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Unfolding the pattern of contentious participation in Taiwan

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1. Introduction

Global violent revolts against both democratic and non-democratic regimes have caught the attention of governments and academia (Tilly and Tarrow, 2015). On December 17, 2010, the self-immolation of Mohammed Bouazizi, a Tunisian street vendor, sparked countrywide protests against the injustices of the local police. Scenes of protest played out again and again in Algeria, Oman, Yemen, Egypt, Syria, and Morocco. The wave of uprisings spread upwards into Europe. Mass protests erupted in London and Stockholm in 2011 and 2013, respectively. While deprivation and poverty could be the key causes of these riots, still other possible factors could lead to contentious activities.² In South America, research suggests that economic slumps and corruption were the key reasons why Venezuela, Paraguay, Argentina, Brazil, Colombia, Chile, Ecuador and French Guiana all faced large demonstrations.3 On August 9, 2014, in Ferguson, Missouri, an 18-year-old African American youth was fatally shot by a white police officer. The death of Michael Brown instigated a certain amount of street violence, while the Black Lives Matter movement has since organized a handful of national and local protests. Looting and vandalism occurred at the same time. In Asia, laborers and students gathered in South Korea's major cities on August 23, 2013, protesting an election manipulation scandal that erupted in the 2012 presidential election. In 2015, Koreans protested the National Intelligence Service's (NIS) attempt to sway public opinion ahead of the presidential election out of fear that these kinds of abuses of power would happen again. From mid-September to mid-December 2014, students in Hong Kong led a series of sit-in street strikes pressing Beijing to adopt universal suffrage in the 2017 Chief Executive election. This galvanization of political activism among youth has been widely noticed.

These widespread movements across Europe, Africa, America, and Asia pose challenges for democracy and globalization. To explain the underlying causes of individual activism, scholars have tapped into the literature on political participation and democratization. While

economic grievances may account for high participation in the Arab Spring (Beissinger et al., 2015), online mobilization could be a key reason why millennials and the younger generation have partaken so much in recent social movements (Chen et al., 2016). In addition to a generational difference in contentious participation, religious beliefs have been demonstrated as another important factor in an individual's conventional and unconventional participation in Taiwan (Chang, 2016)

Considering the scope of unrest and its effect on democracy, it is necessary to devote more research toward factors other than personal grievances and demographic backgrounds. More specifically, we would like in this study to address the enduring puzzle of the relationship between age and social disorder. While the younger generation seems to represent the majority of protesters, there is as yet no definitive evidence regarding the effects of age on contentious action (Chung, 2016; Wang and Weng, 2017). As we believe that it is imperative to study protest behavior with a solid theoretical foundation, the civic voluntarism model was chosen to test whether personal resources and political attitudes may have a bearing on patterns of contentious politics. We contend that the probability of taking part in a demonstration increases with age because older people tend to acquire more skills and personal resources. Accordingly, we examined the effects of education, political efficacy and cognitive mobilization on protests, which may contribute to the current literature on contentious action.

We chose Taiwan as a case study to test our hypotheses. Taiwan has held routine elections at the national and local level since the 1960s. Before democratization in the 1990s, however, people often decided on contentious action to express their discontent with labour, the environment, and civil rights issues. Many of the activists organized the opposition party, Democratic Progressive Party (DPP), and challenged the ruling party, Kuomingtang (KMT), both in the elections and on the streets. Contentious politics continues after the second party turnover in 2008, and Internet and social media is used to diffuse messages. In March 2014, several groups of college students protested against a

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¹ Retrieved from BBC. http://www.bbc.com/news/uk-14668770.

² Retrieved from Guardian. http://eprints.lse.ac.uk/46297/1/Reading%20the%20riots(published).pdf.

³ Retrieved from Washington Post. https://www.washingtonpost.com/world/the_americas/protests-sweeping-south-america-show-rising-antigovernment-anger/2017/04/15/c086c10c-1f92-11e7-bb59-a74ccaf1d02f_story.html?utm_term = .5dbf68d6d71a.

⁴ The DPP was established in 1986, about one year before the KMT decided not to ban the formation of political parties to address the legitimacy issue (Wang, 1989). As a minor party in the beginning, the DPP often resorted to non-institutional political actions. After the DPP becomes more and more institutionalized, it also absorbed issues and leaders of new social movements.

congressional review of a trade pact with China, which had been passed by the standing committee. From March 18 to April 10, hundreds of students stormed and occupied the Legislative Yuan, the national legislature, to paralyze the legislation. Under pressure from students and civil society, KMT agreed not to pass any agreement without first enacting a law to regulate the review process. It was named Sunflower student movement because students held the sunflower to symbolize their call for more sunshine on the legislative process. Quite a lot of research pointed to the influence of national identity (Tsai and Chen, 2015), civil disobedience (Wang and Weng, 2017), and social networks (Chen et al., 2016). Since political participation is "a social and psychological decision" (Dalton, 2014:78), the role of political attitudes such as political efficacy and political cognition should be examined closely. In agreement with previous literature, this research aims to provide evidence that factors such as political efficacy, expectations for government transparency, political discussion, and partisanship help to explain civic activism in an East Asian democracy. We also contend that the tendency to take part in demonstrations increases with age. These empirical findings may shed light on the dynamics of global activism and contribute to the literature on political participation in general.

2. Modes of political actions

Political participation is defined as "activities of citizens that attempt to influence the structure of government, the selection of government authorities, or the policies of government." (Conway, 1991) This definition excludes psychological involvement such as party identification or political interest as well as acts such as political discussion (Verba and Nie, 1972). Many forms of active involvement in the process of government, including campaign activities, are counted as political participation. Milbrath (1965) presented a pyramid of political involvement with the mass public at the base and political elites at the top. As a symbol of democratic principles, voting is the most fundamental form of political participation. At the second tier of political participation are attending a rally, donating money to a party, and other activities. The top forms of political participation include holding office, becoming a candidate for office, and being an active member of a political party.

