

Family communication patterns, media literacy and civic engagement: A study with Indonesian college students

Patmisari, Ahmad Muhibbin, Yeniar Elka Pramesiana, Marisa Zakiya Amini, Wibowo Heru Prasetyo, Sri Gunarsi and Achmad Muthali'in

Universitas Muhammadiyah Surakarta, Indonesia

Understanding the level of media literacy among college students has become increasingly important amid the spread of disinformation or 'fake news' on social media. Currently, the Internet and social media are used to find information and news to participate in better civic engagement in Indonesia. In this study, we hypothesised that family communication, which consists of conversation orientation and conformity orientation, affects civic engagement among young people. A questionnaire designed to test this hypothesis received 330 valid responses that were analysed using structural equation modelling (SEM) and partial least squares (PLS). The findings showed that media literacy was the most significant predictor of civic engagement. We recommend increased attention to media literacy education in Indonesia, and see scope for similar studies in other democratic societies that have high Internet use.

Introduction

In principle, a country is democratic when everyone has the right to determine who takes the lead (Campbell, 2008). Democracy can be observed or measured from the general election process and pluralism, government functions, political participation, political culture, and citizens' freedom (The Economist, 2019). Basic knowledge and understanding of rights and obligations, functions, roles, and responsibilities as citizens are essential to establish a sense of nation and state (Dahlan & Sapriya, 2019). Nussbaum and Cohen (2002) argued that civic education plays a pivotal role for modern citizenship in facilitating citizens to strengthen their identity in interacting with the global community. Accordingly, it is important to act smart and be good citizens who can be developed through civic or citizenship education.

In various countries, citizenship education is a mandatory subject, whether democratic, monarchical, or socialist countries (Wahab & Sapriya, 2011; Winataputra, 2015). In Australia, citizenship education is included in a formal curriculum and is referred to as civics, and citizenship is part of Humanities and Social Sciences (HASS) (Kerr, 1999). Citizenship education in the UK is included in the national curriculum as one of the five cross-curricular themes and is a compulsory subject for secondary-level students (Biesta, 2011), aiming to change the political culture to become active citizens within a monarchical system of government (Pike, 2007). Citizenship education has a role in the formation of good citizens, but it is expected that students will be information literate and have critical citizenship skills (Jerome, 2012). It means that civic education plays a role in the formation of active citizens to bring about changes in political culture. Youth political knowledge will determine next-generation political attitudes.

Families and schools are the primary agents of socialisation for children in developing political knowledge and subsequent attitudes (Galston, 2014; Shulman & DeAndrea, 2014). Parental education, parents' employment status, educational resources at home, cultural ownership, and ICT resources at home are significant predictors of children's education (Calica, 2020). The limitations of mobile technology in schools can be replaced by the use of learning laboratories and support from parents at home (Findawati et al., 2021). Research by Izrael et al. (2020) in the central European country of Slovakia found that nearly 50% of the children had access to tablets and laptops. The use of these digital devices increases with age. Qualitative data found that age and other contextual factors played an important role in the type of applicable parental mediation at home. Simultaneously, quantitative data shows a significant positive correlation between parental digital media competence and parental mediation behaviour such as activating mediation, technical mediation, and monitoring.

Research on information literacy is mainly found in education; however, studies on civic literacy remain difficult to find. Information and media literacy is an important component of democratic participation, especially in dealing with the dissemination of contemporary phenomena such as fake news. Media literacy should focus on the impact upon citizenship through the media can affecting political, social, and cultural issues and democratic issues (Mihailidis & Viotty, 2017). Media literacy is critical for good citizens to deal with various problems arising from advances in information technology. Millner (2002) asserted that media literacy skills are one of the components required in citizenship literacy to deal with the spread of fake news. Currently, there are many problems, such as device addiction, that negatively impact if not counterbalanced with media literacy. The issue of smartphone addiction in adolescents shows no significant differences based on gender or age when children obtain their first smartphone (Niklová et al., 2020). Table 1 illustrates the types of cases of media abuse that may impact on integration and stability of democracy in Southeast Asia. Table 1's 14 types of criminal cases are drawn from ITE Law in Indonesia, with the highest percentage being defamation cases under Article 27, paragraph 3 of Indonesia's ITE Law. (Law No. 11 of 2008 on Electronic Information and Transactions, 2008).

Communication plays an essential role in fostering political trust through mass media, particularly in political marketing (Susila et al., 2020). It is critical in developing democracies, where political knowledge and comprehension are still restricted. The mass media do support democracy, but if they don't have media literacy, they can endanger democracy in Indonesia. Criminal cases of media abuse continue to increase (Table 2), indicating that media literacy is very necessary in this field.

Based on data obtained from the Supreme Court of the Republic of Indonesia, in 2018, 292 criminal case decisions related to the ITE Law were found, much higher than the previous year's 140 cases. The community must address this new source of criminal cases properly, seeking to use digital media wisely and avoiding ITE Law violations. However, law enforcers must be prudent in deciding cases, as these may concern citizens' privacy and their freedom to express opinions.

