Internet Use and Social Participation of Young Adults: Evidence from Rights Safeguard Online in China

Yang Zhang* and Yeqin Song

School of International Relations and Public Affairs, Fudan University, 200433 Shanghai, China

ABSTRACT

The digitalization process in developing countries is accelerating, and the Internet has become a medium for connecting politics, society, and citizens' lives. Previous studies have explored the positive connections between internet growth and citizens' social participation, but the mechanisms of effects have not been revealed. For young adults, safeguarding rights online is the most common form of social participation in the digital era. In this study, we provided an analytical framework on the impact of internet use on young adults' rights to safeguard online based on the public sphere theory. Using data from 1,343 young adults in China, we examined the influence of internet use on youths' intention to safeguard their rights online and the mediating role of functional perceptions. The results showed that Internet use was positively associated with young adults' intention to safeguard their rights online, perceptions of three internet functions, which are resource acquisition, issue discussion, and fairness promotion, mediated this association, and the mediating role of internet function perceptions was more significant in participation in activities organized by others than in self-initiated rights safeguard. This study reveals the intrinsic mechanism of internet use to social participation, and we argued that the public sector in developing countries should be aware of the influence of the Internet on social participation and take reasonable measures to ensure that young adults effectively and legally engage in digital platforms.

INTRODUCTION

The boom of information communication technology and policy support has given rise to a wide range of internet users in developing countries (Zhang et al., 2017). As of June 2023, the netizens in China

reached 1.079 billion, with an internet penetration rate of 76.4%, and more than half of them were young adults. For young adults, the Internet has effectively influenced their beliefs, attitudes, and behaviors by disseminating information and transforming the media environment (Dutton & Reisdorf, 2019; Shin & Lwin, 2017). Meanwhile, the rapid development of the economy and society has resulted in various conflicts of interest affecting young adults' cognition and behaviors on the Internet (Boulianne & Theocharis, 2020; Zheng et al., 2019). The emergence of rights safeguard online is one of the consequences of internet popularization (Benney, 2007; Ruess et al., 2023) that has influenced the network governance and social order (Biao, 2012; Huhe et al., 2018). In this study, rights safeguard online refers to citizens defending their legal rights and interests through the Internet (Benney, 2007; Cooper et al., 2013; Lorentzen & Scoggins, 2015; Wong, 2011), which can be seen as a particular type of social participation. It involves political rights, as well as social, economic, and cultural rights.[1]

With the improvement of the educational level and the continuous enhancement of civic awareness, young adults have become a group with a strong sense of social responsibility and political participation (Earl et al., 2017; Oyedemi, 2015). They pay more attention to civil rights and are inclined to take individual or collective actions to protect rights (Lorentzen & Scoggins, 2015). Thus, they may initiate rights safeguard actions when their rights are violated or support others' rights safeguard activities because of responsibilities. Traditional ways of protecting rights are often carried out, such as court prosecutions and petitioning through letters and visits system[2] offline (Pils, 2016). The Internet offers different channels for safeguarding the rights of young adults in a fast, open, anonymous, and interactive way (Chan et al., 2012).

However, some governments have applied existing repressive laws to the cyber domain and have adopted information technology to monitor online "voices." In recent years, the Chinese government has also been concerned with online opinions or social participation and has been paying more attention to the "voices" on the Internet by taking measures such as supervision or response (Chan et al., 2012; Chen, 2017). According to Freedom in the World 2023, global freedom has declined for 17 consecutive years. The Internet Freedom Score for China is nine, and the Civil Rights Score is 11.

According to the public sphere theory, the Internet is a virtual space associated with democracy, participation, and rights (Batorski & Grzywińska, 2018; Fenton, 2018; Mirra & Garcia, 2017). It raises a

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1   Rights safeguarding online is a broad concept encompassing many activities. For instance, when Chinese citizens are cheated during the consumption process and cannot obtain compensation, they often seek support from others by making the incident public on the Internet to protect their interests.

2   In China, with the letters and visits system, citizens can visit local or national government offices in person. The system is intended to allow citizens to seek redress for injustices, resolve disputes, and safeguard rights.

topic that deserves attention: Does Internet use impact young adults' intention to initiate or participate in online rights defense? If so, is there any inner mechanism? Some studies have found that young people's online activities are affected by several factors, including technology, membership in organizations, and internet resources (Anduiza et al., 2010; Bakker & de Vreese, 2011; Zhang & Chia, 2006). However, the mechanism has not yet been fully revealed. Discussions of Internet use and its role in strengthening democracy and political participation often return to Habermas' theory of the public sphere (Fenton, 2018). This study used a multiple mediation model to explore how the perception of internet functions mediates the relation between internet use and online rights defense. The results will provide a new perspective to understanding young adults' social participation in the information era.

