

Socio-Environmental Factors, Empathy, and Social Responsibility as Drivers of Civic Behavior among College Students

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ABSTRACT

Civic behavior is a core concept that needs to be addressed in developing adolescents. Limited studies have been conducted on the influence of social contexts in relation with this concept. Hence, guided by Bronfenbrenner's ecological systems theory and Vygotsky Sociocultural theory, this descriptive correlational study aimed to examine the relationship between socio-environmental factors, empathy, social responsibility, and civic behavior. Using purposive sampling, a total of 144 college students voluntarily and consented to participate from a private higher education institution answered an online survey. Results revealed that respondents reported good civic education, classroom climate, parental social responsibility, parental civic engagement, social responsibility, and civic behavior. On the other hand, respondents have a high cognitive, affective, and overall empathy. Additionally, parental social responsibility, parental civic engagement, classroom climate, community connectedness, social responsibility, cognitive empathy, and affective empathy may facilitate civic behavior. Moreover, parental social responsibility, community connectedness, parental civic engagement, and affective empathy are drivers of civic behavior. Recommendations include developing evidence-based programs that will enhance community connectedness and affective empathy of college students.

Keywords: *empathy, civic behavior, National Service Training Program, social responsibility, socio-environmental factors*

Introduction

Society dictates the behavior of a person. One core concept that is crucial and needs to be developed specifically for young and school adolescents is civic behavior. Several literatures were cited for the benefits of demonstrating positive civic behavior by adolescents which may include higher levels academic achievement, better career development, self-esteem, motivation, and connections with others (Belay & Tefera, 2022; Bogale & Kibret, 2023; Saban & Saban, 2020; Silke et al., 2020; Silke et al., 2021). However, adolescents may also demonstrate negative civic behavior such as substance abuse, experience teenage pregnancy, suffer school failure and dropout, and engage in violence (Sesso et al., 2021). Given these outcomes, it is better to understand which factors can foster civic behavior which is the key to adolescents' development. Many researchers argue that civic behavior takes place within social groups and communities (Belay & Tefera, 2022). In addition, it is facilitated in family, peer



group, school, community, and even media usage (Belay & Tefera, 2022; Bogale & Kibret, 2023; Silke et al., 2020).

Despite many studies identifying influences of contextual factors on civic behavior of adolescent students in other countries, studies analyzing the role of family, friends, and schools in driving civic behavior in the Philippine setting is very limited. Additionally, the inclusion of empathy and social responsibility into single study has not yet done. This study aimed to examine the relationship of selected socio-environmental contexts, empathy, and social responsibility on civic behavior of college students. Thus, this study sought to address the following research questions:

- 1. What is the extent of respondents' socio-environmental factors in terms of:
 - a. Parental social responsibility
 - b. Parental civic engagement
 - b. Prosocial norm
 - c. Civic education
 - d. Classroom climate
 - e. Community connectedness?
- 2. What is the level of empathy of the respondents?
- 3. What is the extent of social responsibility of the respondents?
- 4. What is the extent of civic behavior of the respondents?
- 5. Is there a significant relationship between socio-environmental factors, empathy, social responsibility, and civic behavior of the respondents?
- 6. Which of the drivers best explain civic behavior of the respondents?

LITERATURE REVIEW

Research conducted by Belay and Tefera (2022) and Bogale and Kibret (2023) discussed different socio-cultural contexts, for instance, family and schools help adolescents to acquire civic knowledge, skills, attitudes, and behaviors to become agents of social change. 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 (Martín-Antón et al., 2020). Parents can support adolescent civic engagement by instilling civic values and socializing and encouraging them to engage in civic activities. 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 (Belay & Tefera, 2022; Bogale & Kibret, 2023).

Aside from the social contexts, there are individual characteristics and internal processes such as empathy and social responsibility that may also shape the civic behavior of an individual. Researchers propose that these two constructs play a key role in enhancing the civic society. Literature review revealed that empathy as a multidimensional construct which commonly include dimensions of cognitive and affective empathy (Batchelder et al., 2017; Sesso et al., 2021). Conversely, social responsibility consists of a set of values or personal commitments that invoice helping or taking care of others, including strangers, and contributing to society for the purpose of improving one's community and society (Bartolo et al., 2023). Researchers argued that social responsibility motivates an individual to have prosocial, moral and civic behaviors.



In line with the aforementioned evidences, Bronfenbrenner's ecological systems theory as a theoretical framework for this study, posits that an individual's development is influenced by a series of interconnected environmental systems, ranging from the immediate surroundings (e.g., family) to broad societal structures (e.g., culture). Vygotsky's sociocultural theory is another theoretical framework of the study which opines that individuals learn through interactions and communications with other. Learning took place during student interactions with their peers, teachers, and other experts in the field.