Table 1: Types of criminal cases related to the ITE law during 2011-2018

Cases	Percentage (%)
Defamation	24
Hate speech	22
Violation of decency	14
Information manipulation	10
Fake news	7
Hack	7
Gambling	5
Blackmail	3
Change information	3
Threat	3
Pirate radio	1
Pornography	0
Fraud	1
Piracy	0
Total	100

Source: Southeast Asia Freedom of Expression Network (SAFEnet, 2019)

Table 2: Number of decisions on criminal cases of the ITE law 2011-2018

Year	Number of cases
2011	1
2013	2
2014	1
2015	20
2016	52
2017	140
2018	292

Source: Southeast Asia Freedom of Expression Network (SAFEnet, 2019)

It is essential to understand how student civic literacy may be impacted by the “fake news” phenomenon on various social media at the tertiary level. Almost exclusive consumption of online information, scepticism and distrust related to traditional media, doubting of digital media, and generalisation of the notion of “fake news”, can reduce civic engagement, create distrust in the relevance of active participation, and lead to a perception that young people are not news consumers (Silveira & Amaral, 2018). Currently, the Internet and social media are used by people to find news information, and enable their better participation (Campbell & Kwak, 2010). Among students, problems that threaten digital technology users, such as cyberbullying, theft of personal data, virus attacks, and addictions, can have an impact on their psychological condition (Prasetyo et al., 2022). Therefore media literacy is a pivotal component in facilitating civic engagement. The proliferation of “fake news” spreading raises concerns about the negative impact on

youth civic engagement as the information they received was incorrect. With the development of digital media and the intense use of social media, educators now are challenged to advance the civic discourse and critical literacy. The amount of fake news and information found in online media misleads many in the young generation. Media education and cultural revitalisation can increase learning motivation through students' pedagogical abilities, improving civic engagement and expanding intercultural dialogue, as well as understanding between generations (Stanton et al., 2020).

Therefore, higher education institutions are encouraged to take advantage of the student potential in volunteer activities or organisational membership to reinforce participation as citizens (Činčalová & Černá, 2021; Yang & Hoskins, 2020). To date, educators face pedagogical challenges according to a cognitive expert's point of view (Keegan, 2021). How the experience in learning citizenship education courses and experiences in using social media affect the level of student citizenship literacy in tertiary institutions. For Indonesian youth, most if not all prior studies have either investigated communication patterns among social media users, advocating media literacy initiative, and political engagement through digital channels (Saud, 2020; Suwana, 2021; Syahputra et al., 2021). However, the combination of incorporating family communication patterns and media literacy to influence civic engagement has not been investigated. Based on research conducted by Graham et al. (2020) on family communication models in political participation, further research is required on the propensity to communicate aspect of family communication.

Family communication, media literacy, and civic engagement

Family communication is one of the supporting factors in increasing citizenship literacy. Measuring the construct of family communication is based on the idea that the political socialisation process experienced by individual can drive an increase towards citizenship literacy that can influence political engagement as adults (Fudge & Skipworth, 2017). Families and schools are the primary agents of socialisation for children in developing their political knowledge and subsequent attitudes (Galston, 2014). Parenting style connects to children's social competence and avoidance of anti-social behaviour (Kompirović et al., 2020). Family communications can help develop children's critical thinking skills; therefore, it is important to have family opportunities to evaluate, discuss, and determine the credibility of various online sources (Damico et al., 2018).

Family communication patterns affect the tendency of each family to engage in daily communication. The communication patterns shown by parents greatly influence the formation of their children's behaviour (Galvin et al., 2018). Ritchie and Fitzpatrick (1990) conceptualised family communication into conversation orientation and conformity orientation. A conversation orientation emphasises discussions, opinions, and ideas among family members, while a conformity orientation emphasises the consistency of behaviour, values and beliefs among family members.

Previous research has shown that adults can remember their childhood accurately, especially behaviours that occur consistently, such as media use and culture of family communication (Seger & Potts, 2017). However, digital culture has emerged to foster citizenship literacy based on children's capacities for identifying with and spurring social change (Hauge & Rowsell, 2020). Psychosocial abilities that have been formed are strong predictors of the young citizen involvement (Holbein et al., 2020). In addition, cultivating voluntary activities and fundraising participation in children will be easier for them to follow because students will have more involvement in volunteer activities or fundraising rather than in political orientation activities (Hylton, 2015). Currently, instilling empathy has been promoted as a social science goal (Keegan, 2021). Experience from the family will lead students to be more critical in analysing a system (Nir & Musial, 2020).

Besides family communication, media literacy is an important part of active citizenship and civic engagement by increasing access to information as a form of self-expression. The emergence of Internet technology and mobile communication tools has transformed old or traditional media into new media concepts. Although media literacy has traditionally been defined as teaching students how to access and understand content, media literacy is now understood as a multidimensional concept consisting of accessing, collecting, analysing data, creating informed opinions, and sharing it with others using multiple platforms (Kurbanoglu et al., 2019).

In the 21st century media literacy has evolved into new media technologies that include aspects of creating media content and sharing it with others (producing media). Chen et al. (2011) divided new media literacy into four components, namely functional consuming; critical consuming; functional prossuming; and critical prossuming. The framework refined by Lin et al. (2013) proposed ten indicators to describe more comprehensively and emphasise the characteristics of Web 2.0 technology. Lin et al. (2013) characterised functional prossuming literacy as based on three indicators: prossuming skills, distribution, and production.

Prossuming skills refer to a number of technical skills for using various technologies to create digital artifacts. Distribution indicators involve the activity of individuals in sharing their own feelings, ideas, and digital artefacts with others on new media platforms. With regard to the process of disseminating information and proprietary Web 2.0 technologies exclusively, production indicators indicate the competence to reproduce, rearrange, or combine text, audio and video clips into digital media formats. As the last but most complex and crucial media literacy, critical prossuming is represented by indicators of participation and creation (Lin et al., 2013). The former refers to the interactive and critical participation of individuals in new media platforms. These indicators relate exclusively to the active and collective contribution of intelligence that is characterised by Web 2.0 technologies. Therefore, it requires individuals to have social skills to achieve digital communication and cooperation with others. The last indicator involves the initiatives of individuals in creating original media content in which their own socio-cultural values and ideologies are embedded, thereby combining pre-existing media to create new meanings.

