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ВЛИЯНИЕ ИСПОЛЬЗОВАНИЯ ИНТЕРНЕТА НА ПОЛИТИЧЕСКОЕ УЧАСТИЕ: ГЕНДЕРНЫЙ АСПЕКТ

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Аннотация. Изучено влияние использования интернета мужчинами и женщинами на их участие в политической жизни Китая. На основе сравнения данных Всеобщего социального исследования Китая за 2011 и 2021 гг. построена модель сопоставления показателей склонности. Выявлено, что использование интернета не оказывает существенного воздействия на уровень политического участия женщин, однако снижает уровень участия мужчин в политической жизни страны. Результаты исследования демонстрируют пределы использования интернет-технологий в процессе политического участия в Китае.

Ключевые слова: политическое участие; использование интернета; Всеобщее социальное исследование Китая; Китай; гендерные различия; технологический оптимизм.

INFLUENCE OF INTERNET USE ON POLITICAL PARTICIPATION: GENDER ASPECT

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Abstract. The impact of Internet use by males and females on their political participation in China is studied. On the basis of comparing the data of the Chinese General Social Survey for 2011 and 2021, the propensity score matching model is constructed. It is found that Internet use has no significant impact on females' political participation, but reduces the rate of males' participation in the political life of the country. The results of the study demonstrate the limits of Internet technology use in the process of political participation in China.

Keywords: political participation; Internet use; Chinese General Social Survey; CGSS; China; gender differences; technological optimism.

Introduction

Political participation is an important part in the process of democratic political construction and an indicator to evaluate the development of modern politics. Therefore, studying political participation has become a significant topic in today's academic discourse. At the same time, under the background of the global digital age Internet, a technology with epoch-making connotations, has profoundly changed the way people live and work. Among them, the relationship between the daily use of the Internet technology and the active political participation process has long been a controversial topic. As an important source of information, mainstream communication medium and virtual anonymous public space, the Internet provides the users with convenience in obtaining political information, cultivating political views and participating in politics. Technological optimism states that the decentralised nature of Internet technology can expand the channels for its users to obtain and exchange political information and strengthen their political perception [1], thereby promoting social public discussion, which will help accelerate the process of political participation [2]. However, there is also a view that the long-standing digital divide has not only caused an imbalance in Internet political participation, but also that the ubiquity and anonymity of the Internet allow false information, irrational emotions, and even racism and terrorism to spread rapidly on the Internet, thereby inducing participants to engage in radical or criminal behaviour [3]. In addition, the increasingly commercialised and entertaining Internet media is also constantly eroding the daily public sphere. Both Internet optimists and pessimists agree that its use has profoundly affected people's political behaviour. As Internet technology enters the 5G era, this impact will only increase. Therefore, reflection on the Internet influence on the political participation is a necessary and urgent issue in social and political research.

Another aspect to be explored is the impact of the Internet use on gender political participation. Traditionally, females' political participation rates have been significantly lower than males'. In addition, females' political participation behaviour has been continuously influenced by traditional culture. The problem is to review whether Internet use can promote people's political participation. Answer to this question can enrich the current status of research on political participation in a digital society and further expand theoretical foundation for political participation. To this end, based on the data of 2011 and 2021 Chinese General Social Survey (CGSS), the authors constructed the propensity score matching model and simultaneously adopts the nearest neighbour matching strategy (1:1), the near neighbour matching strategy (1:4), and the kernel matching strategy to more accurately estimate the net impact of Internet use on political participation of males and females.

Literature review

As the main way to realise citizens' political rights, political participation plays an important role in the functioning of the political and social system. Its continuous expansion also witnesses the socialisation process of politics. The scholars defined political participation as the activities of civilians trying to influence government decisions [4, p. 36]. Political participation indicates the degree of influence of ordinary citizens on the political decision-making process [5]. According to Chinese scholars, political participation demonstrates that ordinary citizens participate in political activities through legal means, thus affecting the state of the political system [6]. Referring to existing literature, the term «political participation» in this article emphasises the ability of citizens to legally use their power to participate in political activities, excluding any illegal channels, first of all, in elections and voting.

There are studies that examine if detail the various factors that influence political participation and their mechanisms of action from aspects such as gender, age, household registration, education level, income level and political status [7–9]. However, there are relatively few studies on the relationship between the Internet use and political participation, and most of them ignore gender differences. From the perspective of technological optimism, as the underlying technology of the digital age, the Internet, provides a public space for political information. It can also break through the limitations of the political participation. The Internet should be able to stimulate the political participation interest of users who are indifferent to political information, so that they will have more opportunities and willingness to participate in political activities.