METHODS

The methodological discussion includes the research design, population and sampling technique, instrumentation, data collection, data analysis, and ethical considerations.

Research design

This study utilizes the descriptive-correlational design, cross sectional to describe several variables such as parental social responsibility, parental civic engagement, civic education, classroom climate, community connectedness, prosocial norm, empathy, social responsibility, and civic behavior. Consequently, to examine the relationships between these variables. Moreover, to predict the best drivers of civic behavior.

Population and Sampling Technique

The population of the study was composed of college students from a higher education institution situated in Pasay City. Respondents were selected using the following inclusion criteria: (1) officially enrolled for the academic year 2023-2024; (2) taking the National Service Training Program; and (3) male and female. Using a purposive sampling, a total of 144 college students volunteered and consented to participate in the study. Response rate for the online survey was 98%.

Instrumentation

An online survey via Google form was used to collect relevant data for this study. The research instrument for this study had five sections. The first section included the personal information of the respondents such as age, sex, course, religion. The second section of the instrument was the socio-environmental factors which include parental social responsibility, parental civic engagement, civic education, classroom climate, community connectedness, prosocial norm.

Parent Social Responsibility (Flanagan, 2013) was assessed through a seven-item scale, which measures respondents' perceptions of parental encouragement of social responsibility values. Responses are scored on a scale of 1 *(strongly disagree)* to 5 *(strongly agree)*. Parent Civic Engagement (Flanagan et al., 2007) was assessed by a three-item scale, with responses ranging from 1 *(strongly disagree)* to 5 *(strongly agree)*. Prosocial Friend Norms (Farrell et al., 2017) were assessed through the use of a six-item Likert-type scale, with scores ranging from 1 *(None of them)* to 5 *(All of them)*. Civic Education was assessed using the Social Analysis scale by Flanagan et al. (2007), which is used to measure the extent of civic education adolescents receive in school. Responses are scored on a four-item scale, which ranges from 1 *(strongly disagree)* to 5 *(strongly agree)*. Open Classroom Climate (Flanagan et al., 2007) was also measured to assess the degree to which adolescents are



encouraged to share their opinions in class. Adolescents were asked to respond to this fouritem scale, on a range of 1 *(strongly disagree)* to 5 *(strongly agree)*. Community Connectedness (Wray-Lake et al., 2017) was measured using a six-item scale, which assessed the degree to which young people feel a sense of connection to and within their local communities. Items are scored on a range of 1 *(strongly disagree)* to 5 *(strongly agree)*.

The third section dealt with social responsibility which was assessed using the Youth Social Conscience scale (Bebiroglu et al., 2013). This is a six-item scale that assesses the sensitivity and sense of responsibility of youth regarding problems in society. Specifically, adolescents were asked to indicate the extent to which a number of values. Responses are scored on a scale of 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores are indicative of better social responsibility values. The fourth section was the Empathy Components Questionnaire (ECQ) by Batchelder et al. (2017) to assess empathy which consists of twenty-seven-item measured using a 4-point Likert scale (1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree) where higher scores indicative of high empathy. Cognitive empathy and affective empathy are dimensions consisting of eleven-item and sixteen-item, respectively. There were fourteen-item that needs to be reversed.

Lastly, the civic behavior was assessed using the Voight and Torney-Purta (2013) Civic Behavior Scale. This scale consists of nine-item, scored on a scale of 1 (Zero) to 5 (6+times), and measures the extent to which adolescents voluntarily engage in a number of civic behaviors both in and outside school. Higher scores represent better civic behavior.

The Cronbach alpha of each adapted questionnaire is presented in Table:

Variables	Cronbach alpha	Number of Items
Socio-environmental factors		
Parental social responsibility	0.82	6
Parental civic engagement	0.81	3
Civic education	0.82	4
Classroom climate	0.86	4
Community connectedness	0.85	5
Prosocial norm	0.81	6
Social responsibility	0.88	6
Empathy	0.90	27
Cognitive empathy	0.89	11
Affective empathy	0.86	16
Civic behavior	0.80	9

 Table 1

 Reliability Statistics of the Scales Used

Data Gathering Procedure

Permission to conduct study was obtained from the academic and administrative councils of the college. After receiving the approval, it was communicated with the coordinator of the National Service Training Program for approval. After which, an online survey with attached informed consent were randomly distributed to all college students who are enrolled in the said course using the MS teams chat. Respondents were given ample time



of 2 weeks to answer the online survey. After the time period, answers were downloaded in a Microsoft Excel file. Data were checked and transferred to SPSS version 26 for analysis.

