
Social capital, diffusion of innovation and political engagement: views of millennials

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Abstract: The millennial generation holds the power of a nation, and the future of the nation is in their hands. Moreover, phenomena, issues, and dynamics that occur in the millennial generation demographics related to social capital, diffusion of innovation, and political engagement are interesting subjects to discuss. This research was conducted in Padang, capital city of West Sumatra. Besides, the participants were millennials with the age of 19 to 38 years from various educational backgrounds, professions and domiciles. The purpose of this study is to analyse social capital on the diffusion of innovation, and social capital on political engagement. Based on the results of hypothesis testing, social capital positively and significantly contributes on the diffusion of innovation and political engagement.

Keywords: millennial generation; social capital; diffusion of innovation; political engagement.

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1 Introduction

In the last few years, the terms of millennial generation must have often been heard, even used in people's conversations in Indonesia as well as in other countries. As part of the terminology that is currently widely discussed and recognised, people somehow still get confused about the term. The availability of research about Indonesian millennials is very limited. This scarcity has caused the emergence of myths and stereotypes about the millennial generation (Utomo, 2019). Millennial generation, also known as generation Y, is younger generation that has a dominant uniqueness compared to the previous generation, and it is the first generation to see the internet as a great invention that can change everything.

Table 1 Name of generation based on birth year and age range

<i>Name of generation</i>	<i>Mature generation</i>	<i>Baby boomers</i>	<i>Generation X</i>	<i>Millennials/ generation Y</i>	<i>Generation Z</i>
Birth year	1925–1945	1946–1964	1965–1980	1981–2000	2001–now
Age in 2019	74–94 years	55–73 years	39–54 years	19–38 years	Under 18 years

Source: Compiled from Reeves and Oh (2008)

Additionally, according to Kian and Yusoff (2012), millennials are more cooperative and optimistic than their parents due to the fact that most of the millennials have a high

educational background or professional training. They are also great collaborators who show high support in teamwork and prefer to follow directions as long as they are provided with flexibility. Moreover, their motivation depends a lot upon good teamwork, demonstration of ability in group activities, instant communication practices, and expectation on feedback in their workplaces. Besides, the millennials were born and raised in a time when technology was sophisticated and advanced. With the help of technology, they are adept at assimilating information quickly, gaining wider knowledge, and becoming multitasking people.

As part of a social entity with a significant amount (34.45%), millennials hold a very important part in Indonesia, and will provide impacts on economic, social, and political aspects in future. Moreover, Indonesia is also preparing to face a demographic bonus that will reach its peak in 2030. The population of Padang in 2017 reaches 927,168 and 91% are above 15 years (categorised as work force) (Padang, 2018). The population of millennial generation (between 15–39 years) in Padang is 425,053 (212,943 men and 212,110 women), or around 48.85% of the population of Padang. Looking at the result, it turns out that the dominance of millennials also occurs in Padang as it occurs in most part of Indonesia. Based on the characteristics, total number, and diversity of millennials, they ideally become the force that can contribute to building this city and even Indonesia in the future.

Regarding social capital, Padang is known for having high Minangkabau values, customs and culture that originally become socially automatic for the community. One of which can be seen from the literary work which is a philosophy of life. It is written in words or sentences that can be provisions in social life. One of the examples is “Duduak surang basampik-sampik, duduak basamo balapang-lapang” (sitting alone feels crowded, sitting together feels roomy). It means that solving a problem alone will be difficult; however, it will be a lot easier if it is assisted by others. Another example is “Barek samo dipikua, ringan samo in jinjiang” (if it is heavy, it is shouldered together. If it is light, it is carried together). This provision means that everything is a lot easier when it is done together.