After extensive research into acts of political participation, Verba and Nie (1972, 31) summarized their findings into the categories of voting, community activities, contacting government leaders, attending a meeting or rally, and giving money to a party or candidate. Verba, Nie and Kim (1978) classified different forms of political participation according to the extent to which they are able to exert pressure on the government, defining them as voting, campaign activities, contacting officials directly, and communal activities. Barnes and Kaase (1979) and Conway (1991) categorized political actions as either "conventional" or "unconventional." Conventional participation that is accepted by most people seeks to influence government through routine channels, such as voting, running for office, and writing to representatives. Unconventional participation is a behavior that challenges the government, such as demonstrations, sit-ins, or occupying buildings. Voting is clearly the least intensive and demanding of these activities, but other activities can interrupt government action before the election is held. Verba, Schlozman and Brady (1995:38) defined political participation as " activity that has the intent or effect of influencing government action." Their forms of political participation include voting, volunteering for campaign work, expressing opinions to the government, attending a rally, and making a donation to politicians and protest activities. On top of Verba et al. (1978)'s four participation modes, Dalton (2014) has added two more forms of political participation: protests and contentious action, and Internet activism. He argues that, "protest was an outlet for those who lacked access through conventional channels."

In short, there are two types of political participation: the conventional (voting, contacting politicians, donating money, signing

petitions, and campaign activities) and the unconventional (protests, demonstrations, rallies, and sit-ins). Rather than examining every mode of political activity, this study focuses specifically on the act of taking part in a demonstration. Through contentious participation, citizens attempt to block or accelerate policymaking on a single issue, such as the anti-nuclear movement, anti-annuity reforms, or gay marriage, for instance. While petitions, donations, and letters to representatives may have some desired responses, demonstrations as collective actions can draw more attention in a shorter period of time. The rationality of this kind of political activity, therefore, merits as much attention as voting, which is the most common form of political activity (Verba et al., 1995). Cross-national data shows a simultaneous increase in unconventional participation and a decrease in voting in most democracies (Dalton, 2014). Protest becomes another outlet of discontent with the government. Therefore, certain elements of the conventional participation apply to protest (Verba et al., 1995).

With this in mind, this study centers on demonstrations in an East Asian democracy, Taiwan, as a case study. From the perspective of political and social context, East Asia is different from Western democracies. In specific, Japan began to democratize after the Second World War, and Korea and Taiwan has not departed from authoritarian until the late 1980s. It is argued that the citizens of these three countries may not fully commit to democracy yet (Park, 2007). However, this region is under-studied due to language and other obstacles (Tilly and Tarrow, 2015). The extent to which Western participation model can travel to this region is of theoretical interest. As this mode of political participation exhibits factors common across many countries, this research can provide useful insight for other cases of contentious politics.

3. Determinants of political participation

There are several approaches to studying political participation. In rational choice theory, the primary elements are costs and benefits. It is assumed that voters calculate the difference between costs and benefits when they decide whether or not to participate in politics (Downs, 1957). Rational choice theory concentrates on the difference between the costs and benefits of voting and the probability of realizing the benefits. Riker (1968) included civic duty as a social psychological term that emerged to counteract the costs of voting, while Fiorina (1976) described the role of partisanship as being beneficial for a candidate during a given interaction term. An individual often perceives there are greater benefits to voting when the winning candidate belongs to an individual's favored party. Blais (2000) also pointed out that a sense of duty may be the only explanation why people turn out to vote when it appears irrational according to rational choice models. Chang (2016) found that in East Asia, citizenship based on civic duty has a significant effect on political participation.

Brady et al. (1995) and Verba et al. (1995) proposed the civic voluntarism model in which resources are critical to participation. They argued that 'the resources component of the Civic Voluntarism Model links both rational choice theory and the socioeconomic approach to political activity.' (Verba et al., 1995: 287) Compared to terms like civic duty and benefits in rational choice theory, it is far easier to operationalize resources, motivation, and access to recruitment networks as described in the civic voluntarism model. Resources can be measured by subjective indicators, such as free time and money; or an individual's perceived capacity to influence public affairs. When people learn political skills from non-political organizations, they would be likely to get involved in voting, contacting, campaign work, and protest. Family background and early experience in school is also critical for commitment to participation (p. 272). Rubenson (2000) contended that motivation is what gets citizens to participate. Access to recruitment networks considers the importance of social organizations and fellow citizens. Dalton (2014) summarized the civic voluntarism model as three points: they can, they want to, and they are asked to participate.

We call it 3M model for it includes motivation, means, and mobilization. Kern et al. (2015) examined European participation from 2002 to 2010 and found that as in the civic voluntarism model, variables such as level of education and income can explain non-institutional forms of participation that include boycotting policies and taking part in demonstrations. In this study, education, age, and income are measured as indicators of a voter's resources.

Political efficacy is one of several attitudes that encourage participation. Efficacy refers to an individual's perception of influence on the political system (Milbrath and Goel, 1977). As Campbell et al. (1954: 187) put it, "political and social change is possible." People who feel that they can influence the making of public policy are more likely to get involved in politics. Abramson and Aldrich (1982) argued that declining external efficacy and weakening partisanship contribute to low turnout. Burns, Schlozman and Verba (2001) and Dalton (2014:77) found that political efficacy exerts a significant impact on political activity. Political efficacy is also related to trust (Niemi et al., 1991), which is cultivated in voluntary associations and likely to generate political action (Almond and Verba, 1963). Norris (2012) suggested that motivation, such as political interest and political trust; and resources, such as time and skills, are the two major causes of political participation.

Party attachment is another driving force in political participation. Each political party has its social base, and people inherit party identification through the socialization process. Campbell et al. (1980) defined partisanship as a longstanding identity with a political party, and party ties consistently influence the political attitudes and behavior of individuals. They found that "whether a person will vote depends on the strength of his partisan preference (p. 97)." Green et al. (2002) also argued that partisanship shapes how citizens perceive politics and engage with it. Mobilization and policy preference are two mechanisms behind the relationship between partisanship and political participation. Rosenstone and Hansen (1993) found that greater citizen involvement is largely a result of the mobilization of political parties, candidates, and campaign organizations. Gershtenson (2002) explained that ideological proximity plays a key role in the level of campaign activity among strong Republicans. Huddy, Mason, and Aaroe (2015) suggested a multi-item partisan identity scale and found that it better accounts for campaign activity than a strong stance on policy issues. Reher (2014) also found that partisanship appears to mediate the effect that one's position on a particular policy issue might have on voter turnout.

