Online Voter's Education, Change of Voting Perceptions, Awareness and Social Media Use of Fake News and Fact-Checking Behaviors Among Tertiary Students

Amor Mia Arandia, Jose Rizal University, Philippines Allison Cruyff Ladero, University of Santo Tomas, Philippines

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Abstract

Voter's education is an avenue which engages student-voters into political socialization. However, their exposure to social media and lack of keenness in verifying information can make them vulnerable to spread of fake news which in the long run may affect voting perceptions and behavior. Others may not be conducting fact checking behaviors that are necessary before they share information. This study aimed to determine the relationship of voter's online education, awareness and social media use of fake news and fact-checking behaviors among university student-voters (N = 446). Using male and female participants, results showed that majority of the respondents share fake news in social media to provide understanding of a particular event or situation. Consequently, sex and monthly gross income is not related with watching online voter's education program, perception of change in voting candidates among key positions in national elections, awareness and checking of fake news, social media use of fake news, and fact-checking information on social media. Findings reveal that fact-checking information increases awareness of fake news in social media (r=.534, p < .001). Implications of this study are also presented with regards to conducting online voter's education program, raising student voter's awareness, utilization of fake news in social media and fact-checking behavior.

Keywords: Online Voter's Education, Awareness of Fake News, Social Media, Fact-Checking

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Introduction

National elections are critical as more Filipinos, especially the youth who comprise 40% percent of the population in the Philippines are taking an active part in electoral politics. The Commission on Elections (Comelec) underscores the significant impact of voters aged 18-41 who are under the youth vote category (CNN, 2022). Their participation in elections can help redefine the political landscape and national development of the country.

Pew Research Center (2019) explains that the youth is the highest internet user of today, who navigate at least one social media site (Metzger et al, 2015). Social media platforms have given their users the power of clicking—and sharing information across hundreds of people. This can also expose them to disinformation and misinformation of the electorate, which impacts election or voting perceptions of youth. Consequently, uninformed, and misinformed voters end up casting ballots for the wrong "leaders".

To guide them, academic institutions try to actively engage students to learn information about politics, candidates and the electoral process through voter's education programs. By doing this, they hope to actively shape students in terms of their role in the country during elections and how elections can be powerful in shaping the country. Therefore, it is relevant to study online voter's education and its relationship with change of voting perceptions, awareness and social media use of fake news and fact-checking behavior of students.

Voters' Education

Values and beliefs regarding politics as well as views on government and community service begin to take form or develop during the emerging adult stage. In short, college period is where political values and preferences are formed. To help students be introduced into political socialization, academic institutions can introduce voter's education program. These programs are designed to provide students practical information that they can use for meaningful discussion on various social issues and topics related to voting. With the advent of the pandemic, academic institutions offers the online modality to teach and reach out to students. Likewise, programs on voter's education were conducted online by colleges and universities in the country.

In conducting voter's education program, students are provided opportunities to learn and take part in politics and its various related activities (University of the Philippines, 2022). This means that to academic institution, voter's education is a crucial activity which help inform and provide knowledge that would influence voters, particularly swaying them to vote or not for a certain candidate. Therefore, it is important to study how students voter's education programs impact students.

Change of Voting Perceptions

Election campaigns draw considerable attention as it helps shape public knowledge and attitudes towards voting of candidates and supporting policy stands (Wang, 2013. In terms of change of voting perceptions, research seems to be lacking in the Philippines.

To be able to vote, individuals must perceive information that would help them choose a political candidate (Wang, 2013). Voter's education, and presidential debates may cause people to change mindsets in terms of choosing a candidate. Bowler and Donovan (2002)

states that voters need information to be aware of propositions, which helps them form opinions. Individuals who are exposed to information, may begin to use that information as part of the process of choosing a candidate.

Change of voting perception in this study is defined as how they were influenced in looking at their candidates and changing them. Individuals' view of their candidates or how they perceive who they are most likely affects their vote. Those who view their candidates favorably would be voted in the elections. There are many factors that affect change of voting perceptions. Several of these factors are exposure to voter's education, the influence of family or peers, educational attainment, race, gender, and socio-economic status (Merck, 2019). Considering that change of voting perceptions are relevant in elections, studying this will help us understand what influences the voting behavior of young people.