In the last two decades, researchers have paid much attention to the role of cultural values in economic and social development. In particular, the important role of various aspects of culture in the development of innovation has been emphasised in various literatures (Ghazinoory et al., 2014). As a result, it is very important to understand how social capital as a core cultural value influences the process and performance of innovation. The rapid development of information technology causes evolution in the industry, known as Industry 4.0. Likewise, it also occurs in other sectors such as Tourism 4.0, Agriculture 4.0, Healthcare 4.0, etc. The occurrence of the revolutionary phase from time to time is caused by humans who continue to look for the easiest way to indulge, and this is also illustrated by the lifestyle of the instantaneous millennials. According to Sanni et al. (2013), studies on diffusions have reported that the rate of technology adoption channelled through the internet is moving faster than other media. However, there are significant differences in the patterns and processes of diffusion in various types of innovation (Rogers, 2003).

Unlike internet platforms such as Facebook, Instagram, WhatsApp, blogs, and Twitter, or other social media that come for free with very minimal risk, other innovative platforms may come with price. There is an interesting finding in the study carried out by Pyöriä et al. (2017). They studied millennial generation in Finland in which Finnish

society is a very advanced in information and communication technology (ICT). The findings showed that all working-age people use ICT on a regular basis; however, millennials in Finland are still having trouble finding work, and it becomes a concern for them. Moreover, Spain, Italy, Greece, and other European countries are experiencing financial crises, where youth unemployment has surged by more than 50% (Pyöriä et al., 2017).

Another interesting issue and dynamics about millennials is political engagement. Indonesia has gone through many steps in terms of democracy, and it is the third largest democracy in the world after India and the USA. Besides, Indonesia is known as a country with simultaneous direct elections in the world with data in 2014 of 187 million voters and as the most complex democratic country by region size and election organiser. It is also known as the largest Muslim democracy in the world. Moreover, various articles on the political engagement of the people in many countries, especially in millennial generation are decreasing, even separated from the formal political process and democratic institutions, or can be said to be increasingly distant and reluctant to political processes and matters.

2 Literature review

2.1 Social capital

The topic of social capital has attracted academics and practitioners for decades and is still relevant today as it is proven by its application to various disciplines and various subject fields (Ishak et al., 2017). The concept of social capital has a substantial pedigree in the social sciences (Smith et al., 2002). The term social capital was first used by US political reformer, Lyda Hanifan, in a study conducted in 1916 that described the centres of rural communities, and it was often traced back to early 20th century (Putnam, 2000). According to Glenane-Antoniadis et al. (2003), social capital is a theoretical umbrella, uniting concepts such as relational, trust, social resources, social exchange, informal organisation, culture, networking between companies, social networks, relational contracts, and social support. Its popularity has increased rapidly over time and has been adopted by various disciplines, including economics, political science, and organisational theory (Glenane-Antoniadis et al., 2003).

The formation of social capital is the development of networks in which people can identify problems, share information, and implement strategies designed to solve problems for the common good (Debertin and Goetz, 2013). According to Kapucu (2011), the idea of social capital has been popular in various disciplines. The definition of the concept of social capital is complex which has been referred to and illustrated by various explanations and meanings throughout the literature. "This is not what you know, but who you know." These common aphorisms summarise many conventional policies regarding social capital (Woolcock and Narayan, 2000). Intuitively, the basic idea of social capital is family, friends, and colleagues which are important assets that can be called upon during a crisis, enjoyed for their own interests, and utilised to obtain material (Woolcock and Narayan, 2000). Social capital is a tangible and intangible source for organisations to use appropriately. It is also associated with the extent to which people share information, and are concerned with the resources embedded in network relationships (Zheng et al., 2017).

Sociologists have agreed on proposed social changes about the demographic changes of the younger generation with common experiences (for example, formal education, socialisation with colleagues, groups, and historical stories) that move through society (Bolton et al., 2013). The millennials may lead to changes in social norms and policies at the community in domains such as political participation, privacy and public safety. One of the ways is through social media. In fact, there is evidence to support the positive impacts of using social media by millennials in political elections (Bolton et al., 2013). Social media is stimulated and invites millennials with the age of 20 to 30 years to be gathered and successfully protest the government's plans in Bulgaria. Besides, social media connects and organises groups of young people, for example against large demonstrations, which are taken with the dismissal of government leaders as what happened in Tunisia, Libya and Egypt.