Media literacy is described as the use of a critical, responsible, and beneficial media environment as the key to building a democratic society (Flornes, 2017). These skills need to be equipped with knowledgeable, caring, and responsible action. One needs to fully participate in digital media through functional consumption, critical consumption of media, practical consumption, and critical demands. From this understanding, media literacy is required to increase citizenship literacy of an individual. Teaching media literacy implies directing the interest and enthusiasm of the younger generation for digital media into learning how to use the Internet as citizen participants.

Civic media literacy is values-oriented, consisting of caring, persistence, agency, emancipation, and critical consciousness, which focuses on civic renewal and supports literacy practice and process (Mihailidis, 2018). Increasing citizen participation is essential to study media literacy that centres on creating and criticizing media content (Kurbanoglu et al., 2019). When young people are directly involved in creating media content, and are able to criticise posts on websites and online blogs, they will feel more engaged in a culture of participation.

Journalism activities can help to develop citizenship literacy, information literacy, and meaningful participation in the public sphere (Smirnov et al., 2018). Dimensionalisation used to measure the construct of media literacy refers to the theory of Millner (2002) who argued that media literacy is one of the important components in citizenship literacy that can deal with the dissemination of fake news.

Civic engagement is formed from individual awareness and direct participation of citizens. Citizen awareness denotes that citizens are directly involved in solving problems within community, but without any coercion from others; implementation is based on encouragement from the individuals themselves (Gusmadi, 2018). There needs to be a strengthening to spur every individual and group to get involved, because citizen involvement in social life is an aspiration for the ideals of a society. Civic engagement encompasses actions wherein individuals participate in personal and public activities that are both individually life enriching and socially beneficial to the community (Doherty et al., 2009).

Civic engagement has been defined as the process of accepting that persons can and should make a difference in improving their community. Individuals, through collective action, can influence a larger civil society (Adler & Goggin, 2005). To improve society, one needs the knowledge, skills, and values required to make a difference. Ownership and demonstration of knowledge, skills, and values are expressed through attitudes and behaviours (Doolittle & Faul, 2013).

Civic engagement is a general term that covers civic knowledge, civic skills, and civic values (Nir & Musial, 2020). It refers to activities that exhibit a sense of belonging in the social order and an understanding of shared responsibility, thus civic engagement is a commitment from a social contract. Simultaneously, political activities incorporate voting activities, political campaign activities, media outlets, relations with public officials, and petition signing actions. Communication within the family may improve citizenship

literacy (Fudge & Skipworth, 2017). For instance, a family may be used to discussing general elections; this is a form of developing children's political knowledge to determine their next attitude. This is supported by information technology, which can disseminate political information facilitating such discussion (Gil de Zúñiga et al., 2014).

Research hypotheses

Based on the literature review, the model of the relationship among constructs is shown in Figure 1. In our model, we consider three relevant factors: conversation orientation, conformity orientation, and media literacy. This study supports civic engagement in Indonesia, which is influenced by family communication and media literacy. Previous research has used this approach to investigate that the family communication model affects political participation (Graham et al., 2020). We assume that the results of our research are contrasting from previous research as political participation is one aspect of civic engagement. This study also investigated the influence of media literacy as a predictor between family communication and civic engagement.

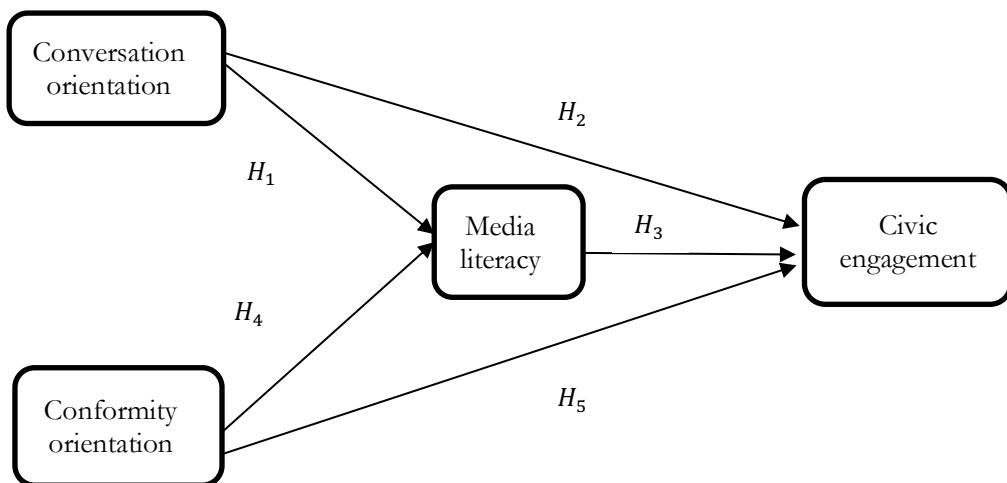


Figure 1: The model of the relationship among constructs

Based on Figure 1, five hypotheses are described, namely:

- Hypothesis 1. Conversation orientation is positively related to media literacy.
- Hypothesis 2. Conversation orientation is positively related to media literacy to civic engagement.
- Hypothesis 3. Media literacy is positively related to civic engagement.
- Hypothesis 4. Conformity orientation is positively related to media literacy.
- Hypothesis 5. Conformity orientation is positively related to media literacy toward civic engagement.

Research method

Design of the study

We employed survey research methods to examine the proposed model. The various constructs studied were measured by designing a questionnaire with a range of questions (Appendix A). A total of 330 students were invited to participate using random cluster sampling. The questionnaire contained demographic data, and other sections for the variables under the study.