Awareness and Social Media Use of Fake News

As the internet enables students to be constantly connected with the world around them, they also have an abundant amount of information from many different sources such as Instagram, Facebook and Twitter. Social media platforms have given their users the power of clicking—and sharing information across hundreds of people. Moreover, since the youth are the highest internet users, the tendency to come across fake news-- information that is disinformed or misinformed is highly probable. Studies have shown that social media platforms' use of spreading misinformation has increased since 2016 (Courchesne et. al, 2021). Social media platforms can also show and hide information due to algorithms (Gardner, 2019). In addition, statistics in US show that two out of three individuals admit having shared fake news story, knowingly or not, on social media (Metzger et al, 2015). Considering this, studying the awareness and the use of social media in spreading fake news will help us find ways on how to help students became critical thinkers specially in relation to the election process.

Fact-Checking Behavior

Fact-checking is a process of investigating or varying the accuracy of information (Brodsky et al, 2021). To effectively fact-check, it is important that individuals move beyond reading narratives of news and information. Fact-checking can be helpful in informing opinions or combatting misinformation.

However, studies have shown that students lack critical thinking ability to evaluate the quality of information online nor take them to verify them (Brodsky et al, 2021). College students often read laterally to evaluate the quality of the information they encounter online and do not often engage in fact checking behaviors (McGrew et al, 2018).

Since fact-checking plays a critical role in diminishing or balancing extreme views due to perception bias (Park, et al, 2021), it is important to understand the fact-checking behavior of student voters since they are frequently exposed to misinformation, especially during elections.

Research Objectives

The authors of this study presented results after the voter's online education program has been conducted. It aimed to determine the relationship of online voter's education to change of voting perceptions, social media use of fake news and fact checking behavior. The association of fact-checking behavior and social media use of fake news was also measured in this study.

Methodology

Research Design

This study utilized quantitative analysis, using the descriptive correlation research design. It aimed to measure the relationship of online voter's education, with change of voting perceptions, awareness/checking of fake news, social media use of fake news and fact-checking behavior of university students in reference to the election issues and political candidates.

Sample

A total of 446 College students from 1st year to 4th year belonging to any degree program participated in the study. Purposive and convenience sampling was used. The inclusion criteria for the participants were 1) those who are currently enrolled in the University; 2) a registered voter; 3) have watched the JRU webinar series; 4) those who have been exposed to fake news in any social media account.

Research Instruments

The study participants answered a socio-demographic profile sheet and a researcher made self-report questionnaire. The generation of questionnaire items were derived from a small focused group discussion of student leaders interested in issues on voting, and elections in May 2023. The instrument was validated by 2 English experts and 2 History and Social Science Experts before utilizing it.

The researcher made self-report questionnaire contains items related to their views on online voter's education program, change of voting perceptions, awareness and checking of fake news, social media use of fake news, and fact-checking behaviors. The various items were answerable through a Likert scale of 1-not at all and 5-Very much. A sample item for awareness and checking of fake news is "After watching the online voter's education program, I take time to check the political news I am reading". A sample item for change of voting perception is "My option on a presidential candidate was influenced by the online voter's education program". A sample item for social media use of fake news is "My attitudes about political candidates have been influenced by fake news on social media". A sample item for fact-checking behavior is "I fact-check the information I am reading on social media".