The scope of social capital study is very broad, covering all aspects; thus, each researcher can determine what aspects of social capital will be studied. The dimensions of social capital in this study are tailored to the characteristics and problems of millennials. Dimensions (as well as indicators) of social capital in this study are groups and networks, credibility, collective action and cooperation, social cohesion and inclusion (Hamdan et al., 2014), norms (Azizi and Shekari, 2018) and tolerance (Lebedeva et al., 2013).

2.2 Diffusion of innovation

According to Rogers (2003), innovation is an idea, practice, or object that is considered new by individuals or other adoption units. Moreover, it is best understood as something new that has been successfully incorporated into social or economic processes (Monge et al., 2008). According to Dearing and Cox (2018), when someone learns about innovations that they think might have important consequences for them, uncertainty about how to respond usually leads to the search for more information; thus, potential users can better judge whether the attributes of innovation can guarantee further exploration. According to Rogers (2003), the diffusion of innovation is the study of how and why innovation is adopted by people, groups, organisations, or countries (subsequent adopters), and it is about the level and pattern of adoption. The idea of diffusion or spreading of new ideas and products has been studied since the beginning of the 20th century (Scott and McGuire, 2017).

Diffusion is a natural social phenomenon that occurs with or without any particular theories to explain it. In addition, diffusion is also a natural physical phenomenon which describes the spread of objects in time and space (Kincaid, 2004). The diffusion of innovation is a theory of how new ideas and technologies are spread in a culture (Rogers, 2003). Further, Rogers (2003) defines the diffusion of innovation as the process by which an innovation is communicated through certain channels over time among members of the social system. Diffusion can also be considered as a cumulative pattern of individual adoption decisions based on the time; times to adopt, reject, or stop innovation in social groups. Moreover, there are four elements of innovation diffusion theory that mark the spread of ideas that are considered new:

- 1 innovation itself
- 2 innovation that refers to ideas, applications, or objects which are considered new

- 3 communication channels used for education and outreach; adopting an idea from time to time
- 4 innovations introduced among members of the social system (Rogers, 2003; Scott and McGuire, 2017).

Based on the four elements of the framework, more and more sub-theories and concepts of innovation diffusion theory are continually applied and developed.

Mannan and Haleem (2017) tried to develop a framework for the diffusion and adoption of innovations that could help learn and understand dimensions and determinants from four different perspectives, namely innovation, social systems, communication, and time. This study can provide assistance in deciding and prioritising the dimensions and determinants of diffusion and adoption of innovation. According to Mannan and Haleem (2017), many past research hypotheses stated that setbacks that happened during diffusion are more prominent than postponement that happened during the manufacturing or product development stage. Although it has been established that diffusion and adoption are the most cardinal phases of the innovation process, practically no effort has been made to develop a diffusion and adoption framework, or to learn and understand dimensions and determinants from different perspectives (Mannan and Haleem, 2017).

Mannan and Haleem (2017) used the four dimensions taken from the most citing diffusion book in social science that links with the study of diffusion of innovation written by Everett M. Rogers. In the book, there are more than 77,533 citations. Indicators or sub-factor dimensions are identified with the help of an extensive literature summary of most cited articles in the fields of diffusion and adoption of innovations. After identifying the dimensions and determinants, Mannan and Haleem (2017) have held workshops where they seek experts' opinions about categorisation of the determinants under the four dimensions. Then, they have agreed on seventeen sub-factors (indicators) of innovation, social systems, communication, and time, or problems that are justified from different study references. For more valid data, statistical techniques can be used for this determinant (Mannan and Haleem, 2017). Suggestions about dimensions and determinants proposed by Mannan and Haleem (2017) will be dug up further in this study.