Data were collected using a questionnaire on *Google Forms* for students on various islands in Indonesia from February to April 2021. We chose online surveys as an effective way of collecting data from students throughout islands in Indonesia. Furthermore, as there were problems with the Covid-19 pandemic, online surveys effectively avoided the risk of contracting Covid-19.

Measurement development

The instruments used in this study were based on previous research and modified to suit the Indonesian context. The measurement of family communication patterns was developed by Chaffee et al. (1973), who categorised the patterns of family communication into two dimensions, namely *concept orientation* and *socio orientation*. There are 14 Likert-style items in the measurement of family communication patterns, with 7 for concept orientation and 7 for socio orientation. Ritchie and Fitzpatrick (1990) modified this measurement, renaming it as the *Revised Family Communication Pattern*, containing 26 items, 15 for conversation orientation (CSO) and 11 for conformity orientation (CFO) (Ritchie & Fitzpatrick, 1990). Sadia et al. (2016) used this instrument, for which Cronbach's alpha was found to be above 0.70, considered high enough for this type of research.

The measurement of media literacy (MDL) has been developed in the theoretical framework of New Media Literacy (Lin et al., 2013) and research on development and validation of the New Media Literacy Scale (NML) for university students (Koc & Barut, 2016). First, we examine the explanatory theory of various media literacy dimensions and indicators to gain a conceptual understanding of media literacy. The list of questions in the Koc and Barut (2016) research was rewritten according to the context in Indonesia, without reducing the intent of the question items. Media literacy referred to in this study is media literacy in the context of the 21st century, namely new media literacy, not traditional media. In this study we only mention media literacy.

To measure civic engagement (CE), question items were adapted from Hylton (2015). This instrument was developed based on the indicators outlined by Keeter et al. (2002) which has three subscales, namely the dimensions of civic activities, electoral activities, and political voice. Civic activities include voluntary memberships, volunteering and raising money for charitable causes. What is meant by electoral activities are activities centred on voting and influencing election outcomes. Lastly, political voice consists of

activities that seek to influence policymaking, such as testifying, signing petitions, or contacting public officials.

To ensure validity and reliability, we used a four-point Likert scale scored strongly disagree (1) to strongly agree (4). The resulting questionnaire items can be seen in Appendix 1.

Survey result

The survey was conducted during the 2020-2021 academic year. College students in this sample were taken from several universities across islands in Indonesia, such as Java, Sumatra, Kalimantan, Bali, Sulawesi, West Nusa Tenggara, Nusa Tenggara Timur, Lombok, and Papua. Table 3 presents the sample descriptive statistics.

Table 3: Descriptive statistics (N=330)

Measure	Items	Frequency	Percentage
Gender	Male	78	23.6 %
	Female	252	76.4 %
Religion	Islam	290	87.9 %
	Catholic	33	10.0 %
	Christian	5	1.5 %
	Hinduism	2	0.6 %
	Buddhism	-	-
	Confucianism	-	-
Age	<18 years	10	3.0 %
	18-21 years	278	84.2 %
	21-24 years	40	12.1 %
	> 24 years	2	0.6 %
Father's educational background	Did not attend school	4	1.2 %
	Elementary	85	25.8 %
	Junior High	52	15.8 %
	High school	131	39.7 %
	Bachelor/ Master/ Doctorate	58	17.6 %
	Elementary	85	25.8 %
	Junior High	78	23.6 %
	High school	112	33.9 %
	Bachelor / Master/ Doctorate	51	15.5 %
	Labourer	39	11.8 %
Mother's occupation	Private employee	39	11.8 %
	Entrepreneur	101	30.6 %
	Civil service	47	14.2 %
	Unemployed	5	1.5 %
	Labourer	11	3.3 %
	Private employees	29	8.8 %
	Entrepreneur	36	10.9 %
Household income	Civil service	24	7.3 %
	Housewife	183	55.5 %
	Unemployed	5	1.5 %
	Other	72	22.9 %

Analysis of results

The data analysis used in this study was a statistical test of the structural equation model (SEM) using the *SmartPLS 3.0* software. Structural equation modeling has developed extensively in social science research (Anderson & Gerbing, 1992). The purpose of using SEM analysis is to test hypotheses and develop new theories (Anderson & Gerbing, 1992), and to test statistical models that include analysis of factors affecting civic engagement (Hesse-Biber & Johnson, 2015). The steps of the SEM equation model comprise, first, building a theory-based model; second, creating a causal path diagram; third, translating flowcharts into mathematical equations; fourth, choosing the input matrix type; fifth, model identification; sixth, the fit model test; and seventh, model interpretation and modification.

Measurement model

Reliability

To measure the reliability of the measurement model, we used composite reliability as it can estimate higher (Garson, 2016). The limit of acceptance as reliability is 0.6 because this study is an exploratory research type (Chin, 1998). In Table 4, the composite reliability value in column 3 is more significant than 0.7, meaning all latent variables are reliable.

Table 4: Inter-construct correlations and reliability (Source: *SmartPLS* output)

Variable	AVE	CR	Cronbach's alpha	CE	CFO	CSO	MDL
CE	0.433	0.908	0.890	0.658			
CFO	0.437	0.873	0.837	0.862	0.661		
CSO	0.505	0.917	0.899	0.372	0.325	0.710	
MDL	0.366	0.937	0.930	0.965	0.918	0.351	0.605

Validity

To test the validity, we administered discriminant validity and convergent validity tests. Convergent validity is measured using the *Average Variance Extracted* (AVE) value which must be greater than 0.5 (Chin, 1998; Hair et al., 2017). In Table 4, column 2, the AVE value for civic engagement, conformity orientation, and media literacy variables is generally smaller than 0.5. However, if the AVE value is less than 0.5, but the composite reliability value is more than 0.6, it remains acceptable (Henseler et al., 2016). It can be determined that the convergent validity has fulfilled all latent variables. Appendix B displays that the discriminant validity is appropriate because the loading of each indicator on a specified construction is more than loading on other constructs (Chin, 1998; Hsu et al., 2016).

