagement	.090***
Perceived Competence for Civic Action	Civic Engagement	.191***

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

The direct effects of all predictors of civic engagement reached level of significance. Of the predictors of civic engagement, the highest influence was exerted by parental civic socialization (β =.386, p<.001), followed by perceived competence for civic action (β = .191, p<.001), then social media use (β =.090, p <.001), and school civic experience (β = .061, p<.01). Social media use bypasses school civic experiences in influencing civic engagement directly. This is because social media is a tool frequently used by adolescents and youth which might have influenced their civic engagement than school civic experience.

Indirect effects of the parental civic socialization, school civic experience and social media on civic engagement of school adolescents

The mediating effect of perceived competence for civic actions in the relationship between parental civic socialization, adolescents' school civic experience and social media use, and civic engagement is presented in Table 3 below.

Table 3 *Summary of Results of Mediational Analyses*

Relationship between variables	Standardized Effects (β)			
	Total	Direct	Specific Indirect Effect	Total Indirect Effect
PCS ➔ PCCA ➔CE	.423***	.386***	.037***	.037***
SCE ➔ PCCA ➔CE	.099***	.061**	.037***	.037***
SMU ➔PCCA➔CE	.112***	.090***	.022**	.022**

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

Results from the analyses of the direct, specific indirect, total indirect, and total regression effects of the independent variables on civic engagement are illustrated in Table 3. All the three independent variables were able to exert statistically significant positive indirect

effects on civic engagement.

The total indirect effect of parental civic socialization (β = .037, p < .001) and school civic experience (β = .037. p < .001) on civic engagement of adolescents was found to be positive and statistically significant. Further, the total indirect effect of social media use (β = .022**, p < .001) on civic engagement was found to be positive and statistically significant.

The results indicate that all the specific indirect effects from parental civic socialization, school civic experience and social media pass to civic engagement via perceived competence for civic action. The mediating effect of perceived competence for civic action in the relationship between parental civic socialization, school civic experience and social media use and civic engagement was found to be significant.

Looking into the total regression effect of the independent variables on the dependent variable, parental civic socialization exerted more influence (β =.423***, <.001), followed by social media use (β = .112, p<.001), and school civic experience (β =.099***, p <.001). Social media use bypasses school civic experience in influencing civic engagement directly. But indirectly, school civic experience bypasses social media use in influencing civic engagement of adolescents. All the three independent variables influenced civic engagement directly than indirectly.

Individual and combined contributions of independent and mediating variables on the dependent variable

The individual and combined contributions of parental civic socialization, school civic experiences, social media, perceived competence for civic action to adolescent civic engagement is presented in Table 4.

Table 4 *Joint and Separate Contributions of Independent and Mediating Variables to Civic Engagement*

Variable	R^2
PCS	0.221
SCE	0.039
SMU	0.047
PCCA	0.105
PCS, SCE	0.231
SCE, SMU	0.080
PCS, SMU	0.234
PCS, SCE, SMU	0.243
PCS, SCE, SMU, PCCA	0.275

As depicted in Table 4, parental civic socialization explained the largest proportion of variance (R^2 = 22.10%) in civic engagement, followed by perceived competence to civic action (R^2 = 10.50%), social media use (R^2 = 4.70%), sand school civic experience (R^2 = 3.90%).

Looking into the pairwise contributions, parental civic socialization and adolescent's social media use contributed the largest variance (R^2 = 23.40%) in civic engagement, followed by parental civic socialization and school civic experience which contributed (R^2 = 23.10%) in civic engagement. School civic experience and social media use contributed (R^2 = 8.0%) variance in civic engagement.

As to the joint contributions of variables, parental civic socialization, school civic

experience and social media use contributed ($R^2 = 24.30\%$) of the variance in civic engagement. All the four variables (parental civic socialization, school civic experience, social media use, and perceived competence for civic action) contributed ($R^2 = 27.50\%$) of the variance in civic engagement. It means 27.5% of the variance in adolescents' civic engagement was predicted by the four variables.

According to Cohen's interpretation of effect size of R^2 (Cohen, 1988), R^2 between 0.13 $<= R^2 < 0.26$ is considered to be moderate. Thus, in the present study, $R^2 = 27.50\%$ was found to be high.

Discussion

The first research question investigated the mediating role of perceived competence for civic action in the relationship between parental civic socialization, school civic experiences, and social media use with civic engagement.