However, even the most optimistic scholars of technological optimism dare not assert that the use of the Internet has no negative impact on political participation. In fact, even without considering the digital divide, the use of the Internet also has great hidden dangers. For example, the use of the Internet is likely to lead to an increase in cynicism, causing the public to be indifferent to politics and inhibiting the political participation. In fact, not only can the information in the Internet space not guarantee objectivity, accuracy and balance, but the Internet space even inherits and strengthens the shortcomings of various traditional media. Thus, selective exposure is considered to be the cause of social and political polarisation at the media level, and this effect is further strengthened by the Internet technological advantages such as convenience, immediacy, openness, sharing, interactivity, diffusion, and decentralisation. At the same time, the increasing commercialisation of the media development is also a threat for political activity. Once the news value is replaced by the

The study materials are the data of CGSS for 2011 and 2021, which allows effective comparative analysis. The study sample for 2011 was 1477 males and 1394 females and for 2021 was 1898 males and 1873 females. The CGSS questionnaire was designed and completed by the employees of Renmin University of China. The sampling method used was a multi-stage stratified probability proportional to size random sampling method, which comprehensively covers all provinces (municipalities and autonomous regions) in mainland China, and comprehensively and systematically collects multi-level data on individuals, families, and society.

The dependent variable is the political participation, which refers to the political participation and behaviour of the respondents. The CGSS measures the rate of political participation through the following question: «Did you vote in this neighbourhood/village committee election?» The answer options for this question are «yes» and «no». In this study, «yes» is assigned to 1, «no» is corresponds to 0.

The independent variable is the Internet use, which refers to the frequency of Internet use by respondents.

Results and discussion

The results of descriptive statistical analysis presented in table 1 show in terms of the dependent variable that in 2011, 47.33 % of male respondents and 42.68 % of female respondents participated in political activities. Males were more willing to participate in political activities than female respondents, and the difference between them was statistically significant at the 5.0 % significance level. In 2021, 54.95 % of male respondents and 48.26 % of female respondents participated in political activities. As can be seen, the rates of male respondents and female respondents participating

consumption value, all kinds of soft news and fake news will be spread wantonly in the Internet space. Since the Internet space gives its users a high degree of freedom to choose information, this will further strengthen the negative effects of political participation caused by selective exposure.

Still, under the influence of traditional gender culture, females are often confined to the private sphere and gradually shaped into the role of family caregivers. At present, the gender awareness of a large number of females in China has not yet completely broken away from the traditional culture of this country, while males in China are shaped into more independent and competitive roles, and their social activities are more concentrated in the public sphere rather than in virtual world. Thus, Internet influence on males and females can differ. Based on the above analysis, the authors of study hypothesised that the Internet use significantly reduced males' political participation, but has no significant impact on females' political participation.

Materials and methods

The CGSS measures Internet use through the following question: «How often do you use the Internet in your daily life?» The answer options for this question are «frequent use» and «infrequent use». In this study, «frequent use» is corresponds to 1, «infrequent use» is assigned to 0.

Based on the actual design of the CGSS questionnaire and referring to existing research [3; 7–9], gender, age, ethnicity, years of education, annual personal income, household registration, marriage, father's years of education, father's political status, mother's years of education, and mother's political status were selected as control variables.

In order to avoid the problem of sample self-selection bias caused by a series of individual characteristic variables such as gender and age, this study chose the propensity score matching model to estimate the impact of Internet use on political participation, and adopts the nearest neighbour matching strategy (1:1), the near neighbour matching strategy (1:4), and the kernel matching strategy to ensure that the estimation results are more accurate and effective.

in political activities have been effectively improved. Also the males were still more willing to participate in political activities than females, and the difference between them was statistically significant at the 0.1 % significance level. In terms of the independent variable, in 2011, only 24.17 % of male respondents and 23.03 % of female respondents frequently used the Internet for political participation. There was no statistically significant difference between them. In 2021, 65.70 % of male respondents and 71.12 % of female respondents frequently used the Internet for political participation. Compared with 2011 rates, the rates for 2021 increased markedly, with a considerably higher proportion of female respondents frequently using the Internet for political participation. The difference between them was also statistically significant at the 0.1 % significance level. This analysis shows that there are overall significant differences in

dependent variable and independent variable between male and female respondents. However, in order to answer whether Internet use has a significant impact on political participation from a gender perspective, it is necessary to further verify the results through the propensity score matching model.