LITERATURE REVIEW

The Internet, Social Participation and Democratization

Can the Internet reinvent democracy? There are three mutually extruding conclusions and perspectives in the relevant literature on the political Internet. The first view is that the Internet can mobilize social participation. The Internet has contributed to the development and strength of social movements in many ways (Jiang et al., 2019). It is seen as a means of reinvigorating youth political knowledge and participation, such that using the Internet significantly increases young adults' political knowledge, improving the possibility of voting participation (McAllister, 2016). Digital networks can enable individuals and organizations to make their voices heard, raise public awareness and mobilize collective action (Batorski & Grzywińska, 2018; Huhe et al., 2018). Against the backdrop of a marked decline in formal political participation in some countries, such online forms of participation hold the promise of greater participation for demographic groups that are politically underrepresented, like women, ethnic minorities, youth, and less educated and low-income individuals (Ruess et al., 2023). In this context, the Internet provides an alternative channel where people can express their opinions and articulate their issues in relative safety (Tang & Sampson, 2012).

The second perspective argues that the Internet has a limited role in facilitating democratic behaviors such as social participation, for example, rights defense and that it can even depress democratization (Chae et al., 2019; Shao & Wang, 2017). Although the citizens in East and Southeast Asia are experiencing dramatic internet changes, internet control appears to be increasingly prevalent due to political, cultural, and other factors, and digital networks are monitored by ruling elites to manipulate public opinion and dissuade civic activists (Lee, 2017). The rise of public discourse on the Internet may be viewed as dissent in some countries, and spontaneous and unauthorized public online activity is suppressed and restricted

(Tang & Sampson, 2012). More studies have shown why internet use reduces civic and social engagement simply in terms of the purpose of internet use - internet use is largely motivated by entertainment or comprehensive personal demands (Cao et al., 2011; Chae et al., 2019).

The last view is similar to the previous conclusion in that they argue that internet use is not linked to individual social participation, nor is it related to the democratization process. Some scholars have found that citizens only engage in superficial collective actions on the Internet, but these collective actions are not politically charged and do not have a democratic effect (Chae et al., 2019; Momen, 2020). In other words, these citizens are unwilling to invest significant efforts to implement meaningful change, such as participating in rights safeguards (Kristofferson et al., 2014).

An important reason for this divergence of views is that how the Internet affects social participation and democratic action remains understudied. This issue is critical in explaining the mechanisms by which technology provides new capabilities for individual citizens to intervene in the public sphere. Youth groups and online rights activism have been addressed in a considerable body of literature (Bosch, 2017; Earl et al., 2017; Kamau, 2017). Youth are the best net users, and deficits in material, motivational, and skill acquisition are the least common among young people (Hirzalla et al., 2011). When they engage in collective activities, they are not dependent on political and governmental news;

instead, benefiting from the technological capabilities of social interaction, they are able to engage in politics through interpersonal discussions, gaining access to the psychological resources of participation, such as self-efficacy for politics (Lee, 2017). The current study only describes them descriptively but has not been examined through data analysis, especially in China.

Hypotheses Building

In most developing countries, including China, the awakening of public awareness of rights has increased people's enthusiasm for rights safeguards and has triggered realistic rights defense actions, like strikes, participation in public protests, and increased willingness to take legal actions against strong power (Lorentzen & Scoggins, 2015). The growing political role of the Internet has rekindled academic debates about the impact of information and communication technologies on the public sphere and democracy (Batorski & Grzywińska, 2018). Rights safeguarding online is an emerging method for citizens to use the Internet to protect rights (Lorentzen & Scoggins, 2015), an inevitable outcome of the digital age.