To sustain engagement in collective actions, movement activists may provide supporters with framing of the sources of the problem (Bernard and Snow, 2000: 616). In Taiwan, social movements have repeatedly called for greater government transparency and more accountability. For example, the death of Army specialist, Hung Chungchiu, spurred massive protests on government transparency in 2013. Hung was sent to military detention because he was found carrying a camera phone to the military base he served. Few days later, he died of organ failure. Although the government offered to compensate Hung's family and charged many of Hung's superiors, thousands of protestors took to streets to demand that the truth must be revealed. One major slogan of the Sunflower Movement was to "oppose the black box", a term describing the undue review process in the legislature and the perceived secret dealings between Taiwan's pro-KMT businesses and China. Therefore, this study adds "government transparency" to the existing set of motivation variables. People who want government transparency to be implemented should be likely to participate in the

The role of interpersonal networks has been noted in previous participation research (Berelson et al., 1954; Katz and Lazarsfeld, 1955;

Lazarsfeld et al., 1968). The civic voluntarism model also suggests that group-based attachment can influence one's decision to participate. Considering interpersonal networks as a vehicle of cognition and information, this study proposes the "cognitive mobilization" dimension to account for political participation. Cognitive mobilization means the acquiring of information for decision making free from external cues, such as partisanship (Dalton, 1984). Dalton (2007) classified the electorate as ritual partisans, cognitive partisans, apartisans, and the apolitical, demonstrating an increase in the proportion of cognitive partisans. Dahl and Stattin (2016) have shown empirical evidence that political interest is associated with illegal political activity because it challenges authority. Ikeda (2010) emphasized the importance of everyday interaction, arguing that interactions inform one another and "inspire active and deliberative thoughts" (Ikeda, 2010: 162). His empirical evidence indicates that political discussion promotes political participation. Discussion is also considered as part of a civic culture that nurtures participatory citizens; taking discussion-based courses in high school is related to increased political activity in the future (Verba et al., 1995:425).

Education is a key variable in the resource model of participation. Those with higher levels of education are more likely to participate than the less-educated (Almond and Verba, 1963; Dahl, 1961; Verba et al., 1978; Wolfinger and Rosenstone, 1980; Verba et al., 1995). Income and civic skills are two resources developed in the workplace that define educational attainment (Brady et al., 1995). Almond and Verba (1963) found that organizational involvement and level of education are positively correlated. Using a natural experiment, Berinsky and Lenz (2011) argued that education represents a level of cognitive skills and social status that determines an individual's decision to participate in politics.

Age is also a personal resource; political engagement increases as individuals age (Dalton, 2014: 78). Age increases information received because life experience grows with age (Wolfinger and Rosenstone, 1980). The strength of partisanship also increases with age (Campbell et al., 1960; Johnston, 1992). However, surging activism among the young is a major spotlight in worldwide political discord, implying that an individual's generation may have some influence as well. Milbrath and Goel (1977: 115) pointed out that "The variation of participation with age is perhaps best explained by position in the life cycle." Conway (1991) also advised that the effects of age on participation can be confounded with other variables, such as marital status. Middle-aged people are more likely to participate because they are free of the burdens of family, and as young people are relatively more mobile, they may not get as involved in local political or unpolitical affairs. Older people are also more receptive to party communication (Anderson and Just, 2012).

In Taiwan, Fu (2003) found that people with college degrees are more likely to attend demonstrations. Interviewing participants of the Sunflower Movement, Chen, Chang, and Huang (2016) reported the high level of education at all ages. Regarding the underlying causes of such phenomena among the young, Chen and Huang's (2007) panel data analysis found that college students' political efficacy increases with their educational experience. Youth phenomena in contentious politics may be explained by the fact that most participants are college students and are motivated by political efficacy and the demand for a transparent government.

After considering unconventional political participation in Taiwan, we will present our research hypotheses in a form largely based on the civic voluntarism model.

4. Contentious politics in Taiwan

In the first decade of the 21st century, Taiwan entered an era of blossoming social issues involving labor rights, women's rights, the rights of indigenous peoples, the anti-nuclear movement, and land justice. Due to a profound awakening of civic consciousness, political

⁵ The acronym is inspired by Taeku Lee's speech at National Sun Yat-sen University, Taiwan, September 14, 2018.

engagement has been widespread among high school students, college students, laborers, and other social groups in recent years. White shirt army and Citizen 1985 demanded the recognition of human rights in the military, and the Sunflower Movement interrupted the review of a trade pact with China. In addition, a group of high school students protested against "slightly adjustment" of course outline of the 12-year public education system between 20014 and 2015. In 2017, a crowd of indigenous people set up protest camps outside the presidential hall and called for more reservation of their tribal territory.

Scholars have offered different explanations for the recent emerging contentious participation. Using panel data collected from Internet surveys, Tsai and Chen (2015) argued that the China factor, the public's perception of China's threat to Taiwan's security and economy, had more impact on participation in the Sunflower Movement attitudes toward civil disobedience. Chen et al. (2016) surveyed participants in the Sunflower Movement and found that a great many of them had been mobilized by social media. Using telephone interview data, Wang and Weng (2017) found that people with a strong civic consciousness and notions of civil disobedience were among the supporters of the Sunflower Movement. The same people were also likely to take part in contentious political activities such as rallies, marches, and strikes.

While previous studies may have presented some causal stories of social disorder, they relied on web surveys, field surveys, and telephone interview. This research uses nation-wide face-to-face interview data that is more representative of the population than non-probability samples, such as Internet surveys and field surveys. Its response rate could be better than telephone survey data. It is reported that the response rate of a RDD telephone interview is 16%, but the in-person household interview is 86% (Hung et al., 2014). The lower the response rate, the more nonresponse error there could be. Furthermore, limitations in the design of these surveys have rendered them unable to properly test all theories of participation. Chung (2016), for example, suggested that citizen norms as determined by socio-cultural factors could be associated with unconventional political participation. Wang and Weng's (2017) study of the Sunflower Movement focused on the effects of civil disobedience and civic consciousness. Tsai and Chen (2015) focused civil disobedience and the public's perception of China. The goal of this study is to estimate the influence of key variables in nation-wide, face-to-face survey data, which can present a broader view of political participation in Taiwan. More precisely, there are seven hypotheses to be tested:

 $\label{probability} \textbf{Hypothesis 1.} \ Political \ efficacy \ increases \ the \ probability \ of \ attending \ a \ demonstration.$

Hypothesis 2. A desire for government transparency increases the probability of attending a demonstration.