Structural model

Predicting the model to yield the value of R^2 was obtained by carrying out the PLS algorithm. In Figure 2, structural model results, the value of R^2 lies in the endogenous variables of media literacy and civic engagement. The R^2 value of media literacy is 0.845, which means that 84.5% of media literacy variance is explained by conversation

orientation and conformity orientation. Meanwhile, R^2 civic engagement is 0.937, meaning that 93.7% of civic engagement variance can be explained by conversation orientation, conformity orientation, and media literacy. Chin (1998) described the strength of R^2 as follows: 0.19 is weak, 0.33 is moderate, and 0.67 is substantial. It can be assumed that the R^2 media literacy model is substantial and the R^2 the civic engagement model is also substantial.

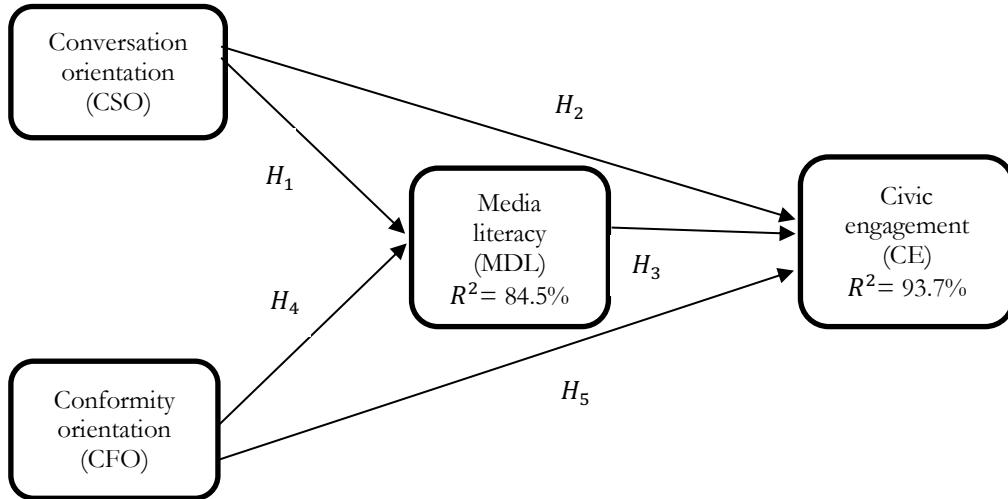


Figure 2: Structural model results

Notes: Bold lines show path coefficients that are significant at ($p < 0.05$)

Table 5: Summary of hypotheses testing results (Source: *SmartPLS* output)

Hypotheses	Path	Path coeff. (β)	t-value	p-value	Conclusion
H1	CSO → MDL	0.059	1.987	0.047	Supported
H2	CSO → CE	0.038	2.488	0.013	Supported
H3	MDL → CE	1.090	30.559	0.000	Supported
H4	CFO → MDL	0.898	59.662	0.000	Supported
H5	CFO → CE	0.151	3.759	0.000	Supported

Table 6: Path coefficients for the indirect effect (Source: *SmartPLS* output)

	Path coeff. (β)	t-value	p-value	Information on relationship decisions
CSO → MDL → CE	0.979	26.117	0.000	Significant hypothesis, null accepted, full mediation, indirect only
CFO → MDL → CE	0.065	1.993	0.047	Significant hypothesis, null accepted, full mediation, indirect only

Findings

Since all hypotheses are directional, we performed a t-test. The bootstrap that was carried out facilitated the calculation of the t-statistic of all hypotheses (H1-H5), as shown in Table 5. The significance of weights can be observed in both t-values and p-values. At the 5% significance level, if the t-value > 1.96 or the p-value < 0.05 , it can be assumed that the path coefficient is significant (Hair et al., 2017). All hypotheses have a significant relationship ($p < 0.05$). The structural findings imply that the H1-H5 hypotheses are proven. Conversation orientation had a positive and significant effect on media literacy (t-value $1.987 > 1.96$ and p-value $0.047 < 0.05$), meaning that the null hypothesis is accepted and rejects the alpha hypothesis. Conversation orientation had a positive and significant effect on civic engagement (t-value $2.488 > 1.96$ and p-value $0.013 < 0.05$), meaning that the null hypothesis is accepted and rejects the alpha hypothesis. Media literacy had a positive and significant effect on civic engagement (t-value $30.559 > 1.96$ and p-value $0.000 < 0.05$), meaning that the null hypothesis is accepted and rejects the alpha hypothesis. Conformity orientation had a positive and significant effect on media literacy (t-value $59.662 > 1.96$ and p-value $0.000 < 0.05$), meaning that the null hypothesis is accepted and rejects the alpha hypothesis. Conformity orientation had a positive and significant effect on civic engagement (t-value $3.759 > 0.151$ and p-value $0.000 < 0.05$), meaning that the null hypothesis is accepted and rejects the alpha hypothesis.

Similar to the direct effect, the *SmartPLS* also estimates the indirect effect coefficient in the construct, which uses media literacy as a mediating variable. Table 6 shows that media literacy mediated or influenced the relationship orientation → media literacy → civic engagement (t-value $26.117 > 1.96$ and p-value $0.00 < 0.05$). Meanwhile, media literacy acts as full mediation or indirect only in the construct of conformity orientation → media literacy → civic engagement (t-value $1.993 > 1.96$ and p-value $0.047 < 0.05$).