With the rapid spread of the Internet in China, users can quickly obtain large amounts of unofficial or alternative information on public issues, which not only liberates the minds of netizens but also promotes social participation (Cheng et al., 2015). The information obtained on social media may encourage young adults to share information, express opinions,

and even try to support the protests by calling on their social media networks (MacAfee & De Simone, 2012; Shiratuddin et al., 2017; van Laer & van Aelst, 2010). Young adults can appeal to the public and government to focus on the rights of victims or vulnerable groups through the Internet, which might result in rights defense (Tang et al., 2016). Therefore, the advantage of the Internet on rights defense is that it provides convenient and interactive channels and strengthens young adults' rights safeguard intention, further developing into rights defense actions. Specifically, the Internet has brought opportunities for young people's social participation and collective action, thereby becoming a beneficial tool for organizing and coordinating actions (van Laer & van Aelst, 2010). The use of social media could encourage users to generate emotional resonance and even lead to group protests on specific issues (García-Galera et al., 2014; Shao & Wang, 2017; Ye et al., 2017). It may quickly attract individuals to gather, participate in an event, and take more action (Kavanaugh et al., 2005). Moreover, the Internet allows young individuals to hide their identity or have anonymity when participating in rights safeguards (Tedesco, 2007). Thus, young adults can initiate actions online to defend or support others' rights and safeguard activities in the extensive virtual social networks shaped by the Internet. Accordingly, we propose the following hypotheses.

H1: The use of the Internet has a positive effect on young adults' intention to rights online.

H1a: The use of the Internet has a positive effect on young adults' intention to initiate rights safeguards online.

H1b: The use of the Internet has a positive effect on young adults' intention to participate in rights safeguarding online.

The public sphere is often defined as "a network for the exchange of information and ideas; In this process, the flow of information disseminated is filtered and synthesized, thereby merging into a set of public opinions on a specific topic." According to Habermas' public sphere theory, the Internet plays a key role in the communication structure of the public sphere (Regilme, 2018). Several studies consider how digital media are fundamentally changing the public sphere and expanding opportunities for expression and action for young citizens, arguing that with the help of the Internet, young people are using knowledge, skills and identity to understand and participate in life in the public sphere (Mirra & Garcia, 2017).

Taking Facebook as an example, (Batorski & Grzywińska, 2018) make an empirical analysis of the network public sphere from three dimensions: structural, representational and interactive. Social networking sites are believed to promote young people's participation in rights protection in various ways, such as promoting discussion and forming consensus (Mirra & Garcia, 2017). In view of the above, we explore the online rights safeguard intention and behaviors of young adults from the three dimensions, i.e.,

resource acquisition, issue discussion, and fairness promotion functions based on the public sphere theory.

First, the previous research reveals that the popularity of the Internet has made it easier for young adults to obtain the information resources they want and promoted their social participation (Anduiza et al., 2010; Ekström & Östman, 2015). Second, unlimited and active discussion in public space is necessary for civil society, and an apparent positive relationship between online social interaction and expressive participation can be observed (Kahne et al., 2013). Many studies on the Internet have focused on the potential of social networking sites and media to provide a platform for democratic communication (Jha & Kodila-Tedika, 2020; Kamau, 2017). Most young adults use internet-based tools for public affairs discussion purposes, especially videos, social networks, and citizen participation websites that target young people. They prefer to conduct democratic communications and discussions through online media (Boulianne & Theocharis, 2020).

Third, the rapid development of information technology has broadened the scope of public access to information and further improved social transparency (van Praag, 2011; Zhu et al., 2020). Internet use has dramatically affected individuals' perceptions of social fairness and increased their trust in the Internet to promote social fairness. The social fairness individuals perceive is crucial to their psychology, decision-making, and behaviors (Tao,

2015). Young adults are willing to use social media on the Internet to organize online activities and even set up various volunteer associations to safeguard social fairness, justice, and the interests of disadvantaged groups (Dong et al., 2017). We thus propose the following intrinsic mechanism hypotheses:

H2: The perception of Internet functions mediates the association between the use of the Internet and the intention to safeguard rights online.

H2a: Internet use influences youths' intention to safeguard rights online by affecting their perceptions of resource acquisition functions.

H2b: Internet use influences youths' intention to safeguard rights online by affecting their perceptions of public issues discussion functions.

H2c: Internet use influences youths' intention to safeguard rights online by affecting their perceptions of fairness promotion functions.

METHODS
Data

The data used in this study were obtained from the 2017 Chinese General Social Survey (CGSS2017), one of the most important data sources of Chinese society, which included online rights defense of the youth in the survey for the first time. According to World Health Organization (WHO) criteria, the population is divided

according to age into minors (0–17 years old), young adults (18–44 years old), middle-aged people (45–59 years old), and older people (60 years old and older) (Hu et al., 2020). Some previous studies also define young adults aged 18–44 (Jing et al., 2021; Qiu et al., 2020), which is consistent with the reality of Chinese society. Thus, 1,343 valid samples are taken after considering the control variables and demographic characteristics.