Analysis of Data

Using IBM SPSS version 26, the collated data were statistically analyzed and summarized. Frequency and percentages were used for the respondents' personal information whereas mean and standard deviation were used to describe the level and extent of socioenvironmental factors, social responsibility, empathy, and civic behavior. Pearson r correlation was used to examine the significant relationship between the aforementioned variables. Linear regression analysis was used to determine the best driver of civic behavior.

Ethical Considerations

Before the administration of the online survey, approval of the University's Ethics Review Board (ERB) was sought with approval code of ERB case code 2024-1138. The study followed the principles of human research ethics and the data privacy act of 2012. Elements of the informed consent form were all stipulated. Data were handled with confidentiality and stored in a password laptop.

RESULTS AND DISCUSSION

This section deals with the tabular results and discussion based on the sequence of research questions as it also addresses the purpose of the study.

Respondents' Socio-Environmental Factors

Table 2 presents the descriptive results of socio-environmental factors of the respondents. The socio-environmental factors in terms of respondents' civic education, parental social responsibility, classroom climate, prosocial friend norms, and parental civic engagement were good ($M = 4.41, \pm .495; M = 4.37, \pm .542; M = 4.03, \pm .600; M = 3.86, \pm .768; M = 3.68, \pm .792$) whereas community connectedness was *fair* ($M = 3.46, \pm .539$). This indicates that respondents reported good civic education and a good classroom climate. In addition, respondents viewed good transfer of social responsibility and civic engagement from their parents including the prosocial norms of their friends. Further, respondents viewed a fair connectedness with their respective community.

l able 2										
Extent of Socio-environmental Factors among the Respondents										
Factors	Overall Mean	Overall SD	VI							
Civic education	4.41	.495	Good							
Parental social responsibility	4.37	.542	Good							
Classroom climate	4.03	.600	Good							
Prosocial norms	3.86	.768	Good							
Parental civic engagement	3.68	.792	Good							

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Community connectedness	3.46	.539	Fair						
<i>Legend:</i> SD = Standard deviation; VI = verbal interpretation									
1.00-1.50 – Very poor; 1.51-2.50 – Poor; 2.51-3.50 – Fair; 3.51-4.50 Good; 4.51-5.00 Very good									

The aforementioned results corroborate with the studies of Silke et al. (2020) and Silke et al. (2021) which reported a fair to good extent of contextual factors. However, in the same studies, results showed that parent civic engagement received a poor score which contradicts the present result. In addition, community connectedness received a very good result in the study of Saban and Saban (2020).

Respondents' Empathy

Presented in Table 3 the descriptive results of empathy of the respondents. The overall empathy of the respondents was *high* ($M = 3.02, \pm .312$). Additionally, respondents reported *high* cognitive and affective empathy ($M = 3.14, \pm .370$; $M = 2.94, \pm .337$). These indicate that respondents have a high ability to empathize with others both cognitively and affectively.

	Table 3								
Level of Empathy and Its Dimensions among the Respondents									
Dimensions	Overall Mean	Overall SD	VI						
Cognitive empathy	3.14	.370	High						
Affective empathy	2.94	.337	High						
Overall Empathy	3.02	.312	High						

Legend: SD = *Standard deviation; VI* = *verbal interpretation*

1.00-1.50 - Very low; 1.51-2.50 - Low; 2.51-3.50 - High; 3.51-4.00 Very high

The present results are consistent with the study results of Silke et al. (2020) and Ge et al. (2023) which reported a moderately high score for cognitive, affective and overall empathy. However, the construct of empathy has posed noteworthy definitional issues that are still under debate resulting in different reports from the respondents (Sesso et al., 2021).

Respondents' Social Responsibility

Presented in Table 4 the descriptive results of respondents' social responsibility. The overall social responsibility of the respondents was *good* ($M = 4.37, \pm .598$). This indicates that respondents are demonstrating good social responsibility. Respondents reported highest for the statement "helping other people" which is *very good* ($M = 4.53, \pm .625$) while reported the lowest for the statement "giving time and money to make life better for other" which is *good* ($M = 4.13, \pm .765$). These suggest that students prioritize helping others instead of giving time and money to these people.