The direct and indirect (mediated) effects and the total regression effect of parental civic socialization on civic engagement were found to be positive and statistically significant. Of the predictors of civic engagement, the highest influence was exerted by parental civic socialization ($\beta = .386$, p<.001). The possible explanation is that parents are considered to be the first teachers in socializing children and mediating between one's culture and children's social engagement (Corbetta, Tuorto, & Cavazza, 2013; Van Goethem et al., 2014).

In Ethiopia, parents tend to influence adolescents to engage in community-based civic engagement activities implicitly through imparting social values and explicitly by participating in such activities. Parents serve as role models for adolescents to participate in community-based services, volunteering during religious festivals and in times of crisis such as supporting the needy people. Adolescents participate in voluntary service in their neighborhoods during burial ceremonies and this is a commonly practiced civic participation, an indicator of respecting social and religious values, cultivate their relationship with the society and a means for adolescents' empowerment. Further, parents and adolescents participate in community-based care and support structures aimed at helping vulnerable members of the community (MoLSA, 2017).

These results can be interpreted in light of the Social Development Model, which underlines the crucial role played by the social contexts in which adolescents are daily embedded, in the understanding of both their attitudes and behaviors. Discussion on social and political issues was associated with a range of civic values and behaviors (Boyd et al., 2011; Hooghe & Boonen, 2015).

Parental civic socialization influenced civic engagement of adolescents indirectly through boosting their perceived civic competencies. Perceived civic competence as predictor of civic engagement was found to statistically significant ($\beta = .191$, p<.001). The importance of civic discussions in enhancing adolescents' perceived competence for civic action and its contribution to civic engagement was affirmed in previous research (Jennings, Stoker, & Bowers, 2009; Matthews, Hempel, & Howell, 2010). Grütter and Buchmann (2021) indicated that civic competencies are essential prerequisites for adolescents' active citizenship and Lenzi, et al. (2014) found out a positive association between perceived civic competencies and future intention to participate in civic engagement activities.

The direct effects of school civic experience on perceived competence for civic action

(β = .196, p<.001) and civic engagement (β = .061, p<.01) were found to be significant. The effect of perceived competence for civic action on civic engagement and the specific indirect effect of school civic experience on civic engagement of adolescents were significant. Ensuring students have enhanced civic learning and engagement opportunities in school is an effective way to advance adolescents' civic behavior. Schools seem to act as communities of practice in which students' civic development is enhanced through belonging to the school community and having experiences that create meaning for abstract democratic principles and practices. Previous research (Ahmad et al., 2012; Krauss et al., 2013; Prati et al., 2018) found out that schools can help adolescents to develop civic competence and play active role in their school governance and community-based civic engagement initiatives.

School adolescents participate in volunteering during religious festivals or worship, community outreach services, student traffic; participate in district and city level children's parliaments and youth-led groups. School adolescents organized in adolescent/youth-led parliaments promote awareness on their rights, identify adolescents who experience violence, deprived of access to social services and report to local government offices to take appropriate actions (MoWCY, 2020).

Social media have become increasingly popular tools for engaging adolescents in social behaviour (Allen et al., 2014; Hart, 2011; Spiliotopoulos & Oakley, 2013). The findings of the study by Mulisa and Getahun (2018) on Social Media use among Ethiopian Secondary School Students (aged from 14-19 years old) revealed that 70.6% of the 500 sampled 500 students were found to be active users of social media. Nearly 95% of participants reported that they use social media. In this study, the direct and indirect (mediated) effects and the total regression effect of social media use on civic engagement were found to be positive and statistically significant. Findings of the previous research (Middaugh et al., 2017; Theocharis & Quintelier, 2016) found out the use of social media in facilitating informed and effective civic engagement of adolescents. Social media helps adolescents to participate in peer-based social networks that help them share information on social issues (Brandtzæg et al., 2012; Kirshner, 2015).

The second research question examined the individual and combined contributions of parental civic socialization, school civic experiences, social media, and perceived competence for civic action to adolescent civic engagement.

The findings showed that parental civic socialization accounted for the largest variance followed by perceived competence for civic action in civic engagement. Discussion on political and social issues with parents is associated with a range of civic values and behaviors (Boyd et al., 2011; Hooghe & Boonen, 2015) and parents' civic modeling (civic engagement) is a strong predictor of adolescents' civic engagement (van Goethem et al., 2014). It appears that parents and other adults in the family have played significant role in adolescents' civic socialization thereby influenced the civic engagement of adolescents.

 Civic competencies are essential prerequisites for adolescents' civic participation as active citizenship. The fact that adolescents' perceived ability to engage in civic action was identified as a second strong predictor of civic engagement implies the need to invest in building the civic competencies of adolescents to ensure sustained engagement of adolescents in civic activities.