Measurements

Independent Variable. The CGSS2017 data contains questions on young adults' use of the Internet. Most studies use frequency to measure internet use to reflect individual differences (Szymkowiak et al., 2021). We took the frequency of internet use by young adults as an independent variable, measured by "In the past year, how often did you use the internet?" A five-point Likert scale was used to measure this item.

Dependent Variables. Two items were related to the intention of rights safeguarding online, "If your rights are violated, would you consider using the internet to defend your rights?" and "Will you participate or support online rights defense actions initiated by others?" These correspond to the intention to initiate online rights defense and participation in online rights defense. Regarding data processing, the value of online rights defense was set to 1, and the value of not choosing online rights defense was 0.

Mediating Variables. The Internet's issue discussion, resource acquisition, and fairness promotion functions were chosen as mediating variables to explain the influence mechanism of Internet use on the young adults' online rights defense intention. The items in CGSS2017 were "Do you agree that the internet enables more people to discuss government affairs?", "Do you agree that the internet will enable more people to gain access to more social resources?" and "Do you agree the internet can promote social equity?" Point "1" means they agree with the functions of the Internet for public affairs discussion, resource acquisition, or promoting social fairness functions, and point "0" means they do not agree with the functions of the Internet.

Control Variables. The control variables may affect young adults' intention to defend their rights on the Internet. In this study, the age of the youth was coded as a continuous variable. Gender was coded as "0" for "female" and "1" for "male ."Educational level was divided into three grades (1 = junior school and below; 2 = high school; 3 = college degree or above). Marital status was coded as "1" for "married" and "0" for "not married ."Hukou was coded as "1" for "non-agricultural (urban)" and "0" for "agricultural (rural) ."Political status ranged from 1 to 3 (1 = public; 2 = members of the Chinese communist youth league; 3 = members of the democratic party and the Communist Party of China). The following items measured social fairness and trust: "Do you agree that most people in this

society can be trusted?" and "Do you think the society is fair?" The five-point Likert scale was used to measure these two items.

RESULTS

Descriptive Analysis

Table 1 shows that the average age of the samples is 32.53 years old, and females accounted for about 52.42% of the total.

Moreover, 8.27% of the respondents have never used the Internet in the past year, while 51.15% use it often. Among the respondents, 41.62% intended to initiate online rights safeguards when their rights are violated. In comparison, 40.52% would participate in online rights safeguard activities when the rights of others are being violated.

Table 1
Descriptive statistics of main variables

Types	Variables	n	Percentage
Independent variable	Internet use 1 = Never 2 = Rarely 3 = Sometime 4 = Often 5 = very frequently	111 54 93 398 687	8.27% 4.02% 6.92% 29.64% 51.15%
Control variables	Age 18–29 30–39 40–44	469 560 314	34.92% 41.70% 23.38%
	Gender 0 = female 1 = male	704 639	52.42% 47.58%
	Education level 1 = junior school and below 2 = high school 3 = college degree or above	538 302 503	40.06% 22.49% 37.45%
	Hukou 0 = agricultural (rural) 1 = non-agricultural (urban)	837 506	62.32% 37.68%
	Marital status 0 = not married 1 = married	372 971	27.70% 72.30%
	Political status 1 = public 2 = members of the Chinese communist youth league 3 = members of the party (includes Democratic)	1,049 176 118	78.11% 13.10% 8.79%

Table 1 *(Continue)*

Types	Variables	n	Percentage
	Social trust		
	1 = strongly disagree	79	5.88%
	2 = disagree	293	21.82%
	3 = neutral	180	13.40%
	4 = agree	705	52.49%
	5 = strongly agree	86	6.40%
	Social fairness		
	1 = unfair	107	7.97%
	2 = somewhat unfair	405	30.16%
	3 = neutral	290	21.59%
	4 = somewhat fair	512	38.12%
	5 = fair	29	2.16%
	Resource acquisition function of the Internet		
	0 = disagree	339	26.08%
	1 = agree	961	73.92%
Mediating variables	Issue discussion function of the Internet		
	0 = disagree	466	35.87%
	1 = agree	833	64.13%
	Fairness promotion function of the Internet		
	0 = disagree	647	50.51%
	1 = agree	634	49.49%
	Intention to initiate rights safeguard online		
	0 = no	784	58.38%
	1 = yes	559	41.62%
Dependent variables	Intention to participate in rights safeguard online		
	0 = no	799	59.49%
	1 = yes	544	40.51%