2.3 Political engagement

Political engagement and political participation are considered necessary conditions for democracy to function effectively (Barrett and Zani, 2014). Political engagement initially referred to voting in political elections. The concept has been expanded to include various other political activities (Park and You, 2015). Political engagement is a term that can be exchanged for political participation because voting during political elections is usually a typical form of political participation (Park and You, 2015). Although political engagement is often identified with political participation, political engagement can be distinguished from the concept of political participation in a number of ways (Pontes et al., 2018). Carreras (2016) distinguishes between cognitive and active political engagement. Cognitive political engagement refers to the psychological involvement of citizens in the political system, including whether they are politically interested, seeking political information, and identifying certain political parties. On the other hand, active political engagement manifests itself in a higher probability of contacting politicians,

attending political party meetings, and participating in public meetings (Pontes et al., 2018).

According to Klesner (2007), what is meant by political engagement is the psychological dimension of involvement in politics. Meanwhile, some experts argue that following politics in the media and discussing politics with acquaintances is one way of political participation. Klesner (2007) continues to distinguish between subjective engagement in political sideline affairs and active participation in politics which requires entering the public sphere in one way or another. Moreover, Lockyear and Cunningham (2017) argue that engagement involves interacting with others, or the opposite of isolation. In acknowledging a relationship with others, one cannot avoid active participation with themes that are of concern to others. Involvement facilitates self-differences, identifies similarities with others, and generally helps to build the political environment in which a person works (Lockyear and Cunningham, 2017).

Political engagement includes participation in five activities:

- 1 voting
- 2 signing the petition
- 3 participating in social movements
- 4 participating in legal or legal demonstrations
- 5 joining political parties or citizen associations (Park and You, 2015).

Among the five types of political engagement activities, a more direct one is joining political parties and civic associations. In addition, previous studies have shown young people who associated politics with values and ideology, political engagement that is assumed to take position and have values, and their enthusiasm (Pontes et al., 2018). However, when describing what they understood about political involvement, it led to the emergence of ideas from the participants in research conducted by Sveningsson (2016), such as finding and getting information, be aware of, getting involved, having their own opinions, showing interest in political issues, and be proactive to defend one's beliefs. Furthermore, participants did not refer to vote when discussing the main indicators of political engagement; this is similar to other studies' findings (Pontes et al., 2018).

The young generation is often categorised as a problematic group, which shows a low turnout, a lack of trust in democratic institutions, and signs of scepticism and cynicism towards politicians and political parties (Dalton, 2008). According to Furlong and Cartmel (2012), most political scientists accept the notion that young people have a relatively low interest in conventional politics. In many developed countries, young people are less likely than older citizens to express interest in political parties, to identify with certain parties or vote in local, regional or national elections. Various explanations have been put forward to explain the lack of engagement of young people, including the idea that they are relatively apathetic, alienated, or that they fail to see the relevance of the political agenda in which they perceive as a merging of their little interests.

On the other hand, some researchers such as Barrett (2012) and Dalton (2008) argue that the modern young generation begins to relate to politics and public life in ways that are clearly different from the concept of political engagement that has become a dominant feature among previous generations (Xenos et al., 2014). Pontes et al. (2018) propose an update to the definition of political engagement put forward by Barrett (2012)

that was discussed earlier, and developed by considering the literature in the field of political engagement as well as incorporating some ideas that emerged from the focus group discussion (FGD) they do with young people. To map the definition of political engagement that considers the reality and conception of young people, Pontes et al. (2018) propose that political engagement must be defined as having an interest, paying attention, having knowledge or opinion, being aware, proactive, and continually informed about politics. This political engagement can occur online and offline because young people do not distinguish between these two realities.

Pontes et al. (2018) argue that political engagement can be understood as a psychological process that includes cognitive and emotional dimensions. The cognitive dimension can be defined as the investment and willingness of people to put forth the effort needed to understand and master complex ideas and skills that are challenging to deal with political issues. Examples of cognitive political engagement act include finding political information online, signing petitions online or offline, being interested in the political agenda, and watching political debates (Pontes et al., 2018). Meanwhile, the emotional dimension of political engagement reflects positive and negative reactions to politicians' actions and instructions, positive and negative reactions to other people's opinions about politics, perceptions about political parties, and beliefs about political values (Pontes et al., 2018). Examples of emotional political involvement include, among others, sharing one's own thoughts about politics or commenting on social media so that other people read, use or display symbols or signs that represent support for political reasons, and/ or express opinions about issues of citizenship or politics.