Examining the pairwise contributions, parental civic socialization and adolescent's social media use contributed the largest variance in civic engagement, followed by parental civic socialization and school civic experience. When combined, parental civic socialization, school civic experience and social media use contributed ($R^2 =24.30\%$) of the variance in civic engagement. It is plausible to assume that the influence of three predictors (parental civic

socialization, school civic experience and social media) on adolescents' civic engagement is complementary. For example, having an open discussion in the family influences adolescents to engage in civic activities in school and community. Learning in a school that encourages civic engagement of adolescents enables students to gain civic knowledge and skills necessary for civic engagement. It is expected that adolescents would be able to share civic related information gained through social media, to their family members and other students in schools.

All the predictors of civic engagement contributed 27.50% of the variance in civic engagement. This implies the significant return that we can earn in enhancing the civic engagement of adolescents by influencing these predictor variables.

Conclusions and Implications

Conclusions

Parents, schools, and social media facilitate preparation of adolescents for civic engagement by discussing political and social issues, challenging the construction of civic knowledge, and providing models of conscientious citizens. While all the predictors of civic engagement were significant, the highest influence on civic engagement was exerted by parental civic socialization. Schools provide opportunities for hands-on experiences of democratic processes, a supportive environment for sharing different opinions, and a learning environment in which democratic ideals are communicated to students. In some instances, adolescents are differentially prepared for functioning citizenship, but inputs within different contexts can reduce the disparities in adolescents' civic competencies. In particular, civic experience in schools contributes to the preparation of adolescents for active citizenship and equal access to these experiences reduces civic engagement gaps between students of different demographic groups. Social media is a tool frequently used by adolescents and youth which influence their civic engagement.

The results indicate that all of the specific indirect effects from parental civic socialization, school civic experience and social media influenced civic engagement via perceived competence for civic action. It means the mediating effect of perceived competence for civic action in the relationship between parental civic socialization, school civic experience and social media use and civic engagement was found to be significant.

The direct, specific indirect, total indirect, and total regression effects of the independent variables on civic engagement were significant. All the three independent variables (parental civic socialization, school civic experience and social media use) were able to exert statistically significant positive total indirect effects on civic engagement.

Parental civic socialization accounted for the largest variance followed by perceived competence for civic action in civic engagement. When combined, parental civic socialization, school civic experience and social media use contributed ($R^2 = 24.30\%$) of the variance in civic engagement. All the predictors civic engagement contributed 27.50% of the variance in civic engagement.

Implications

Parental civic socialization explained the largest proportion of variance in civic engagement. Government, civil society organizations and other stakeholders can support

families through training, mentoring and follow up to help adolescents with civic engagement gap. This will help adolescents with low level of civic engagement develop civic skills and responsibilities and exercise their citizenship right, and be able to thrive and become productive members of the society.

There is a need to strengthen the role of schools in facilitating civic engagement opportunities for school adolescents with the view of helping adolescents to be civically responsible and productive members of the society.

Although social media use has influenced their civic engagement of school adolescents, there may be a potential of using disinformation that might occur online and use it to engage in socially destructive behaviors. For adolescents reading and sharing civic messages through Facebook friends might not be sufficient to develop critical thinking and acquire civic knowledge and skills relevant for civic participation. Thus, as part of civic education or social studies, schools can teach school adolescents on social media literacy skills, how to interpret and use social media information to stimulate offline discussion on issues affecting their lives, and verify and enrich the information gathered online through face-to-face interactions.

Perceived competence for civic action not only served as precursor for civic engagement of school adolescents but also mediated the relationship between parental civic socialization, school civic experience and social media, and civic engagement. Interventions aimed at enhancing civic engagement of adolescents need to build their civic competencies for enhanced and sustained participation in civic engagement activities.

Future Research

All the instruments used were based on a demonstrated reliability and validity in adolescent population. Researchers interested to study adolescent civic engagement should collect data from family, teachers, and friends to have a comprehensive understanding of contextual factors in Ethiopia.

The study was conducted with urban school adolescent samples. More work is needed to see whether or not these results apply to other adolescent groups, such as rural, non-student adolescent population from different socioeconomic strata.

Future studies need to clarify which mechanisms are responsible for the positive association between characteristics of the social environments and adolescents' civic development and how these interactions evolve over time.

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Conflict of Interest: The authors declare that they have not conflict of interest.

Ethical approval: The research project was approved by the Research Ethics Committee of Addis Ababa University, College of Education and Behavioral Studies., School of Psychology, and secured ethical clearance. The research project was approved on 11 August,

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