Hypothesis 3. Political discussion increases the probability of attending a demonstration.

 $\label{eq:hypothesis} \textbf{4.} \ \ \text{Identifying with the DPP or NPP increases the probability of attending a demonstration.}$

Hypothesis 5. One's level of education increases the probability of attending a demonstration.

Hypothesis 6. Age increases the probability of attending a demonstration.

Hypothesis 7. People with lower incomes are more likely to attend a demonstration.

5. Data and variables

The "Citizen and Role of Government" module of the 2016 Taiwan Social Change Survey (TSCS) data was chosen to test these hypotheses. Data was collected by the Institute of Sociology at Academia Sinica between August 7 and November 27, 2016. Citizens aged 18 and above were randomly drawn from a multi-stage stratified sampling frame. The number of completions was 1966. To assure the representativeness of the population, the data was weighted according to gender, age, education, and household registration area. These weights were used during the analysis of the data. The response rate is 59%.

Whether or not respondents had attended contentious political activities was used as the dependent variable. It is found that 28 respondents attended a demonstration in the past year, while a total of 145 had participated in the distant past. In other words, 173 respondents, or 8.6% of all respondents, were coded 1 and others were coded 0. Since the number of people over 18 years old is 19 million, it means about 1.6 million of people over 18 years old were ever protestors. Because this survey was conducted around two years after the Sunflower Movement, the responses reflect political engagement during or before the demonstrations. §

As far as independent variables were concerned, political efficacy and demands for government transparency represented the motivation variable. Political efficacy was judged by a combination of two questions. The first question was "Do you agree or disagree with the following statement? 'People like me don't have any say about what the government does." The second question was "Do you agree or disagree with the following statement? 'I don't think public officials care much what people like me think." Each variable was measured on a fivepoint scale (1–5). The scale reliability coefficient of these two questions was 0.50. Summing these two variables created the efficacy variable. As for the government transparency variable, respondents were asked if they believed that "all government information should be publicly available, even if this means a risk to public security" or "public security should be given priority, even if this means limiting access to government information.' Where would you place yourself on such a scale?" People who value access to government information over public security should be more motivated to attend a demonstration than those who prefer public security over access to government information.

Party identification was also included as a dummy variable. Because the DPP was then the opposition party and often mobilized rallies and demonstrations, their supporters were more likely to attend contentious political activities. The New Power Party (NPP) was established in the wake of the Sunflower Movement, thus it was supposed that their supporters had attended contentious political activities before and after the movement. Both DPP and NPP identifiers were also likely to turn out because both parties performed well in the polls ahead of the presidential election. In contrast, KMT identifiers were less likely to

⁶ Although Chung's (2016) research is based on nation-wide Taiwan Social Change Survey (TSCS) data, it was collected in 2004. In other words, his findings may not apply to the latest Sunflower Movement.

⁷ The response rate is defined as the number of complete interviews with reporting units divided by the number of eligible reporting units in the sample (The American Association for Public Opinion Research, 2015).

⁸We re-coded the dependent variable in which only taking part in a demonstration in the past year was coded as 1. In other words, only 28 respondents, instead of the 173, were coded as 1. Estimating the same model with a different dependent variable, we found that political discussion is statistically significant.

⁹ In 2014, the Sunflower movement erupted as a group of college and graduate students swamped into the Legislative Yuan. Some academics that were advisors to the students in the movement formed the NPP and participated in the 2016 legislative election. Although the NPP gained five seats and became the third largest party in the Legislative Yuan, they still took to the street on labor right issue to raise more public awareness.

¹⁰ Polls showed that the DPP presidential candidate, Tsai Ing-wen, led the KMT candidate, Eric Chu, by at least 20 percentage points. For example, the

attend any demonstrations because the KMT had long been the incumbent party, having no need to turn to contentious political activities. KMT identifiers were consequently less likely to take part in a demonstration. Moreover, they may not have turned out to vote because they did not perceive themselves to be likely winners. ¹¹

Resources are defined as free time, money, civic skills, and social status. People who have more resources are understood to be more active in contentious political activities, and thus personal income and its squared term are included in the multivariate analysis. Level of education is categorized into five groups: illiterate, primary school, junior high school, high school, and some college. Following Beissinger et al. (2015), age is categorized into six groups: 18–24, 25–34, 35–44, 45–54, 55–64, and 65 and plus. Table A-1 in Appendix lists the wordings and coding schemes of all variables.

Given that the dependent variable is dichotomous, a binary logistic regression model is estimated. Specifically, the model can be expressed as Eq. (1).

$$Pr(Y = 1|X) = exp(\Omega)/1 + exp(\Omega)$$

and $\Omega = (\beta_0 + \beta_1 \text{Partisanship} + \beta_2 \text{Political Efficacy} + \beta_3 \text{Transparency} +$

$$\beta_4$$
Political Discussion + β_5 Age + β_6 Education + β_7 Income + β_8 Income² + β_9 Female) (1)

where Y denotes attending a demonstration.

6. Results

6.1. Basic results

Table 1 shows the descriptive statistics of the variables. It is noted that only 8 percent or 173 of 1932 respondents have ever taken part in a demonstration. Respondents scored high on the political efficacy and government transparency scales, and the mean values are 5.68 and 6.39, respectively. As for political discussion, the mean value is 2.38 on a four-point scale. The average level of respondents' education falls into the category of junior high school, with the average age being 46.22. Finally, the average personal income is between NT\$20,000 and NT\$29,999 and the proportion of female respondents is at 47 percent.

Table 2 shows a profile of people participating in a demonstration. Highly educated male respondents aged between 45 and 54, DPP and NPP identifiers, and people who disagreed with the statement that "people have no influence on government" and agreed with the statement that "citizens can influence politics" all tend to take part in demonstrations. Multivariate analysis is needed to determine what variables have a more substantial effect on contentious action.

6.2. Multivariate analysis

Table 3 presents the logistic coefficients, their standard errors and the odds ratios of the political demonstrations model. The coefficient of political efficacy is 0.103 and is statistically significant at the 5% level. The odds ratio is 1.108, which indicates that the odds of attending a demonstration is about 1.108 times greater when political efficacy increases by one unit, regardless of the value of other variables. It also means that incrementing political efficacy increases the odds by 10.8%.

Table 1Descriptive statistics of variables.