The dimensions and indicators of engagement in this study are taken from Pontes et al. (2018) indicators, namely cognitive and emotional. In addition, political engagement is identical to political participation. Besides, 2018 and 2019 were political year. In that year, there were a number of political agendas or democratic parties, such as the Regional Election in 2018, the General Election and the Presidential Election in 2019. Then, this study also used the dimensions proposed by Narayan and Cassidy (2001), namely voting in the last local election, with three indicators. The three indicators include participation in the elections, participation in the general election or presidential election, and volunteering (political parties/ candidates) in the local, general, or presidential elections.

2.4 Research hypotheses

Hypotheses of this study are:

- 1 social capital has a positive and significant contribution on the diffusion of innovation
- 2 social capital has positive and significant contribution on political engagement.

3 Research methodology

This study was conducted in Padang, the capital city of west Sumatera. The participants of this study were millennial generation with age of 19 to 38 years from various educational backgrounds, professions and domiciles. This study aimed to investigate and analyse interactions between variables which were social capital, diffusion of innovation,

and political engagement, and was discussed through various reflective indicators. The population in this study was 425,053 millennials in Padang (Padang, 2018). From this population, 400 millennials were selected as respondents in this study. Besides, purposive technique was used to select the samples. Here are some criteria used in selecting the respondents:

- 1 the level of education of at least high school or equivalent
- 2 domicile in Padang City for at least 1 year or more
- 3 have never granted the right to vote in the general election and presidential election
- 4 not working as a policeman or soldier.

The type of this was an explanatory research, using quantitative methods through surveys that use a questionnaire instrument, with the analysis of partial least squares-structural equation modelling (PLS-SEM) which is carried out in three stages, namely outer model analysis (validity test and reliability test), inner model analysis (coefficient of determination or R square (R^2), hypothesis testing, and path analysis) (Hair et al., 2017). The first step is to determine the construct of the research indicators. The model construct in this study is a construct with a reflective indicator model. The reason is because it is based on previous studies, and from the model proposed in this study, each construct is explained by each indicator. In addition, the indicators in each construct measure the same thing. The reflective indicator model is a model that assumes that the covariance between measures is explained by the variance which is a manifestation of the latent construct, where the indicator is an indicator of the effect.

4 Results and discussion

The AVE score of social capital was 0.522; diffusion of innovation was 0.570, and political engagement was 0.570. Then, the AVE score of the three variables can be declared valid. Cronbach's alpha (>0.600) for social capital, diffusion of innovation, and political engagement respectively were 0.955, 0.972, and 0.972. Value of composite reliability (>0.700) for social capital, diffusion of innovation, and political engagement respectively were 0.954, 0.969, and 0.973. Therefore, it can be concluded that the reliability of each variable has been fulfilled. The coefficient of determination or R square (R^2) diffusion of innovation was 0.704, meaning that the influence/ contribution of social capital on innovation diffusion was 70.4%. R^2 value of political engagement was 0.591 meaning that the contribution of social capital on political engagement was 59.1%. Q^2 value indicates that the model has predictive relevance, which was 0.879 (>0). The probability value of the contribution of social capital on the diffusion of innovation was 0.000, smaller than the sig-value, 0.05. The t-statistics, 31.619, was greater than t-table, 1.645. It can be concluded that social capital has a positive and significant contribution on the diffusion of innovation. Moreover, the probability value of the contribution of social capital on political engagement was 0.000, smaller than the sig-value of 0.05. The t-statistic was 24.216 and it was greater than t-table, 1.645. Thus, it can be concluded that social capital has a positive and significant contribution on political engagement.