Discussion

This study attempted to enrich the theory of family communication patterns by empirically examining the role of family communication in promoting media literacy and civic engagement. Several previous studies revealed that family communication in childhood would continue into adulthood, affecting civic and political activities (Ledbetter, 2015; Shah et al., 2009). Family communication appears to have a high level of information use; conversations that look for political information in the media shape children's attitudes that are oriented towards public affairs when they reach adulthood. Communication practices in the family need to be considered for the motivation of political mobilisation. This research is also supported by previous research, which suggested that communication patterns in the family in childhood, mediated by the search for political information, continue to alter children's political activities in adulthood (Graham et al., 2020). The study affirms that family communication patterns consisting of conversation orientation and conformity orientation, and the mediating effect of media literacy are found to influence civic engagement among adults in Indonesia significantly.

Conversation orientation ($\beta = 0.038$, $t = 2.488$) and conformity orientation ($\beta = 0.151$, $t = 3.759$) had a positive and significant effect on civic engagement. This denotes that conversation orientation and conformity orientation are important predictors of civic engagement. The family becomes the first agent of socialisation and the most influential in the development of political education (Shulman & DeAndrea, 2014). Several studies have shown that parents and children often have the same political attitudes, beliefs upheld held from an early age extend into adulthood (Chaffee et al., 1971). This is consistent with social learning theory that the appropriateness of views between parents and children is influenced by several factors, including family communication (Jennings et al., 2009). Family communication pattern is a pivotal component of the relationship between parents and teenagers. Internet addiction on teenagers caused by family members not being sufficiently involved in conversation (Mareta et al., 2020).

Media literacy ($\beta = 1.090$, $t = 30.559$) had the strongest influence on civic engagement. This suggests that media literacy is the most important predictor of civic engagement among adults in Indonesia. The development of communication technology provides broad access to share political information to increase civic engagement (Gil de Zúñiga et al., 2014). This finding is supported by research finding that youths experiencing the study of media literacy in terms of creating and sharing digital media related to social issues are more likely to be involved in online political participation (Bowyer & Kahne, 2020). Meanwhile, youths who can learn citizenship-oriented digital consumption (the opportunity to learn to assess the credibility of online content) are implausible to be involved in political participation. Digital consumption of learning opportunities was positively related to offline civic engagement. Offline citizenship learning opportunities had a positive relationship with offline civic engagement and online participatory politics. Civic media literacy education is education that teaches the media literacy skills required for information in effective civic engagement (Middaugh, 2019).

The use of media technology needs to be emphasised in media literacy education (Kaun, 2014). Media literacy programs, academic skills, frequency of using the internet to access information and news improve civic engagement (Martens & Hobbs, 2015). Moreover, most young people utilise their smartphones daily to connect with social media to share, disclose information, and communicate (Mihailidis, 2014). Using social media as a component of the personal learning environment can enhance media literacy and deeper learning. Learning about problems becomes more interesting (Sweet-Cushman, 2019).

Students' ability is pivotal to distinguish the factual accuracy of civil information in social media. The diversity of media has a negative influence in the learning environment, as it was shown that self-regulated effort is not as effective in aiding students to learn when they have to deal with distractions brought about by diverse forms of media (Lange & Costley, 2019). As a civics education teacher, it is essential to provide media literacy skills to critically evaluate information. Learning can be done through discussion, group work, or activities that allow students to be skilled in consuming and evaluating news and information obtained (Kaufman, 2021). For students, one of the benefits of media literacy is that it can help students to be more aware of messages received from the media and build perceptions that will help direct them to take action against the media, whether

political, economic, or social (Ramsey, 2017). In addition, students need assistance with the media accessed. Students who receive assistance from parents or people who are more knowledgeable will avoid imitating negative content in media content (Wijaya et al., 2019).

At one small public school in New York City, young researchers used photography, collage, and videography to turn school hallways into civic spaces for critical conversations about race and gender. This civic space was formed from collective youth resistance, multimodal counterstories, and negotiated civic engagement (DeJaynes & Curmi-Hall, 2019). Critical media literacy if adopted as a compulsory school subject and taught as a dynamic literacy education will better equip young citizens to be resistant to various 'information chaos' (McDougall, 2019; Wardle & Derakhshan, 2017).

Media literacy education facilitates resilient media engagement among young citizens. For example, the Dutch "International Transition Class" school developed a media literacy program focusing on producing visual media using smartphones, to increase critical awareness and promote civic engagement (Leurs et al., 2018). Currently, many institutions are revitalising their commitment to meaningful civic engagement as a philosophical and higher education goal, because citizen engagement and media literacy are essential to promote democracy (Woolard, 2018).

Media literacy is a popular response mechanism that can foster young citizens critical of partisanship and distrust (Mihailidis & Viotti, 2017). In Brazil, media education is considered an invaluable resource for achieving the objectives of the education system (Bujokas & Rothberg, 2014), whereas in the Netherlands a good example of literacy education focuses on producing visual media using smartphones to increase civic engagement (Leurs, et al., 2018).

Civic engagement requires media literacy (Martens & Hobbs, 2015; Middaugh, 2019). When youths read and share multimedia information about public services, they learn about democracy, citizenship, civic engagement (Bujokas & Rothberg, 2014). This finding is supported by a survey of journalists in high school circles showing that women wanted to use student media to discuss urgent topics that could develop civic engagement contributions (Bobkowski & Belmas, 2017)). Media literacy education and educational discourse by facilitators conducting discussion based on social problem questions, can foster curiosity to assist college students in encouraging civic engagement as important potential (Friesem, 2015). Media literacy education may take the form of a course in making school-based videos. Media literacy and various learning experiences in a class by making videos are also associated with civic engagement (Hobbs et al., 2013). Through these activities, students will exhibit attitudes regarding news, current events, reporting, and journalism. Thus, special attention is needed on media literacy, civic engagement, independence, and transparency (Singer & Singer, 2018).