Source: Authors' work

Regression Analysis

Table 2 shows the results of the logit regression model about the effects of internet use on young adults' intention to safeguard their rights online. Model 1 estimates the correlation between internet use and the intention to initiate online rights safeguard. The coefficient is significantly positive ($\beta = 0.462$, $p < 0.010$), indicating that the higher the frequency of internet use, the more likely young individuals will initiate online rights

safeguard activities. Model 2 shows that after controlling for covariates, internet use still significantly influenced the intention to initiate online rights defense ($\beta = 0.248$, $p < 0.010$). The results also show that age and education level significantly correlate with young adults' intention to initiate rights safeguards online, indicating that as they grow older, their intention to initiate online rights safeguards may follow a downward trend. In contrast, those with high education

levels are more inclined to initiate online rights protection activities.

The dependent variable in Model 3 is the young adults' intention to participate in others' online rights defense activities. The result reveals that the more frequently young adults use the Internet, the stronger their intention to participate in or support others' online rights defense activities ($\beta = 0.464$, $p < 0.010$). The results remain significant after controlling for covariates ($\beta = 0.232$, $p < 0.010$). Education level still positively affected the intention to participate in online rights defense, while age and this intention are negatively correlated.

Table 2
Logit regression of the internet use on rights safeguard online intention

Variables		Intention to initiate rights safeguard online		Intention to participate in rights safeguard online	
		Model 1	Model 2	Model 3	Model 4
Internet use		0.462***	0.248***	0.464***	0.232**
		(0.056)	(0.063)	(0.056)	(0.064)
Age			-0.037***		-0.050***
			(0.011)		(0.011)
Gender	Male		-0.044		0.006
			(0.120)		(0.121)
Educational level	High school		0.489***		0.558***
			(0.169)		(0.171)
	College degree or above		0.761***		0.949***
			(0.175)		(0.177)
Hukou	Non-agricultural (urban)		0.063		-0.066
			(0.137)		(0.139)
Marital status	Married		-0.160		0.060
			(0.177)		(0.179)
Political status	Members of the Chinese communist youth league		0.070		-0.064
			(0.202)		(0.202)
	Members of the party (includes Democratic)		-0.017		0.036
			(0.216)		(0.217)
Social trust			0.041		0.102*
			(0.060)		(0.060)
Social fairness			0.063		-0.008
			(0.061)		(0.061)
Constant		-2.286***	-0.839*	-2.352***	-0.627
		(0.249)	(0.509)	(0.253)	(0.513)
N		1,343	1,343	1,343	1,343
Pseudo R^2		0.045	0.044	0.088	0.095

Notes: Standard errors in parentheses; *** $p < 0.010$, ** $p < 0.050$, * $p < 0.100$.
Source: Authors' work

In order to enhance the validity and reliability of regression results, we used two approaches to do the robustness check. First, drop those who never use the Internet (N = 111) and run the regression analysis. Second, the independent variable was substituted by assessing the frequency of internet usage among young individuals using the item "In the past year, how often did you engage in online activities during your leisure time?" The findings indicate that increased internet usage increases the likelihood of young individuals initiating or participating in online rights defense.

Mediating Effects

First, we explored the relationship between independent and mediating variables. This study established three regression models to examine whether internet use is associated with the perceptions of internet functions. Covariates are controlled in all three models. The results in Table 3 show that internet use positively affects young adults' perception of internet functions. When using the Internet more frequently, young adults are more likely to perceive the Internet's function of resource acquisition (β = 0.226, p < 0.010), issue discussion (β = 0.108, p < 0.100), and fairness promotion (= 0.132, p < 0.050).

Table 3

Logit regression of the internet use on the perception of internet functions

Variables	Perception of Internet functions		
	Model 1 Resource acquisition	Model 2 Issue discussion	Model 3 Fairness promotion
The internet use	0.226*** (0.060)	0.108* (0.056)	0.132** (0.057)
Control variables	controlled	controlled	controlled
Constant	-1.034* (0.535)	-0.293 (0.492)	-2.032*** (0.490)
N	1,300	1,299	1,281
Pseudo R-squared	0.029	0.025	0.018

Notes: The covariates were controlled. Standard errors in parentheses; *** p < 0.010, ** p < 0.050, * p < 0.100.
Source: Authors' work

Second, we explored the indirect effect of mediating variables in models. The dependent variable of the first three models is the intention of the youth to initiate online rights protection activities. In comparison, the latter three models represent the intention to participate in online rights protection activities others organize.