Table 2 Results of hypotheses testing

<i>Hypotheses</i>	<i>t statistic (O/STDEV)</i>	<i>P-value</i>	<i>Note</i>
Social capital → Diffusion of innovation (H1)	31.619	0.000	Positive and significant
Social capital → Politic engagement (H2)	24.216	0.000	Positive and significant

Source: Data analysis (2019)

4.1 Contribution of social capital on diffusion of innovation

Some researchers have considered social capital as a determinant of innovation adoption (Monge et al., 2008). The results of hypotheses testing indicate that social capital has a positive and significant contribution on the diffusion of innovation of millennials. The better social capital is, the higher the diffusion of innovation will be. Conversely, if social capital is weak, then the diffusion of innovation will decrease. These results are supported by several previous studies, such as Frank et al. (2004), Monge et al. (2008), Crescenzi et al. (2013), Ishak et al. (2017), Lebedeva et al. (2013), Kashi and Afsari, (2014) and Ghazinoory et al. (2014). One of the studies found that the predominant reason for millennials to adopt an innovative product is the need for work (192 respondents or 48%), and following trends or lifestyle (189 respondents or 47.2%). Meanwhile, other reasons for respondents in adopting an innovation product are the necessities of life, its usefulness, needs and interests, family's needs, personal needs, curiosity about new things, and desire to try new things. Because of innovative products, we can have new ideas, daily needs, try something new, and keep up with current development to improve living standards, working life and social life. Thus, it can be concluded that the majority of millennials have an awareness of the importance of innovation in their lives.

According to Ghazinoory et al. (2014), in the last two decades researchers have paid much attention to the role of cultural values in economic and social development. In particular, the important role of various aspects of culture in the development of innovation has been emphasised in various literatures. As a result, it is very important to understand how social capital as a core cultural value influences the process of innovation and innovative performance. The role of social capital is very important for the diffusion of innovation. The diffusion of innovation is the spread of innovation within a population or community of organisations. The mechanism of diffusion occurs because there is an underlying force that encourages the spread of an innovation. There is a power that is able to transfer an innovation in an entire community or social system, one of which is social capital owned by community members in a social system. Creation of new ideas is not enough; innovation must spread to many people and can change the system, and it, then, can only be said as innovation.

Social capital acts like a precursor to innovation and organisational performance. Most of the literature has provided very different ways in which social capital contributes on economic and social activities Crescenzi et al. (2013). One of the main highlighted observations in many studies is the role of social relations and community structure in the diffusion process (Monge et al., 2008). Communication and information related to new knowledge are proven to be embedded in social interactions that are more common among individuals. The pattern of information flow received and sent by individuals is thus related to their social environment, their network of relationships, and their status in

the network (Monge et al., 2008). According to Hopp and Barker (2016), young people tend to be in the forefront in terms of using the internet. Innovation is commonly referred to millennial generation and technology, including information technology or the internet, and what is most visible from millennial generation compared to the previous generation is the use of technology. Information technology is developing so rapidly that it causes evolution in the industry, also known as the Industrial revolution 4.0. The revolution that occurs from time to time is caused by humans who continue to look for the easiest way to indulge in, and are depicted from the lifestyle of an instantaneous millennial generation. This is much influenced by the rapid development of the internet, the widespread use of smartphones and social media

In the previous research hypotheses, it is stated that setbacks that happened during diffusion were more prominent than postponement that happened during the manufacturing or product development stage (Mannan and Haleem, 2017). With this study, the diffusion of innovation is no longer a complex, long, and most cardinal phase of an innovation process that is identical to technology or information technology. In order to be competitive in facing the era of the Industrial revolution 4.0, old literacy (reading, writing and mathematics) alone is not adequate. Millennial generation needs new literacy, such as human literacy (humanities and communication), data literacy (the ability to read, analyse and use information), and technological literacy (understanding technology). The government as the policy maker must be able to create regulations and programs that can build social capital and create a diffusion of innovation in order to prepare a more competitive future generation.

4.2 Contribution of social capital on political engagement

Based on the results of hypotheses testing, it is revealed that social capital has a positive and significant contribution on the political engagement for millennial generation. The better social capital is, the higher political involvement will be. Conversely, if social capital is weak or bad, political engagement will decrease. These results are supported by several previous studies, such as Kahne et al. (2006), Narayan and Cassidy (2001), Bwalya and Sukumar (2018) and Tossutti (2016). In this study, it was found that 67.2% (269 respondents) of the millennials had done voting on regional head election in Padang for more than once. Meanwhile, there were 131 respondents (32.8%) that have voted once on regional head election. Furthermore, for general election and presidential election, there were 288 millennials (72%) have given their voting rights for more than once, and there were 112 respondents (28%) who have done it once. It can be concluded that the majority of the millennials in Padang has had experience in political participation in the regional head election, general election and presidential election.