Research Procedure

This study involved two steps. One is the implementation of the E-Leksyon Serye, an online voter's education program, in which students were invited to join. Then, it was followed by a survey questionnaire. The E-Leksyon Serye program was composed of four separate events that were geared towards a practical and effective voters' education which ran between December 2021 and April 2022. The first webinar was called "Mga Aral sa Nagdaang Eleksyon, Gabay sa Susunod na Henerasyon (Ang Lihim, Kasaysayan at Kahalagahan ng 1987 Eleksyon), (The Lessons of Previous Elections, Guide for the next generation (The

Secrets, History & Importance of 1987 Election). This webinar aimed to go back in time and abstract valuable lessons for students to ponder and apply in their time as voters for the upcoming May 2022 elections. The second webinar was called "GenLit: Rizalianong Maalam, May Pakialam,", a webinar in partnership with PinasForwardPh, "a nation-building movement which organizes fora, talks and camps for youth empowerment, transformational leadership and nationalism" (Garcia, 2020). Next, there was a Miting de Avance participated by two Presidential candidates showing their plans and promises if elected. And finally, a senatorial forum was held last April 2022 which featured different senators or their representatives.

The online survey question was administered via a secured link after the students have attended the E-LEKSYON program. The informed consent was given to student prior to answering the survey, which contains explanations of purpose, benefits and risks of the study. The survey lasted for 10-15 minutes.

Data Analysis

The frequency, percentage, mean and standard deviation was used to measure the views on online voter's education program, change of voting perceptions, awareness and checking of fake news, social media use of fake, and fact-checking behaviors of university students. The correlation statistic of the variables was measured using Pearson r and Point bi-serial through JASP (University of Amsterdam, n.d.).

Results

Characteristics	Frequency	Percentage	М	SD
Sex			1.59	.49
Male	183	41		
Female	263	59		
Monthly Gross Income			2.99	1.80
Below 10,000 PHP	100	22.4		
10,001 - 20,000 PHP	125	28.0		
20,001 - 30,000 PHP	81	18.2		
30,001 - 40,000 PHP	41	9.2		
40,001 - 50,000 PHP	49	11		
50,001 - 70,000 PHP	30	6.7		
80,001 – 100,000 PHP	10	2.2		
100,001 And Above PHP	10	2.2		

Table 1 Sevend Manthly Cross Income of Vataria in Tartiany Educati

Table 1 study shows that majority of the respondents, 263, 59%, are female registered voters, while the minority of the respondents, 183, or 41%, are male registered voters. The monthly gross income illustrates that there were 125 or 28% voters earns a money of 10, 0001 -20,000 PHP, 100 or 22.4% voters obtain an average of below 10,000 PHP, 81 or 18.2% voters receive a salary of 20,001 - 30, 000 PHP, 49 or 11% voters gain a mean of 40,001 -50,000 PHP, 41 or 9.2% voters earn an income of 30,001 - 40,000 PHP, 30 or 6.7% voters receive a wage of 50,001 - 70,000 PHP, and 10 or 2.2% voters obtain a salary of 80,001 -100,000 PHP and 100,001 and Above PHP.

Table 2. Participants Watching Voter's Education, Perceptions of Voting Change on
Key Positions in the National Elections, Awareness and checking of fake news,
Social media use of fake news, Fact-checking information on social media

	М	Sd
Watching Voter Education	1.59	0.49
Change of Voting Change for a Presidential Candidate	2.53	1.24
Change of Voting Change for a Vice Presidential Candidate	2.43	1.21
Change of Voting Change for a Senatorial Candidate	2.66	1.28
Awareness and Checking of Fake News	8.31	1.91
Social media Use of fake news	9.50	2.75
Fact-checking information on social media	4.05	1.12
Note: $(N = 446)$; M = Mean, SD = Standard deviation.		

In Table 2, watching voter's education series has a mean of 1.59 and a standard deviation of 0.49. The mean for change of voting perceptions for a Presidential candidate is 2.53 while it has a standard deviation of 1.24. The mean for change of voting perceptions for a Vice-presidential has a mean of 2.43 and a standard deviation of 1.21. The mean for change of voting perceptions for a Senatorial has a mean of 2.66 and a standard deviation of 1.28. The Awareness and checking of fake news has a mean of 8.31 and a standard deviation of 1.91. The social media use of fake news illustrates a mean of 9.50 and a standard deviation of 2.75. The reading fact-check information on social media has a mean of 3.39 and a standard deviation of 2.64.