Based on the results presented in Table 4, in Model 1, a significant positive relationship between the resource acquisition function and the youth's intention to initiate rights

Table 4
Logit regression of mediation effects

Variable	Intention to initiate online rights defense			Intention to participate in online rights defense		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
The Internet use	0.185*** (0.065)	0.210*** (0.065)	0.201*** (0.065)	0.164** (0.066)	0.198*** (0.066)	0.185*** (0.067)
Resource acquisition	0.594*** (0.142)			0.797*** (0.147)		
Issues discussion		0.568*** (0.128)			0.761*** (0.131)	
Fairness promotion			0.534*** (0.121)			0.662*** (0.123)
Control variables	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Constant	-0.810 (0.521)	-0.974* (0.523)	-0.618 (0.521)	-0.648 (0.528)	-0.814 (0.530)	-0.383 (0.528)
N	1,300	1,299	1,281	1,263	1,300	1,299
Pseudo R-squared	0.087	0.090	0.087	0.102	0.106	0.101

Notes: Standard errors in parentheses; *** $p < 0.010$, ** $p < 0.050$, * $p < 0.100$.
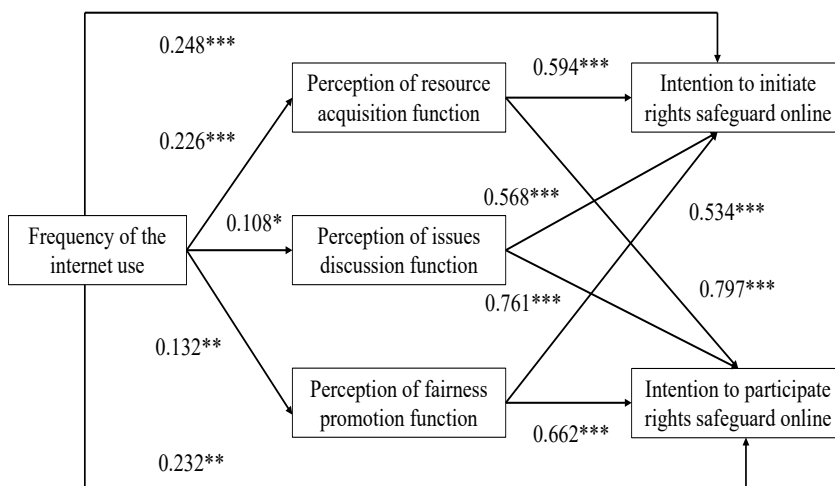*Source:* Authors' work

Figure 1. Results of the mediating analysis
Source: Authors' work

safeguard online ($\beta = 0.594$, $p < 0.010$) can be observed. Models 2 and 3 also prove that the issue discussion and fairness promotion functions of the Internet have significant effects on the youth's intention ($\beta = 0.568$, $p < 0.010$; $= 0.534$, $p < 0.010$). Meanwhile,

Models 4 to 6 verify the significant relationships between the perception of the three functions of the Internet and the intention of the youth to participate in online rights safeguard activities (β = 0.797, $p <$ 0.010; β = 0.761, $p <$ 0.010; β = 0.662, $p <$ 0.010). From the above model results, we can conclude that the perception of internet functions partially mediates internet use and the youths' intention to initiate rights safeguard online (Figure 1).

Robust Examination of The Mediating Effects

The Sobel tests were applied to further examine the robustness of this study. Table 5 shows that the indirect effect is significant. The results indicate that the perception of resource acquisition, issue discussion, and fairness promotion functions of the Internet positively influenced the young adults' intention to initiate rights safeguard online actions. The mediating effects are 14.93%, 7.94%, and 9.17%, respectively, which means the mediating effects of the perception of the internet resource acquisition function are more significant than the other two. Models 4 to 6 also suggest that perception of the Internet's function mediates the positive association between Internet use and young adults' intention to participate in online rights safeguard activities. The mediating effects are 21.63%, 11.28%, and 12.47%, respectively. The Sobel tests verified the conclusion that the mediating effect of the perception of internet functions appeared in the relationship between internet use and young adults' intention to safeguard rights online.