Table 1

Variable	Sample mean for 2011			Sample mean for 2021			
Valiable	Males	Females	Value difference	Males	Females	Value difference	
Political participation	0.473 3	0.426 8	0.046 5*	0.549 5	0.482 6	0.066 9**	
Internet use	0.241 7	0.230 3	0.011 4	0.657 0	0.711 2	-0.054 2**	
Age	46.798 9	44.307 8	2.491 1**	51.319 8	48.546 7	$2.773 \ 1^{**}$	
Ethnicity	0.945 2	0.960 5	-0.015 3	0.938 9	0.937 5	0.001 4	
Years of education	10.065 7	9.698 0	0.367 7**	10.681 2	10.538 2	0.143 0	
Annual personal income	2.489 6	1.491 2	0.998 4**	7.294 4	3.833 1	3.461 3**	
Household registration	0.498 3	0.504 3	-0.006 0	0.445 7	0.480 5	-0.0348^{*}	
Marriage	0.838 9	0.835 0	0.003 9	0.759 7	0.774 2	-0.014 5	
Father's years of education	5.558 6	5.863 0	-0.304 4	5.523 2	5.977 0	$-0.453.8^{**}$	
Farher's political status	0.177 4	0.182 2	-0.004 8	0.147 5	0.150 0	-0.002 5	
Mother's years of education	3.382 5	3.690 1	$-0.307.6^{*}$	3.6196	4.127 1	-0.507 5**	
Mother's political status	0.029 1	0.036 6	-0.007 5	0.024 8	0.031 5	-0.006 7	

Descriptive statistics of variables

Notes: 1. Symbol * stands for p < 0.05. 2. Symbol ** stands for p < 0.001.

Table 2 reports the average treatment effect on the treated (hereinafter – ATT) of Internet use on political participation using the nearest neighbour matching strategy (1:1), the near neighbour matching strategy (1:4), and the kernel matching strategy, taking gender differences into account. The results show that in both 2011 and 2021 before data matching is completed, Internet use significantly reduced the political participation of male respondents and female respondents. After data matching is

completed, Internet use only affected male respondents' political participation in 2021, but had no significant impact on female respondents' political participation. It was found that the sample has a serious problem of sample self-selection bias. If the traditional regression method is used directly, it will result in biased estimation. Therefore, it is very reasonable for this study to choose building the propensity score matching model to estimate the impact of Internet use on political participation.

Table 2

ATT on the impact of Internet use on political	participation from a gender perspective
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Matching strategy	2011				2021			
	Males' ATT		Females' ATT		Males' ATT		Females' ATT	
	Unmatched	Matched	Unmatched	Matched	Unmatched	Matched	Unmatched	Matched
Nearest neighbour (1:1)	-0.195 6 [*] (0.029 9)	-0.031 0 (0.069 0)	-0.238 8 [*] (0.030 8)	0.012 7 (0.065 9)	-0.124 5 [*] (0.023 9)	-0.206 4 ^{**} (0.071 3)	-0.129 7 [*] (0.025 3)	0.054 2 (0.074 1)
Near neighbour (1:4)	-0.195 6 [*] (0.029 9)	0.026 1 (0.057 0)	-0.238 8 [*] (0.030 8)	0.001 6 (0.058 5)	-0.124 5 [*] (0.023 9)	-0.169 9 ^{**} (0.065 9)	-0.129 7 [*] (0.025 3)	0.029 6 (0.065 1)
Kernel	-0.195 6 [*] (0.029 9)	0.011 2 (0.055 0)	$\begin{array}{c} -0.238\ 8^{*} \\ (0.030\ 8) \end{array}$	-0.012 8 (0.057 5)	-0.124 5 [*] (0.023 9)	-0.175 6 ^{**} (0.060 7)	-0.129 7 [*] (0.025 3)	0.005 6 (0.056 1)

N ot e s: 1. Values in brackets indicate standard errors. 2. Symbol * stands for p < 0.001. 3. Symbol ** stands for p < 0.01.

Specifically, in 2011, Internet use had no significant impact on the political participation of both male and female respondents. In 2021, Internet use still had no significant impact on female respondents' political participation, but it significantly reduced male respondents' political participation. In 2021, the ATT parameter estimates of Internet use on male respondents' political participation under the above three matching strategies are -0.2064, -0.1699, and -0.1756 respectively, and they are all statistically significant at the 1.0% signifi-

cance level. Frequent the Internet use made the political participation rate of male respondents drop significantly to 16.99 % indicating that Internet use did signifi-

cantly reduce males' political participation, but had no significant impact on females' political participation, which verifies our hypothesis.

Conclusions

Based on the CGSS data in 2011 and 2021, this study found that in 2011, Internet use had no significant impact on the political participation of either males or females. In 2021, Internet use still had no considerably impact on females' political participation. However, it reduced males' political participation: Internet factor had negatively influenced this participation, and only impact of other factors made possible to keep males' political participation on the level of level of 20.64 %. This empirical result needs further researching to verify whether it is valid only for China.

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