Choices	Frequency	Percentage
It is interesting.	126	28.3
It is eye catching.	70	15.7
It is funny.	89	20
It is current.	72	16.1
It provides understanding of a particular event or situatio	n. 232	52
It seems useful.	148	33.2
It seems important.	149	33.4
It comes from my close friends or family.	39	8.7
It is consistent with my belief or assumption.	65	14.6
It seems inaccurate.	0	0
It comes from authoritative sources.	126	28.3
It looks frightening.	43	9.6

Table 3. Participants Sharing of Fake News

Table 3 explains participants sharing of fake news. Majority of the respondents, 232 or 52% choose to share fake news as it provides understanding of a particular event or situation, 149 or 33.4% respondents share fake news as it seems important, 148 or 33.2% respondents share fake news as it seems useful, 126 or 28.3% respondents share fake news as it is interesting and it comes from authoritative sources, 89 or 20% share fake news as it is funny, 72 or 16.1% share fake news as it is current, 70 or 15.7 share fake news as it is eye catching, 65 or 14.6% share fake news as it is consistent with my belief or assumption, 43 or 9.6% share fake news as it looks frightening, 39 or 8.7% share fake news as it comes from my close friends or family and no respondents select it seems inaccurate when sharing of fake news.

Table 4. Association among Online Voter's Education Program and Change of Voting Perception for Key Positions in National Elections, Awareness and checking of fake news, Social media use of fake news, Reading fact-checked information, Viewing fact-checked information

Online Voter's Education	Point bi-serial (r _{pb})	p-value, df	Interpretation
Change of Voting			Positive Weak
Perception for a	0.212***	<.001, df =	Correlation
Presidential Candidate		444	
Change of Voting	0.154***		Positive Weak
Perception for a Vice-		<.001, df =	Correlation
Presidential Candidate		444	
Change of Voting			Positive Weak
Perception for a Senatorial	0.238***	<.001, df =	Correlation
Candidate		444	
	Pearson r (r)	p-value	Interpretation
Awareness and checking	0.191***		Positive Weak
of fake news		<.001	Correlation
Social media use of fake	0.078	0.100	No Correlation
news			
Reading fact-checked	0.237***		Positive Weak
information on social		<.001	Correlation
media			
Note: (N = 446), $* = p < .05$, $**$	= p < .01, *** = p	<i>p</i> < .001	

Table 4 indicated correlation analysis of online voter's program and change of voting perception of key election post in presidential, vice-presidential or senatorial level, as not significant. It shows that attending online voter's education is not related to changes of voting perception in choosing a presidential, vice-presidential or senatorial candidate. Likewise, correlation analysis of online voter's education program is not significantly related to awareness and checking of fake news (r= .191, p <.001), social media use of fake news (r= .078, p <.001), fact-checking information (r= .237, p <.001).

Table 5. Association of Fact-checking information on social media, Awareness and checking of fake news, Social media use of fake news

	Fact-Checki social media	ng informatic 1	on on
Factors	Pearson r	p-value	Interpretation
Awareness and checking of fake	0.524***	<.001	Positive
news			Moderate
			Correlation
Social media use of fake news	0.267***	<.001	Positive
			Weak Correlation

Table 5 displays correlation analysis using Pearson's r signified that awareness and checking of fake news and fact-checking information on social media are moderately and positively

related with one another (r= .534, p <.001). It displays that awareness and checking of fake news is moderately related with how the respondents read fact-check information on social media. The respondents are aware and check if the news is fake as they read fact-check information on social media. This shows that the more the respondents are aware and check fake news, the more likely they are to spend time in reading and fact-checking it before doing anything with the information. Correlation analysis using Pearson's r signified that social media use of fake news and reading fact-check information on social media are weak and positively related with one another (r= .267, p <.001).

Discussion

The current findings of the study shows that more females than males attended the online voter education program. As early as 1980's, the turnout of women participating in electorate is on the rise (Turpen, 2008). One explanation of higher participation of women in voter education is society's advancement and democratization of women's activity and direct participation in the realm of politics and governance (Azimova, 2016).