Table 5
Sobel tests

Independent variable	Internet Use					
Dependent variable	Intention to initiate online rights defense			Intention to participate in online rights defense		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Mediating variable	Resource acquisition	Issue discussion	Fairness promotion	Resource acquisition	Issue discussion	Fairness promotion
Sobel statistic	0.006*** (0.002)	0.003* (0.002)	0.004*** (0.002)	0.009*** (0.012)	0.004** (0.002)	0.005** (0.002)
Indirect effect	0.006** (0.002)	0.003* (0.002)	0.004*** (0.002)	0.009*** (0.012)	0.004** (0.002)	0.005** (0.002)
Proportion that is mediated	14.93%	7.94%	9.17%	21.63%	11.28%	12.47%
N	1300	1299	1281	1300	1299	1281

Notes: Covariates were controlled. Standard errors in parentheses; *** $p < 0.010$, ** $p < 0.050$, * $p < 0.100$.
Source: Authors' work

Considering that the bootstrap method has a relatively high statistical effect, the conditional indirect effects of 95% confidence intervals (CIs) were obtained using the bootstrap method. The mediating paths constructed in Table 6 show the indirect effects of internet use through the perception of three internet functions on young adults' intention to safeguard their rights online. After controlling for covariates, we found the indirect paths (Table 6) significant (the 95% confidence interval for the indirect effect did not include zero). The indirect effects through the perception of internet resource acquisition function on the young adults' intention to initiate online rights safeguard were significant, with a point estimate of 0.006 and a 95% bias-corrected confidence interval excluding zero (0.002 to 0.010). Similarly, the indirect effects of the other mediating variables had a confidence interval excluding zero, indicating a statistically significant partial mediation.

Table 6
Bootstrap analysis of multiple mediation effects

Mediating paths	Indirect effects	Model summary		BC 95% CI	
		SE	Z-score	Lower level	Upper level
UI → RA → TI	0.006***	0.002	2.97	0.002	0.010
UI → ID → TI	0.003**	0.002	1.75	0.001	0.007
UI → FP → TI	0.004**	0.002	2.13	0.001	0.008
UI → RA → TP	0.007***	0.003	3.10	0.003	0.013
UI → ID → TP	0.004*	0.002	1.91	0.001	0.009
UI → FP → TP	0.005***	0.002	2.19	0.001	0.010

Notes: $N = 1,379$. Bootstrap sample repeated times = 1000. Covariates were controlled. *** $p < 0.010$, ** $p < 0.050$, * $p < 0.100$; UI = the internet use. TI = intention to initiate rights safeguard online. TP = intention to participate in rights safeguard online. RA = resource acquisition function. ID = issues discussion function. FP = fairness promotion function.

Source: Authors' work

DISCUSSION

The relationship between the Internet and democracy has received much attention in various studies, especially in a country such as China, which is undergoing a profound transformation in the fields of technology, economy and culture (Li & Shang, 2020; Shao & Wang, 2017; Wandaogo, 2022). The development of China's digital society has brought about two phenomena. The first is the growth and popularization of network technology, with most young people regularly using the Internet (Huhe et al., 2018). The second is the increase in civic awareness, which leads to a wider prevalence of democratic actions on the

Internet (Lorentzen & Scoggins, 2015), such as online rights defense. According to the public sphere theory, the Internet provides a platform for youth to express their opinions, making resources such as information and attention within reach, facilitating the formation of a public space or a public opinion field, and stimulating youth's social participation behavior (Anduiza et al., 2009; Boulianne & Theocharis, 2020). Young adults who are willing to express their opinions actively safeguard their rights online. Not only do they initiate rights protection online, but they also participate in or support the actions of others.

First, the Internet is not simply an essential source of information and a means for citizens to act collectively; it also provides an open and free space for citizens to discuss online public events, which may explain why public sphere theory is appropriate for understanding young adults' online rights defense (Shao & Wang, 2017). As an instrumental and emerging communication channel, the Internet enables organizations and individuals to break through barriers of geographic distance, censorship, and personal responsibility (Pendry & Salvatore, 2015; Van Deursen & Helsper, 2018). The Internet can play a role in reducing the costs of informing, mobilizing, and engaging in the struggle for rights safeguards (Lee, 2015). Young adults are, therefore, more inclined to take rights online when necessary.

Second, the perception of internet functions mediates the effect of internet use on the intention to defend rights online, and this finding expands the current literature on the Internet and democracy. Those with a relatively high frequency of internet use can better recognize the functions of the Internet, which in turn would inspire their intention to take action to defend their rights online. According to the results of the mediating test, the perception of the Internet's resource acquisition function has the strongest mediation explanatory effect on the youths' intention to start rights safeguard online, suggesting that their capacity to mobilize Internet resources will have a significant impact on the likelihood of their engaging in active rights safeguard behaviors. Discussions on government affairs allow young people to participate in politics (Freelon, 2010; Ye et al., 2017). Young individuals can post their views and opinions on events and government affairs on the Internet when their rights are violated, which will attract the attention of the public and relevant government departments (Wong, 2011).