Based on research by Bowyer & Kahne (2020), learning digital consumption positively affects offline student civic engagement. Offline citizenship learning has a positive relationship with student civic engagement that is carried out offline and can be reflected in politics online. Therefore, it is essential to increase participation both offline and online.

Media literacy is studied through the lens of broadcasting, communication studies, cultural studies, cinema, and digital media studies (Christ & De Abreu, 2020). Passive and almost exclusive consumption of online information, scepticism and distrust concerns traditional media, distrust of digital media, and generalisation of the notion of "fake news". It significantly reduces civic engagement and may create doubt about the relevance of active participation, and the perception that young people are not news viewers (Silveira & Amaral, 2018).

In the *World's Most Literate Nations Ranked* research conducted by Central Connecticut State University (2016), Indonesia was ranked 60th out of 61 countries with low literacy levels. Although students are required to have media literacy, teachers are needed for innovations in overcoming these problems. Maybe this effort is not optimal without the role of the family. According to research conducted by Hastini et al. (2020), the use of technology in learning does not necessarily increase literacy in students in Indonesia. That's because they tend to find it difficult to communicate directly and by instant communication. Therefore, these problems are not only the responsibility of the school, but also require good communication between parents and children. Media literacy in the midst of various kinds of media abuse is expected to improve the state of democracy in Indonesia through civic engagement.

Limitations and future research

Despite the importance of this study, we found several limitations that provide scope for further research. First, we recommend future research using surveys of the respondent's families to investigate the most commonly used family communication model. Second, the study was conducted from February to April 2021. We recommend analysing a broader area to increase the reliability of the study results. This study collected data from respondents in Indonesia, a country with high Internet consumption. A similar topic is suggested in future research with a focus on other countries with high Internet consumption.

Conclusion

In this study, we examined family communication on civic engagement, which is deemed necessary for creating democratic life. The results showed that civic engagement in Indonesia was influenced by family communication and student media literacy. Media literacy was the main factor affecting the level of civic engagement of students. Family communication comprising conversation orientation and conformity orientation had a positive and significant impact on civic engagement. Family communication was mediated by media literacy on civic engagement in Indonesia. Accordingly, media literacy education is required because of media abuse. Therefore, it is necessary to incorporate media literacy into the education curriculum in Indonesia. Media literacy education needs to be given to young children because that age is the most vulnerable in consuming media. In addition, young people are expected to be agents of change in overcoming various kinds of problems in the digital era. To support media literacy is not solely the responsibility of the

school, as family communication is also a supporting factor. Media literacy education is not implemented only in schools, and therefore it is hoped that families will also have well-developed awareness.

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Appendix A: Questionnaire items

Response scale: Strongly disagree=1; Disagree=2; Agree=3, Strongly agree=4

Construct	Item	Statement
Conversation orientation (CSO)	CSO3	Parents ask for my opinion when discussing something.
	CSO5	Parents suggest that when faced with problems, look from many perception.
	CSO6	I used to tell my parents what I thought.
	CSO7	I share almost everything with my parents.
	CSO8	Family members often complain to the family.
	CSO9	I can chat with my parents for a long and relaxing time.
	CSO10	Although we have different opinions, I enjoy talking to my parents.
	CSO11	My parents encourage me to express my feelings.

	CSO13	As a family, we usually talk about the activities we have been doing throughout the day.
	CSO14	My family often talks about plans and hopes for the future.
	CSO15	Parents like to hear my complaints.
Conformity orientation (CFO)	CFO1	My parents expect me to comply when there is something important.
	CFO2	My parents are in control at home.
	CFO3	My parents feel it is important to be leaders.
	CFO4	Sometimes my parents get angry when I disagree.
	CFO5	My parents do not want to know if they disagree with my wishes.
	CFO6	When I am at home, I am expected to abide by my parents.
	CFO7	My parents often say that it is bad to know things in the wrong time.
	CFO8	My parents do not like it when I ask questions which are unnecessary.
	CFO9	My parents remind me not to fight with older people.
Media literacy (MDL)	MDL1	I can use a search engine to access to information.
	MDL2	I can keep up with changes in the media.
	MDL3	I can use various types of information media.
	MDL4	I can understand the messages in the media.
	MDL6	I can understand media content from the political, economic, and social dimensions.
	MDL7	I observe different thoughts and opinions in the media.
	MDL8	I can distinguish among various functions of the media (communication and entertainment).
	MDL9	I can distinguish media content that contains a commercial message.
	MDL10	I can classify the type, purpose of messages in the media,
	MDL11	I can find the correct news and information in the media.
	MDL12	I can take messages that are in the media.
	MDL14	I can analyse the positive and negative impacts of content on the media.
	MDL15	I can evaluate ethics and law in media (e.g., copyright, human rights).
	MDL16	I can judge the credibility and reliability of the media.
	MDL17	I can refrain from the harmful influence of media content.
	MDL19	I can create an account in the media.
	MDL20	I can utilise hardware to create media content (text, images, videos, etc.).
	MDL21	I can use software to create media content (text, images, videos, etc.).
	MDL22	I can operate basic operating tools like buttons, hyperlinks, transfer files on media.
	MDL24	I can comment on others' media content.
	MDL26	I can influence other people to participate in expressing opinions on social media.
	MDL27	I can have an opinion regarding socio-economic and ideological issues on social media.
	MDL29	I can show my personality in the media.
Civic engagement (CE)	CE3	I have volunteered with the health or social service community.
	CE4	I once volunteered to raise funds for charity.
	CE6	I get annoyed about fundraising charities.
	CE7	I am currently in a voluntary community.
	CE8	I refuse to volunteer with religious groups.
	CE15	I am not interested in expressing opinions in newspapers or magazines.
	CE16	I refuse to be a campaigner for a political party.
	CE17	I am willing to express my opinion in broadcast media.
	CE18	I still participate in the general election even though many people do not.