Т	Table 4										
Extent of Social Responsibility among the Respondents											
Statements	Mean	SD	VI								
1. Helping other people.	4.53	.625	Very good								



2. Helping to make the world a better			
place to live in.	4.51	.679	Very good
3. Helping to make sure all people			
are treated fairly.	4.47	.709	Good
4. Speaking up for equality.	4.37	.809	Good
5. Helping to reduce hunger and			
poverty in the world.	4.21	.810	Good
6. Giving time and money to make			
life better for other.	4.13	.765	Good
Overall Mean	4.37	.598	Good

Legend: SD = *Standard deviation; VI* = *verbal interpretation*

1.00-1.50 - Very poor; 1.51-2.50 - Poor; 2.51-3.50 - Fair; 3.51-4.50 Good; 4.51-5.00 Very good

Similar results of good social responsibility reported by the respondents in the studies of Bartolo et al. (2023), Martín-Antón et al. (2020), Silke et al. (2020), Silke et al. (2021). One study cited by Martín-Antón et al. (2020) described responsibility as an ability to respond to one's actions appropriately and effectively in accordance with the social norms. It consists of a set of values or personal commitments that involve helping or taking care of others, including strangers, and contributing to society for the purpose of improving one's community and society (Bartolo et al., 2023).

Respondents' Civic Behavior

Descriptive results of civic behavior of the respondents is presented in Table 5. The overall civic behavior of the respondents was good ($M = 2.52, \pm .659$). This indicates that respondents demonstrate good civic behavior. Respondents reported highest for the statement "offered to help someone at school" ($M = 3.43, \pm .745$) whereas reported lowest for the statement "been a leader in a group or club in your neighborhood" ($M = 1.74, \pm .988$). Respondents are enrolled students in the school which are likely to demonstrate the behavior of helping someone at school.

Statements	Mean	SD	VI
I have			
1offered to help someone at school	3.43	.745	Good
2helped out at your church or other place of worship	2.90	1.092	Good
 helped someone in your neighborhood 	2.79	1.003	Good

Table 5



	Overall Mean	2.52	.659	Good
3	your neighborhood	1.74	.988	Fair
9	been a leader in a group or club in			
8	participated in school government	1.81	.908	Fair
ł	petter place for people to live	2.34	1.012	Fair
7	helped make your neighborhood a			
5	school	2.34	1.032	Fair
6	been a leader in a club or group at			
	place	2.57	.951	Good
5	helped make your school a better			
	at your school	2.75	1.028	Good
4	participated in an afterschool activity			

Legend: SD = Standard deviation; VI = verbal interpretation 1.00-1.50 – Poor 1.51-2.50 – Fair; 2.51-3.50 – Good; 3.51-4.00 Very good

The present results contradict the previous study results by Silke et al. (2020) where respondents reported fair civic behavior.

Relationship Between Socio-environmental factors, Empathy, Social Responsibility, and Civic Behavior

Table 6 showed the bivariate correlational analyses among the following factors: parent social responsibility, parent civic engagement, civic education, classroom climate, community connectedness, prosocial norm, social responsibility, cognitive empathy, affective empathy, civic behavior. It revealed that majority of the independent variables and civic behavior have a positive, weak, and statistically significant correlation to civic behavior (r =.384, p = .001; r = .351, p = .001 r = .235, p = .005; r = .339, p = .001; r = .183, p = .028; r =.257, p = .002; r = .358, p = .001). Further, only two nonsignificant correlation was observed which is civic education and prosocial norms in relation to civic behavior. These results denote that a very good parent social responsibility, parent civic engagement, classroom climate, community connectedness, social responsibility while high in cognitive empathy, and affective empathy will contribute to very good civic behavior.

	Civic Benavior among the Respondents										
		M									
	Variables	(SD)	1	2	3	4	5	6	7	8	9
1.	Parental social	4.37									
	responsibility	(.542)									
2.	Parental civic	3.68	.360**								
	engagement	(.792)	(.001)								
3.	Civic education	4.41	.361**	.094							
		(.495)	(.001)	(.261)							
4.	Classroom	4.03	.238**	.094	.362**						
	climate	(.600)	(.004)	(.263)	(.001)						

 Table 6

 Correlation Between Socio-environmental Factors, Empathy, Social Responsibility, and

 Civic Rehavior among the Respondents



5.	Community	3.46	.271**	.242**	.313**	.278**					
	connectedness	(.539)	(.001)	(.003)	(.001)	(.001)					
6.	Prosocial norm	3.86	.064	.022	.222**	.154	.180*				
		(.768)	(.445)	(.795)	(.007)	(.068)	(.031)				
7.	Social	4.37	.423**	.085	.367**	.137	.340**	.301**			
	responsibility	(.598)	(.001)	(.309)	(.001)	(.101)	(.001)	(.001)			
8.	Cognitive	3.14	.266**	089	.286**	.107	.227**	.236**	.351**		
	empathy	(.370)	(.001)	(.289)	(.001)	(.203)	(.006)	(.004)	(.001)		
9.	Affective	2.94	.367**	.082	.380**	.303**	.378**	.289**	.375**	.576**	
	empathy	(.337)	(.001)	(.329)	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)	
10.	Civic behavior	2.52	.384**	351**	.097	.235**	.339**	.034	.183*	.257**	.358**
		(.659)	(.001)	(.001)	(.248)	(.005)	(.001)	(.683)	(.028)	(.002)	(.001)