In terms of monthly gross income, majority of the registered voters or 28% belongs to those who earn 10 to 20 thousand pesos, belonging to the lower income level bracket. One article has supported our study findings, showing that those in the lowest income category had participated in voting related activities. In fact, during a Presidential election in USA in year 2016, voting participation rate for families in the lowest income category were 48 percent (Akee, 2016).

In this study, where majority of the respondents share fake news seems to be similar to other studies in the U.S. showing that two out of three individuals share fake news story, knowingly or not, on social media (Azzimonti & Fernandez, 2017). Sharing fake news based on the idea that "it provides understanding of a particular event or situation" is in keeping with findings that fake news, when believed can be spread and shared to others (Flynn et al, 2017). In fact, others use social media to generate and spread low-quality information (e.g. fake news) in society (Vo, 2021). In addition, Doing this appears to be aligned or related to people's political beliefs, identities and predispositions (Flynn et al, 2017).

Findings of this study also demonstrate that reading fact checked information also increases awareness and checking fake news. One explanation for this is that those who have attained higher education, like college students in this case, read fact-checked information. This is because they have the skills and knowledge to do so. In this case, fact-checking appears to be effortful evaluation strategy, as this involves the process of determining the accuracy of the information presented through various steps (Brodsky, 2022). The more they fact check information, the more likely they are to find out if the information presented to them is fake news. This in turn helps them fight against misinformation and disinformation. Another explanation for fact-checking which increases awareness and checking of fake news is tied to the need for information. Accordingly, users would put more effort and more strategy in evaluating information if it is important for them (Brodsky et al, 2021). More so, in terms of election, those who engage in fact-checking have high interest and knowledge in politics (Kyriakidou et al, 2022).

Conclusion

This study shows that reading fact-checked information appears to be related with awareness of fake news. Despite such findings, the present study are cited with limitations. First, the respondents in this study are university students, who are 1st time registrants in the last May 2022 National Elections in the Philippines. Their experiences in voting and electoral participation is quite young. Second, our participants came from the university setting and might be more school-culture based. Third, the income level of the participants belong to low to middle income category. The findings do not apply to those belonging to Upper middle class to Higher class level of income. Another limitation of the study is that there were no follow-up activities provided to verify if students have applied the lessons learned in the online voter's education program.

While voter's education programs remain an essential part of the campaign in encouraging young voters to participate in elections, there is a need to revisit its effectivity especially to young audiences who are often exposed to fake news proliferating in social media. Other than providing programs to watch, finding ways to engage students participation through other means can help raise awareness on voting and not being vulnerable to fake news. This emphasizes the importance of increasing college students critical thinking abilities to evaluate the political messages they are confronted with. More so, since fact-checking behavior leads to awareness of fake news, universities should look at increasing this among students. In the future, studies on voter's participation and what kind of messages they are more inclined to expose themselves as well as factors related with it can be studied.