- CE19 I join the campaign, for example, by pasting stickers.
 CE20 When there is an election, I can convince other people to vote or refuse the party or candidate.
 CE21 I have never volunteered for a political organisation.
 CE22 I once refused money from a candidate (money politics).

Appendix B: Matrix of cross-loadings and loadings

Indicators	CE	CFO	CSO	MDL	Indicators	CE	CFO	CSO	MDL
CE15	0.717	0.726	0.32	0.713	CSO6	0.278	0.233	0.788	0.258
CE16	0.701	0.671	0.357	0.684	CSO7	0.188	0.177	0.734	0.178
CE17	0.595	0.571	0.348	0.553	CSO8	0.18	0.185	0.559	0.197
CE18	0.655	0.672	0.185	0.655	CSO9	0.294	0.242	0.805	0.269
CE19	0.529	0.711	0.125	0.587	MDL1	0.489	0.426	0.112	0.516
CE20	0.716	0.577	0.175	0.694	MDL10	0.724	0.507	0.241	0.681
CE21	0.623	0.487	0.321	0.597	MDL11	0.632	0.479	0.23	0.588
CE22	0.619	0.521	0.271	0.614	MDL12	0.48	0.448	0.186	0.549
CE3	0.724	0.507	0.241	0.681	MDL14	0.734	0.607	0.227	0.699
CE4	0.632	0.479	0.23	0.588	MDL15	0.717	0.726	0.32	0.713
CE6	0.734	0.607	0.227	0.699	MDL16	0.701	0.671	0.357	0.684
CE7	0.581	0.38	0.163	0.533	MDL17	0.595	0.571	0.348	0.553
CE8	0.697	0.458	0.216	0.63	MDL18	0.655	0.672	0.185	0.655
CFO1	0.717	0.726	0.32	0.713	MDL19	0.529	0.711	0.125	0.587
CFO2	0.701	0.671	0.357	0.684	MDL2	0.621	0.492	0.194	0.64
CFO3	0.595	0.571	0.348	0.553	MDL20	0.537	0.758	0.096	0.647
CFO4	0.655	0.672	0.185	0.655	MDL21	0.458	0.629	0.103	0.534
CFO5	0.529	0.711	0.125	0.587	MDL22	0.438	0.641	0.128	0.553
CFO6	0.537	0.758	0.096	0.647	MDL24	0.532	0.53	0.253	0.607
CFO7	0.458	0.629	0.103	0.534	MDL26	0.513	0.546	0.181	0.59
CFO8	0.438	0.641	0.128	0.553	MDL27	0.512	0.523	0.278	0.6
CFO9	0.355	0.537	0.203	0.449	MDL29	0.45	0.495	0.256	0.536
CSO10	0.331	0.318	0.804	0.318	MDL3	0.716	0.577	0.175	0.694
CSO11	0.223	0.218	0.684	0.211	MDL4	0.623	0.487	0.321	0.597
CSO13	0.283	0.237	0.828	0.251	MDL6	0.619	0.521	0.271	0.614
CSO14	0.307	0.227	0.694	0.289	MDL7	0.581	0.38	0.163	0.533
CSO15	0.149	0.124	0.544	0.127	MDL8	0.697	0.458	0.216	0.63
CSO3	0.275	0.283	0.679	0.282	MDL9	0.659	0.502	0.182	0.652
CSO5	0.288	0.216	0.627	0.265					

Patmisari (corresponding author) is a lecturer in the Department of Civic Education, Universitas Muhammadiyah Surakarta, Indonesia. Her research is focused on citizenship education and political education.
Email: pat179@ums.ac.id

Dr Ahmad Muhibbin is a senior lecturer at the Civic Education Department, Universitas Muhammadiyah Surakarta, Indonesia. His areas of research expertise include character education, citizenship education, and educational management.
ORCID: <https://orcid.org/0000-0003-2528-1833>
Email: am215@ums.ac.id

Wibowo Heru Prasetyo is a lecturer in the Department of Civic Education, Universitas Muhammadiyah Surakarta, Indonesia. His research is focused on character education, citizenship education, ecological citizenship, and digital citizenship.
ORCID: <https://orcid.org/0000-0002-9146-063X>
Email: whp823@ums.ac.id

Dr Sri Gunarsi is a senior lecturer at the Civic Education Department, Universitas Muhammadiyah Surakarta, Indonesia. Her areas of research expertise include citizenship education and sociology of law.
Email: sg219@ums.ac.id

Yeniar Elka Pramesiana is a student in the Department of Civic Education, Universitas Muhammadiyah Surakarta, Indonesia.
Email: yeniarelka@gmail.com

Marisa Zakiya Amini is a student in the Department of Civic Education, Universitas Muhammadiyah Surakarta, Indonesia.
Email: marisazakiyyaami@gmail.com

Achmad Muthali'in is a senior lecturer at the Civic Education Department, Universitas Muhammadiyah Surakarta, Indonesia. His areas of research expertise include character education, citizenship education, and multicultural education.
Email: am244@ums.ac.id

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