Legend: ** Correlation is significant at the 0.01 level (2-tailed);

* Correlation is significant at the 0.05 level (2-tailed)

+1 Perfect Relationship, +0.80-+0.99 Very Strong Relationship, +0.60-+0.79 Strong Relationship, +0.40-+0.59 Moderate Relationship, +0.20-+0.39 Weak Relationship, +0.01-+0.19 Very Weak Relationship, 0 No Relationship

The relationship between the variables were both supported and contradicted the study results by Silke et al. (2020) and Silke et al. (2021). However, based on the theories of Vygotsky and Bronfenbrenner supported the relationship between social and environmental contexts to the learning and demonstrated behavior.

Drivers of Civic Behavior

Tables 7 and 8 present the linear regression model summary and coefficients using the stepwise method of the drivers of civic behavior. This analysis was conducted to determine which socio-environmental factors, empathy, and social responsibility can explain the respondents' likelihood to demonstrate civic behavior.

				Table 7			
		Model Sun	, ,	0	rivers of Civic B	ehavior	
Model	R	<i>R</i> Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
4	.528	.279	.258	.568	.036	6.931	.009
		Са	11 1	v	Civic Behavior		
Model				standardized oefficients	Standard coefficients	_	
			В	SE	β	t	Sig.
Consta	int		-1.0	.508		-2.029	.044
							135



Parental social responsibility	.219	.101	.180	2.160	.032
Community Connectedness	.186	.098	.152	1.898	.050
Parental civic engagement	.193	.066	.232	2.944	.004
Affective empathy	.423	.161	.216	2.633	.009

a. Dependent Variable: Civic Behavior

In the final model, there were four independent variables such as parental social responsibility ($\beta = .180$, t = 2.160, p < .032), community connectedness ($\beta = .152$, t = 1.898, p < .050), parental civic engagement ($\beta = .232$, t = 2.944, p < .004), and affective empathy ($\beta = .216$, t = 2.633, p < .009) are statistically significant and positive drivers of civic behavior. The final predictive equation would be civic behavior = -1.030 + .219 (parental social responsibility) + .186 (community connectedness) + .193 (parental civic engagement) + .423 (affective empathy). The overall contribution of these four variables to civic behavior is 27.9% which means that the 72.1% predictor remains unknown.

These results confirm that parental factors predict civic behavior of respondents (Belay & Tefera, 2022; Bogale & Kibret, 2023). Parents served 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 (Belay & Tefera, 2022, p. 577). In addition, Bogale and Kibret (2023) cited from a previous study that parents are socializing agents in communicating civic values and messages with adolescents. In terms of the affective empathy as a driver of civic behavior, this present result contradicts the study of Silke et al. (2020). It was cited that cognitive empathy is more powerful predictor of civic behavior than affective empathy as it may be more adaptive in certain situations and can help expand one's circle of care and understanding to include unfamiliar others.

CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

This study assesses and consequently investigates the relationship between socioenvironmental factors, empathy, social responsibility to civic behavior. In the study context, college students have good civic education and classroom climate. There is also a good parental social responsibility and civic engagement including prosocial friend norms. However, they reported fair community connectedness. Further, college students have high cognitive and affective empathy whereas there is a good social responsibility and civic behavior.

Parental social responsibility, parental civic engagement, classroom climate, community connectedness, social responsibility, cognitive empathy, affective empathy are factors that may facilitate civic behavior. Moreover, parental social responsibility, community connectedness, parental civic engagement, and affective empathy are the drivers of civic behavior.

Implications of this study include providing opportunity with community connectedness and developing strategies that will further enhance the affective empathy of the respondents. Additionally, to create basic or advanced leadership programs in order to develop abilities that provide opportunities to represent in the various school and community settings. Further research includes employing a mixed method design, conducting a multisite study to include more college students, and application of a structural equation model.



There are some noted limitations of this study. First, the small sample size involved only college students from one higher education institution which may potentially limit the generalizability of the results to the wider population. Second, the research instruments were self-reported measures wherein the scores may be affected by factors such as social desirability and response biases. Lastly, the sampling technique used which is purposive sampling may not give chance to others to be selected as one of the respondents.

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