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References

- Akee, R. (Feb 14, 2019). Ackee on Family Income's Effect on Voter Participation, UCLA, Luskin. https://luskin.ucla.edu/akee-on-family-incomes-effect-on-voter-participation
- Azimova, A. Y. (2016). Political Participation and Political Repression: Women in Saudi Arabia. Electronic Theses and Dissertations. 1186. https://digitalcommons.du.edu/etd/1186
- Azzimonti, M., and Fernandes, M. (2023). Social media networks, fake news, and polarization. *Euro. J. Polit. Econom.* 75, 1-62. doi:10.1016/j/ejpoleco.2022.102256
- Brodsky, J.E., Brooks, P.J., Scimeca, D. (2021). Improving college students' fact-checking strategies through lateral reading instruction in a general education civics course. Cogn. Research 6, 23. https://doi.org/10.1186/s41235-021-00291-4
- Bowler, S., & Donovan, T. (2002). Democracy, Institutions and Attitudes about Citizen Influence on Government. *British Journal of Political Science*, 32(2), 371–390. http://www.jstor.org/stable/4092223
- Courchesne, L. Illhardt, J. & Shapiro, J.N. (2021). Review of social science research on the impact of countermeasures on influence operations. Harvard Kennedy School (HKS) Misinformation Review, Volume 2 (5). Received: April 30, 2021. Accepted: August 26, 2021. Published September 13, 2021.
- CNN Philippines Staff (September 11, 2021). Young Filipinos comprise 52% of total registered voters for 2022 polls so far Comelec". http://www.cnnphilippines.com/news/2021/9/11/Comelec-youth-vote-2022-national-elections.html
- Flynn, D., Nyhan, B., Reifler, J. (2017). "The Nature and Origins of Misperceptions: Understanding False and Unsupported Beliefs about Politics", *Political Psychology* 38 (1): 127–50.
- Garcia, M.B. (February 13, 2020). "SPUP's Pinas Forward Capacitates Paulinians". St. Paul University.https://spup.edu.ph/2020/02/13/spups-pinas-forward-forum-capacitatespaulinians/#:~:text=Pinas%20Forward%20is%20a%20nation,empowerment%2C%20 transformational%20leadership%20and%20nationalism
- Gardner, A. (2019). User's ability to detect fake news in online environments." Electronic Thesis and Dissertations. Paper 3143. https://doi.org/10.18297/etd/3143
- Kyriakidou, M., Cushion, S., Hughes, C., & Morani, M. (2022): Questioning Fact-Checking in the Fight Against Disinformation: An Audience Perspective, Journalism Practice, DOI:10.1080/17512786.2022.2097118
- McGrew, S., Breakstone, J., Ortega, T., Smith, M., & Wineburg, S. (2018). Can students evaluate online sources? Learning from assessments of civic online reasoning. Theory & Research in Social Education, 46(2), 165–193. https://doi.org/10.1080/00933104.2017.1416320

- Merck, C.M. (2019). "It's important to just have your voice heard": Young voters change perception of political efficacy". Honors Program Theses. 385. https://schorworks.uni.edu/hpt/385
- Metzger, M. J., Flanagin, A. J., Markov, A., Grossman, R., & Bulger, M. (2015). Believing the unbelievable: Understanding young people's information literacy beliefs and practices in the United States. Journal of Children and Media, 9(3), 325348. https://doi.org/10.1080/17482798.2015.1056817
- Metzger, M. J. (2007). Making sense of credibility on the Web: Models for evaluating online information and recommendations for future research. Journal of the American Society for Information Science and Technology,58, 2078–2091. https://doi.org/10.1002/asi.20672
- Park, S., Park, J. Y., Kang, J., & Cha, M. (2021). The presence of unexpected biases in online fact-checking. Harvard Kennedy School (HKS) Misinformation Review, 2(1). Received: September 9th, 2020. Accepted: January 12th, 2021. Published: January 27th, 2021.
- Pew Research Center. (2019). Internet/broadband fact sheet [Fact sheet]. Retrieved March 2, 2021, from https://www.pewresearch.org/internet/fact-sheet/internet-broadband/#who-uses-the-internet
- Turpen, B.J. (2008). An Examination of the Impact of Education on Voter Turnout". Unpublished Masters Thesis. Auburn University. https://etd.auburn.edu/bitstream/handle/10415/1060/Turpen_Benjamin_40.pdf?sequen ce=1&ts=1443615062524
- University of Amsterdam (n.d.). JASP: A Fresh Way to Do Statistics. Department of Psychology and Psychological Methods Units. https://jasp-stats.org/
- UP Media and Public Relations Office, "Lakas Botante": UP launches voter education series for young voters", Apr 1, 2022. https://up.edu.ph/lakas-botante-up-launches-votereducation-series-for-young-voters/
- Wang, G. (2013). Elections and the third-person effect: Voter's perception of 1012 first presidential debate's effects. Unpublished Thesis. Iowa State University. https://dr.lib.iastate.edu/server/api/core/bitstreams/7d8960d0-b430-43f8-98b5-9461c888427d/content
- Contact emails: amormia.arandia@jru.edu amormiaarandia@gmail.com