Variables	Mean	S.D.	Min	Max
Demonstration	0.08	0.27	0	1
Political Efficacy	5.68	1.95	2	10
Transparency	6.39	2.51	0	10
Political Discussion	2.38	0.98	1	4
KMT Identification	0.13	0.33	0	1
DPP Identification	0.20	0.40	0	1
NPP Identification	0.02	0.14	0	1
Education	3.95	1.22	1	5
Age	46.22	17.70	18	97
18-24	0.12	0.33	0	1
25-34	0.18	0.39	0	1
35-44	0.17	0.37	0	1
45-54	0.17	0.37	0	1
55 and plus	0.17	0.38	0	1
Income	4.55	2.63	1	14
Female	0.47	0.49	0	1

 Table 2

 Demographic and attitudinal variables and demonstration.

Variables	Participation	No	Total		
Gender					
Male	108(10.63)	908(89.37)	1016		
Female	65(7.10)	851(92.90)	916		
Education					
Illiterate	0(0.00)	56(100.0)	56		
Elementary school	14(4.96)	268(95.04)	282		
Junior high school	10(4.90)	194(95.10)	204		
Senior high school	29(6.47)	419(93.53)	448		
College/University	120(12.74)	822(87.26)	942		
Age					
18-24 years old	17(6.54)	243(93.46)	260		
25-34 years old	34(9.34)	330(90.66)	364		
35-44 years old	28(8.43)	304(91.57)	332		
45-54 years old	48(14.41)	285(85.59)	333		
55-64 years old	24(7.08)	315(92.92)	339		
65 years old and above	22(7.26)	281(92.74)	303		
Partisan attachment					
KMT identifier	21(7.95)	243(92.05)	264		
DPP identifier	46(12.07)	335(87.93)	381		
NPP identifier	18(38.30)	29(61.70)	47		
People have no influence on govern	People have no influence on government				
Strongly disagree	17(15.60)	92(84.40)	109		
Disagree	52(11.09)	417(88.91)	469		
Neither agree nor disagree	7(9.21)	69(90.79)	76		
Agree	68(8.17)	764(91.83)	832		
Strongly agree	27(7.05)	356(92.95)	383		
Citizens can influence politics	10(4.90)	194(95.10)	204		
Strongly disagree	10(7.87)	117(91.13)	127		
Disagree	61(9.97)	551(90.03)	612		
Neither agree nor disagree	5(5.21)	91(94.79)	96		
Agree	70(8.23)	781(91.77)	851		
Strongly agree	23(15.33)	330(84.67)	150		

When the level of demand for government transparency increases by one unit, the odds of attending a demonstration is about 1.074 times greater. The impact of both the motivation variables confirms hypotheses 1 and 2.

Regarding political discussion, the coefficient is 0.534 and is statistically significant at the 0.1% level. The odds ratio is 1.706, which indicates that for a one-unit increase in political discussion, the odds of attending a demonstration increase by a factor of 1.706, regardless of values that other variables take on. These results confirm Hypothesis 3.

The coefficients of DPP and NPP identification are statistically significant at 0.660 and 1.582 respectively, while the coefficient of KMT identification is not. When a respondent identifies with the DPP over other parties, the odds of participating a demonstration are 1.936 times greater. Therefore, Hypothesis 4 is also confirmed.

With regard to the demographic variables, we estimated the effects

⁽footnote continued)

polls released on December 31, 2015 by Taiwan Indicators Survey Research showed that the DPP ticket led with 40.1 percent, while the KMT ticket garnered 17.5 percent of support. It also found that the DPP, the KMT, the PFP and the NPP could all secure legislator-at-large seats. See Hsiao (2016).

¹¹ The People First Party, which used to be the third party in the legislature, was not included in the analysis because only 23 respondents identified with the party.

 Table 3

 Logistic regression model of demonstration.

	Coefficient	S.E.	Odds ratio
Motivation			_
Political Efficacy	0.103*	(0.045)	1.108
Transparency	0.071†	(0.038)	1.074
Cognition			
Political Discussion	0.534***	(0.102)	1.706
Partisan attachment			
KMT identifier	-0.012	(0.273)	0.990
DPP identifier	0.660**	(0.222)	1.936
NPP identifier	1.582***	(0.340)	4.866
Resources			
Education	0.474***	(0.137)	1.607
Age			
18-24 years old	-1.205**	(0.414)	0.299
25-34 years old	-0.756*	(0.368)	0.469
35-44 years old	-0.839*	(0.355)	0.431
45-54 years old	0.073	(0.332)	1.075
55-64 years old	-0.582	(0.385)	0.558
Income	-0.191†	(0.103)	0.825
Income-squared	0.019**	(0.006)	1.019
Female	-0.265	(0.195)	0.766
Constant	-5.321***	(0.732)	
N	1692		
Likelihood ratio test	144.09***		
Pseudo R ²	0.143		
−2×Log likelihood	-423.330		

Notes: ***: p < 0.001; **: p < 0.01; *: p < 0.05; †p < 0.10. Two-tailed test.

of education, age, and income. The coefficient of education is 0.474 and is statistically significant at the 0.1% level. The coefficients of the first three age dummy variables, 18–24, 25–34, and 35–44, are $-1.205, -0.756, \ \,$ and -0.839 respectively. This implies that unconventional participation is much more likely for people over 65 years of age than for people under 44. For example, the odds of taking part in demonstration for Taiwanese youth are 0.299 (exp $^{-1.205}$) times those of people over 65 years of age. Therefore, hypotheses 5 and 6 are not rejected. A higher level of personal income seems to reduce the probability of taking part in a demonstration, but the squared term is positive. In essence, the odds of attending a demonstration fall by a ratio of 0.825 for each category of income; and this decrease accelerates by 1.019 for each income level. Therefore, Hypothesis 7 is not supported.

We also calculate the predicted probability of each independent variable by replacing their values into the logit regression equation as other variables are held at their mean values. Table 4 displays the change in probability for a discrete change for certain magnitudes in an independent variable.

According to Table 4, the predicted probability of taking part in demonstration increases by 3.37% when the value of political discussion changes by one standard deviation. Changes in political efficacy and government transparency also increase the predicted probability by 1.26% and 0.24% respectively. As far as age is concerned, the probability of taking part in demonstration of Taiwanese youth is smaller than that of people over 65 years old by 6.96%.