Political participation is usually defined as an attempt to influence political life. However, the political behaviour of people is not always dominated by freedom of will to participate. The most influential work on political behaviour came from Sidney Verba (Pausch, 2011), who developed a model for citizen volunteerism based on the same theoretical assumptions as social capital theory. Verba et al. (1987) convincingly show that it is not only rational thought that determines political behaviour, but cultural aspects and contexts are crucial for citizen engagement in politics (Pausch, 2011). Political engagement is considered an important element for stable democratic development as a

necessary condition for democracy to function effectively, and people get more opportunities to take a position and act politically with one another (Park and You, 2015).

Based on observations done in Padang, there are currently many various and diverse communities or organisations of millennial generation. It starts from the communities or organisations related to hobbies, professions, arts and culture, sports and the alumni community of a school or college. This shows that millennial generation already has social capital from their communities; thus, it encourages their engagement in politics. According to Klesner (2007), social capital is an important factor in encouraging a higher level of political participation, which is usually associated with a richer and fuller democratic experience. As a matter of fact, many are pessimistic about the political engagement of millennials as it is shown on the results of previous studies. However, different results are shown by the millennial generation in Padang in which the majority of them have experience in giving the right to vote in the elections in 2019 General and Presidential Election. Moreover, in 2020 millennials will also have to give their voting right in regional head election and governor elections. Moreover, the dynamics at the 2019 presidential election were very attention-grabbing, and caused high political engagement of millennials.

For more than a decade, sociologists, political scientists, and educators have investigated several ways on how social capital can increase the productive capacity of groups and individuals in the economic, political, social, and functioning of democratic institutions (Kahne et al., 2006). A successful and efficient democratic system is most likely to be found in tolerant and cooperative societies, which show a high level of life association, and trust between them. Conversely, in societies that are relatively lacking in social capital, they tend to show greater inefficiency and corruption (Putnam, 1993).

Indonesia is the third largest democracy in the world after India and the USA, and has gone through many steps in terms of democracy. Democracy demands every society including millennials to be democratic, and whether they like it or not, they must concern about politics. According to Barrett (2012), political engagement and political participation are considered as necessary conditions for democracy to function effectively. The government as the policy maker in the future must also be able to create regulations and programs that can build social capital and political engagement. With the engagement of millennials in politics, it can make them concern and aware of politics. Every political action carried out by millennials will affect the implementation and determinants of the progress of the country and cities, and even have an impact on the environment where they live, and their own personal lives.

5 Conclusions and implications

Based on the results of hypothesis testing, the following conclusions can be drawn:

- 1 social capital has a positive and significant contribution on the diffusion of innovation
- 2 social capital has a positive and significant contribution on political engagement.

In addition, this study can have implications for the behaviour of millennials. They become aware of the importance of maintaining emotional relationships with those around them (family, neighbours, friends, coworkers, and others) in order to increase the

diffusion of innovation and become aware of the importance of being involved in politics. Furthermore, this study also has implications for the government as a policy maker. To encourage the creation or the increase of social capital, the diffusion of innovation, and political engagement in millennials, it cannot be done on its own. It needs the participation of various stakeholders, including the government in the form of policies, so that it can be a stimulus for millennials. Based on the characteristics, the diversity of millennials, and the population that is quite dominating, ideally this should be a concern because they are a force that can contribute to building the future.

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Appendix

Attachments to tables and figures

Path analysis result table

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T. statistics (O/STDEV)	P-values
Social capital → Diffusion of innovation	0.863	0.869	0.027	31.619	0.000
Social capital → Political engagement	0.792	0.801	0.033	24.216	0.000

Image model from research result (see online version for colours)