Promoting social fairness on the Internet is also an essential mediating factor for young people to become initiators of rights safeguard activities. This contradicts some studies that have concluded that internet use reduces citizens' sense of social fairness (Zhu et al., 2020). The recognition of this function indicates that these young people believe the Internet can play a role in rights safeguard actions, significantly aiding them in adequately resolving the problems of rights infringement and achieving social fairness.

CONCLUSION

Some studies have argued that the impact of the Internet in promoting democracy has been exaggerated (Bakker & de Vreese, 2011; Chae et al., 2019; Gunitsky, 2015). More scholars have called for a rethinking of the role of the Internet. Despite the serious challenges to social participation on the Internet, this is the case for transitional democracies and even mature democracies worldwide (Lee, 2017; McAllister, 2016; Momen, 2020). Our conclusion finds that the Internet still significantly promotes rights safeguarded online for citizens, especially youth, in developing countries. The more frequently the Internet is used, the stronger the intentions of young people to take rights safeguard actions online when faced with rights violations. Internet use also enhances the intention of young adults to participate or support others in their rights to safeguard online actions. The perception of resource acquisition, issue discussion, and fairness promotion functions of the Internet positively influenced the young adults' intention to initiate and participate in rights safeguarding online. It is consistent with the findings of previous studies (Dong et al., 2017; Jiang et al., 2019). The Internet is capable of fostering democratic values among its users, expanding access to a plurality of information and perspectives, and allowing new modes of political communication to be realized (Huhe et al., 2018).

Implication

This study contributes to the theory and literature on democratic behavior and social participation among young adults by providing evidence on the role of functional internet perception in internet use and rights safeguarding online. Specifically, we make three main contributions to theoretical understanding and innovation. Firstly, while previous research has focused more on the negative effects of internet use on the psychology and behavior of young people (Ak et al., 2013; He et al., 2021; Liu et al., 2020), this study shifts the focus onto a typical form of social participation rights safeguard online and explores the broader democratic implications of China's internet development based on public sphere theory. Secondly, this study constructs an analytical framework for the relationship between internet use and rights safeguarded online. It introduces the mediating variable of perceived Internet functionality to reveal the mechanisms and relationships between them, thus enriching the literature on the impact of the Internet on individuals. Thirdly, in contrast to existing literature (Aarons & Rona, 2016; Goodwin-De Faria & Marinos, 2012; Tang et al., 2016; Wong, 2011), this study distinguishes between spontaneous and participatory rights safeguard online, further expanding the typology of social participation in the digital age, further expanding the types of social participation in the digital age, in which the Internet is used as a public sphere (Batorski & Grzywińska, 2018; Fenton, 2018; Regilme, 2018).

In the democratic era, the Internet contributes to pluralism and the public

sphere and triggers fundamental value changes for citizens (Huhe et al., 2018; Momen, 2020). As a result, incidents involving online rights defense are expected to become more frequent. Our findings highlight the imperatives of improving information literacy (Karim et al., 2021) and safeguarding the legal rights of young adults (Xu et al., 2017). This study, therefore, provides some practical implications for the public sector related to education and cyberspace governance. Educational institutions such as schools should improve young adults' ability to recognize and evaluate online information (Karim et al., 2021). The government should protect young adults from infringement of their rights and interests as well as provide practical guidance and appropriate solutions in democratic participation activities (Medaglia & Zhu, 2017; Zeng et al., 2017). In addition, it is also necessary to improve the system and mechanism of online rights defense from the aspects of public policies, laws and regulations.

Limitation and Recommendation

Some limitations should be noted. First, considering the nature of the cross-sectional design data set, we cannot analyze trends over time in the same sample and make long-term comparisons. In future works, a longitudinal or experimental design is useful for collecting data over multiple years and examining whether young adults' online rights safeguard intention has been affected. Second, the sample size is relatively small because of the secondary data, which affects the generalization of the conclusion. Thus, the sample size can be expanded for analysis. Third, other environmental variables may moderate the relationship between internet use and the intention of the youth to defend their rights online, such as the type of area in which the young adults live. Thus, exploring the moderating roles of these variables is necessary.

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