Fig. 1 shows the curvilinear effect of the squared term of income by two age groups: people under the age of 24 and others. For people under the age of 24, the probability of being part of a demonstration is relatively low and slow to accelerate. Therefore, a relatively lower income may partially explain why young people are less willing to speak out.

In summary, these findings on the one hand suggest that both people who believe they can influence the government and people who demand access to government information are more likely to take part in a demonstration. Political discussion also contributes to unconventional political engagement. Additionally, DPP and NPP identifiers are more engaged in contentious political action. Better-educated and older

Table 4Difference in Predicted Probability caused by Change in Independent Variables.

	Change in X	Difference in Predicted Probability
Motivation		
Political Efficacy	mean to mean + 1 standard deviation	0.0126
Transparency	mean to mean + 1 standard deviation	0.0024
Cognition		
Political Discussion	mean to mean + 1 standard deviation	0.0337
Partisan attachment		
KMT identifier	0 to 1	-0.0005
DPP identifier	0 to 1	0.0437
NPP identifier	0 to 1	0.1576
Resources		
Education	mean to mean + 1 standard deviation	0.0341
Age		
18-24 years old	0 to 1	-0.0696
25-34 years old	0 to 1	-0.0517
35-44 years old	0 to 1	-0.0556
45-54 years old	0 to 1	0.0069
55-64 years old	0 to 1	0.00426
Income	mean to mean + 1 standard deviation	0.0054
Female	0 to 1	-0.0150

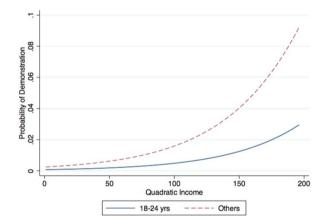


Fig. 1. Income and demonstrations by age.

respondents are also more willing to voice their dissent.

The primary findings of this study appear to counter the presumption that young people are more likely to rebel against the government. It is therefore necessary to confirm that the findings hold up regardless of the setup of the model.

6.3. Robustness check

The robustness check mainly aims to estimate the effect of age in different forms. We find that participation increases with age but Dalton (2014) suggested that youth are more likely to get involved in unconventional participation because they are more idealistic. To confirm that young citizens are less engaging, we add the interaction term between age and education and add the quadratic term of age to the logistic regression model. We also use different comparison group of age.

The first column of Table 5 shows the estimates of the model with the interaction term between two variables: the dummy variable of being under the age of 24 and the level of education. The interaction term is clearly not significant. In other words, whether or not one is under the age of 24 has the same effect on unconventional participation

Table 5Alternative logistic regression models of demonstration.

	Model 1	Model 2	Model 3
Motivation			
Political Efficacy	0.102*(0.045)	0.103*(0.045)	0.097*(0.045)
Transparency	0.071†(0.038)	0.071†(0.038)	0.068†(0.038)
Cognition			
Political Discussion	0.531***(0.102)	0.534***(0.102)	0.525***(0.101)
Partisan attachment			
KMT identifier	-0.012(0.272)	-0.010(0.273)	-0.016(0.278)
DPP identifier	0.665**(0.223)	0.660**(0.222)	0.668**(0.218)
NPP identifier	1.575***(0.340)	1.582***(0.340)	1.656***(0.340)
Resources			
Education	0.462***(0.137)	0.474***(0.137)	0.458***(0.133)
Age			
18-24 years old	-4.682(5.204)	-0.623(0.392)	_
25-34 years old	-0.739*(0.370)	-0.174(0.337)	_
35–44 years old	-0.827*(0.355)	-0.257(0.330)	_
45-54 years old	0.081(0.332)	0.655*(0.307)	_
55–64 years old	-0.577(0.385)	_ ` `	_
65 years old and above	_ ` ` `	0.582(0.385)	_
18-24*Education	0.711(1.054)	_ ` `	_
Age	- ` `	_	0.046(0.036)
Age-squared	_	_	0.000(0.000)
Income	-0.189†(0.103)	-0.191†(0.103)	-0.179†(0.104)
Income-squared	0.019**(0.006)	0.019**(0.006)	0.018*(0.006)
Female	-0.264(0.195)	-0.265(0.195)	-0.223(0.193)
Constant	-5.277***(0.732)	-6.161***(0.767)	-7.212***(1.139)
N	1692	1692	1692
Wald test	142.12***	144.09***	137.26***
Pseudo R ²	0.143	0.142	0.130
-2×Log likelihood	-424.104	-424.330	-430.171

Notes: Standard errors are in parentheses. ***: p < 0.001; **: p < 0.01; *: p < 0.05; †p < 0.10. Two-tailed test.

regardless of the level of education. The coefficients of the other variables are nearly as alike as those of the original model.

The second column shows the estimated results of the original model along with the different comparison group of 55–64 years of age, the second oldest age group. The coefficient of ages 45 to 54 is 0.655 significant at the 5% level. Other age groups are not significant. This indicates that being younger than 45 and older than 65 does not make any difference in terms of the odds of joining a demonstration. Once again, the coefficients of other variables remain the same.

Model 3 in the third column of Table 5 includes age as a continuous variable and its squared term. However, neither of them are significant. No changes occur in the other variables.

Although the effects of age are estimated in different ways, the robustness check confirms the results in Table 3. In short, political attitudes are in fact more influential than demographic variables. Among age, education, income, and gender, education is the most important predictor.

7. Conclusion

Why do citizens take part in demonstrations? This study has endeavored to provide assertive answers to this question by analyzing nation-wide, face-to-face survey data. The primary findings are as follows: that political efficacy is the major driving force for participating in a demonstration, that political discussion as a vehicle of cognition can mobilize people, that attachment to opposition parties is critical for contentious action, and that contentious political action is less common among the young but increases with an individual's level of education. The civic voluntarism model with cognitive mobilization helps to explain unconventional participation.

Our data analysis supports the civic voluntarism model that emphasizes personal resources and political attitudes, implying that older and not younger generations are more likely to be politically engaged. The civic voluntarism model suggests that older people tend to acquire

more civic skills and personal resources required by conventional and unconventional participation (Dalton, 2014: 89). Certainly, it may require a longitudinal study to verify whether the effects of age are dependent on cohorts or generations; young protesters may be still engaged in contentious action even as they get older. An age-period-cohort model may help us understand how aging, the time period, and cohort effects influence political participation (Grasso, 2014; Ho et al., 2015).

In addition to an individual's belief that he or she is able to influence the government, this research also highlights the importance of access to government-held information, offering insight for social movements in Taiwan, South Korea, and the United States. The average of the transparency variable is 6.39 on an eleven-point scale (0–10), indicating that respondents have strong demands for greater government transparency. However, the transparency variable's relatively modest effect on demonstrations implies that citizens are as of yet not fully motivated by these concerns.

Future research should consider the consequences of contentious action as Milbrath and Goel (1977) have suggested. How does people's sense of political efficacy change after they protest against the government? Under what conditions do protestors return to the streets? Do elected officials become generally more responsive to the mass public after protests erupt? These questions merit more exploration because, as protests reflect dissent and opposition against the establishment, democratic or not, any change to a polity, new and old alike, is deserving of thorough inspection.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.electstud.2018.12.009.

Appendix

Table A 1
Dependent and Independent Variables.

Variables	Questions	Coding of Response
Demonstration	Here are some different forms of political and social action that people can take: Took part in a demonstration. $ \\$	"Have done it in the past year" & "Have done it in the more distant past" = 1, "Have not done it but might do it" & "Have not done it and would never do it" = 0, $Can't$ Choose = NA
Vote	In this presidential election on January 14th 2016, many people went to vote, while others, for various reasons, did not go to vote. Did you vote?	Yes = 1 , otherwise = 0
Political Efficacy	Do you agree or disagree this statement: 1. "People like me don't have any say about what the government does. 2. "I don't think public officials care much what people like me think."	Strongly Disagree = 1, Disagree = 2, Neither Agree nor Disagree = 3, Agree = 4, Strongly Agree = 5, Can't Choose = NA
Transparency	Here is a scale from 0 to 10 where 0 is "all government information should be publicly available, even if this means a risk to public security" and 10 is "public security should be given priority, even if this means limiting access to government information". Where would you place yourself on such a scale?	·
Political Discussi- on	During the past 12 months, how often did you talk about things that happened in society (including political, economic, and social matters) with other people, whether you knew them personally or not?	Hardly = 1, Seldom = 2, Sometimes = 3, Always = 4
Party Identificati- on	Political parties in Taiwan have their own supporters. Among these political parties, which one do you support?	Dummy variables: KMT, DPP, People First Party (PFP), New Power Party (NPP)
Education	What is your education level?	illiterate, primary school, junior high school, high school, and some college
Age	When were you born?	Dummy variables: 18-24, 25-34, 35-44, 45-54, 55-64
Income	What is your average monthly income before taxes, including all sources of	None, 9999 or less,
	income (e.g., your earnings from work or part-time jobs, rewards, interest,	10,000–19,999, 20,000–29,999,
	bonuses or dividends, government subsidies, rent and other income, allowance	30,000–39,999, 40,000–49,999, 50,000–59,999, 60,000–69,999,
	from parents or children, pension, etc.)?	70,000–79,999, 80,000–89,999,
		90,000–99,999, 100,000–109,999, 110,000–119,999, 120,000–129,999,
		130,000-139,999, 140,000-149,999,
		150,000–159,999, 160,000–169,999, 170,000–179,999, 180,000–189,999,
		190,000–199,999, 200,000–299,999, 300,000 or more
Gender		Female = 1

References

Abramson, Paul, Aldrich, John, 1982. The decline of electoral participation in America. Am. Pol. Sci. Rev. 76 (3), 502–521.

Almond, Gabriel, Verba, Sidney, 1963. The Civic Culture: Political Attitudes and Democracy in Five Nations. Princeton University Press, Princeton.

Anderson, Christopher J., Just, Aida, 2012. Partisan legitimacy across generations. Elect. Stud. 31 (2), 306–316.

Stud. 31 (2), 300–310.

Barnes, Samuel H., Kaase, Max, 1979. Political Action: Mass Participation in Five Western Countries. Sage, Beverly Hills.

Beissinger, Mark R., Jamal, Amaney A., Mazur, Kevin, 2015. Explaining divergent revolutionary coalitions: regime strategies and the structuring of participation in the Tunisian and Egyptian revolutions. Comp. Pol. 48 (1), 1–24.

Benford, Robert D., Snow, David A., 2000. Framing processes and social movements: an overview and assessment. Annu. Rev. Sociol. 26, 611–639.

Berelson, Bernard R., Lazarsfeld, Paul F., MacPhee, William N., 1954. Voting: A Study of Opinion Formation in a Presidential Campaign. University of Chicago Press, Chicago.
 Berinsky, Adam J., Lenz, Gabriel S., 2011. Education and political participation: exploring the causal link. Polit. Behav. 33 (3), 357–373.

Blais, André, 2000. To Vote or Not to Vote: The Merits and Limits of Rational Choice Theory. The University of Pittsburgh Press, Pittsburgh.

Brady, Henry E., Verba, Sidney, Schlozman, Kay L., 1995. Beyond SES: a resource model of political participation. Am. Pol. Sci. Rev. 89 (2), 271–294.

Burns, Nancy, Schlozman, Kay L., Verba, Sidney, 2001. The Private Roots of Public Action. Harvard University Press, Cambridge.

Campbell, Angus, Gerald, Gurin, Miller, Warren E., 1954. The Voter Decides. Row, Peterson and Company, Evanston.

Campbell, Angus, Converse, Philip, Miller, Warren E., Stokes, Donald, 1960. The American Voter. University of Chicago Press, Chicago.

Chang, Wen-Chun, 2016. Culture, citizenship norms, and political participation: empirical evidence from Taiwan. Jpn. J. Polit. Sci. 17 (2), 256–277.

Chen, Lu-Huei, Huang, Hsin-Hao, 2007. Socialization agents, college experience, political

efficacy and political participation among college students in Taiwan. East Asia Ouarterly 38 (1), 1–48.

Chen, Wan-Chi, Chang, Hen-Hao, Huang, Su-Jen, 2016. The coming of networked social movements? Social ties and social media in the Sunflower movement. J. Soc. Sci. Philos. 28 (4), 467–501.

Conway, Margret M., 1991. Political Participation in the United States. CQ Press, Washington, D.C.

Dahl, Robert, 1961. Who Governs? Yale University Press, New Haven.

Dahl, Viktor, Stattin, Häkan, 2016. Beyond the limits: involvement in illegal political activities. European Political Science Review 8 (1), 125–145.

Dalton, Russell J., 1984. Cognitive mobilization and partisan dealignment in advanced industrial democracies. J. Polit. 46 (1), 264–284.

Dalton, Russell J., 2007. Partisan mobilization, cognitive mobilization and the changing American electorate. Elect. Stud. 26 (2), 274–286.

Dalton, Russell J., 2014. Citizen Politics: Public Opinion and Political Parties in Advanced Industrial Democracies. CQ Press, Washington, D.C.

Downs, Anthony, 1957. An Economic Theory of Democracy. Harper, New York. Fiorina, Morris P., 1976. The voting decision: instrumental and expressive aspects. J. Polit. 38 (2), 390–413.

Fu, Hen-Der, 2003. Political Culture and Political Participation. Weber Publication International Ltd, Taipei.

Gershtenson, Joseph, 2002. Partisanship and participation in political campaign activities, 1952-1996. Polit. Res. Q. 55 (3), 687–714.

Grasso, Maria T., 2014. Age, period and cohort analysis in a comparative context:

Political generations and political participation repertoires in Western Europe. Elect.

Stud. 33 (1), 63–76.

Green, Donald, Palmquist, Bradley, Schickler, Eric, 2002. Partisan Hearts and Minds. Yale University Press, New Haven.

Ho, Karl, Weng, Dennis L-C., Clarke, Harold D., 2015. Using repeated cross-sectional surveys to study political attitudes and behavior in a new democracy: HAPC models for Taiwan. Elect. Stud. 39 (1), 256–263.

Hsiao, Alison, 2016. PFP trails KMT with one percentage point: survey. Taipei Times. http://www.taipeitimes.com/News/taiwan/archives/2016/01/02/2003636253.

Huddy, Leonie, Mason, Lilliana, Aar\(\varphi\)e, Lene, 2015. Expressive partisanship: campaign involvement, political emotion, and partisan identity. Am. Pol. Sci. Rev. 109 (1), 1–17.

- Hung, Yung-Tai, Hung, Baai-Shyun, Lin, Yu-Hsuan, Lu, Meng-Ing, Hsu, Shen-Mao, Wu, Shu-Hui, Cho, Chung-Yen, Hsu, Shu-Yi, 2014. An evaluation of the Effect of cell-phone-only users on telephone survey coverage rates in Taiwan. Survey Research: Method and Application 31, 7–30.
- Ikeda, Ken'ichi, 2010. Social networks, voting and campaign participation in Japan: the interpersonal political environment and the autonomous dimension of social networks. In: Wolf, M.R., Morales, L., Ikeda, K. (Eds.), Political Discussion in Modern Democracies: A Comparative Perspective. Routledge, New York, pp. 162–182.
- Johnston, Richard, 1992. Political generations and electoral change in Canada. Br. J. Polit. Sci. 22 (01), 93–115.
- Katz, Elihu, Lazarsfeld, Paul F., 1955. Personal Influence, The Part Played by People in the Flow of Mass Communication. The Free Press, Glencoe.
- Kern, Anna, Marien, Sofie, Marc, Hooghe, 2015. Economic crisis and levels of political participation in Europe (2002-2010): the role of resources and grievances. W. Eur. Polit. 38 (3), 465–490.
- Lazarsfeld, Paul F., Berelson, Bernard, Gaudet, Hazel, 1968. The People's Choice: How the Voter Makes Up His Mind in a Presidential Campaign, third ed. Columbia University Press, New York/London.
- Milbrath, Lester W., 1965. Political Participation: How and Why Do People Get Involved in Politics? Rand McNally, Chicago.
- Milbrath, Lester, Goel, M. Lai, 1977. Political Participation: How and Why Do People Get Involved in Politics? Rand Mac Nally, Chicago.
- Niemi, Richard G., Craig, Stephen C., Mattei, Franco, 1991. Measuring internal political efficacy in the 1988 national election study. Am. Pol. Sci. Rev. 85 (4), 1407–1413.
- Norris, Pippa, 2012. Democratic Phoenix: Reinventing Political Activism. Cambridge University Press, Cambridge.
- Park, Chong-Min, 2007. Democratic consolidation in East Asia. Jpn. J. Polit. Sci. 8,

- 305-326
- Reher, Stephanie, 2014. The effects of congruence in policy priorities on electoral participation. Elect. Stud. 36, 158–172.
- Riker, William H., Ordeshook, Peter C., 1968. A theory of the calculus of voting. Am. Pol. Sci. Rev. 62 (1), 25–42.
- Rosenstone, Steven, Hansen, J. Mark, 1993. Mobilization, Participation and Democracy in America. MacMillan Publishing, New York.
- Rubenson, Daniel, 2000. Participation and politics: Social capital, civic voluntarism, and institutional context. Political Studies Association-UK 50th Annual Conference, London, UK.
- The American Association for Public Opinion Research, 2015. Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys, eighth ed. AAPOR.
- Tilly, Charles, Tarrow, Sidney G., 2015. Contentious Politics, second ed. Oxford University Press, New York.
- Tsai, Chia-Hung, Chen, Lu-Huei, 2015. China factor or civic disobedience? explaining support for the sunflower movement with panel data. J. Soc. Sci. Philos. 27 (4), 573–603.
- Verba, Sideny, Nie, Norman H., 1972. Participation in America: Political Democracy and Social Equality. Harper & Row, New York.
- Verba, Sidney, Nie, Norman H., Kim, Jae-On, 1978. Participation and Political Equality: A Seven-Nation Comparison. Cambridge University Press, New York.
- Verba, Sidney, Schlozman, Kay L., Brady, Henry E., 1995. Voice and Equality: Civic Voluntarism in American Politics. Harvard University Press, Cambridge.
- Wang, Jenn-Hwan, 1989. Political transition and oppositions in Taiwan. Taiwan A Radic. Q. Soc. Stud. 2 (1), 71–116.
- Wang, Ching-Hsin, Weng, Dennis L.-C., 2017. The effects of civic consciousness and civil disobedience on support for and participation in contentious politics. Jpn. J. Polit. Sci. 18 (2), 313–335.
- Wolfinger, Raymond E., Rosenston Steven, J., 1980. Who Votes? Yale University Press, New Haven.