

## **“Weibo To The Rescue? A study of social media use in citizen-government relations in China”**

Vincent Homburg (corresponding author: [homburg@essb.eur.nl](mailto:homburg@essb.eur.nl))

Erasmus University Rotterdam

Erasmus School of Social and Behavioral Sciences

Department of Public Administration

PO Box 1738

NL3000DR Rotterdam, The Netherlands

University of Tartu

Johan Skytte Institute of Political Studies

Ülikooli 18

50090 Tartu, Estonia

Rebecca Moody

Erasmus University Rotterdam

Erasmus School of Social and Behavioral Sciences

Department of Public Administration

PO Box 1738

NL3000DR Rotterdam, The Netherlands

### **Structured abstract**

**PURPOSE:** In this study, we explain citizens’ adoption of social media in citizen-government relations in China, a country that blends an authoritarian governance regime with limited tolerance of and responsiveness to online citizen participation.

**DESIGN / METHODOLOGY:** original survey data were gathered using a vignette survey among 307 respondents living in the People’s Republic of China. Multivariate analysis of the data was used to test four hypotheses and identify antecedents of Chinese citizens’ social media adoption for ‘thin’ participation purposes.

**FINDINGS:** citizens’ perceived impact of ‘thin’ participation, citizens’ skills and capabilities, and citizens’ trust in institutions are significantly associated with citizens’ social media adoption. Social media anxiety was found not to be associated with Chinese citizens’ social media adoption.

**ORIGINALITY:** this study is one of the few systematic survey studies focusing on Chinese citizens' adoption of social media in citizen-government relations.

**RESEARCH IMPLICATIONS:** this study demonstrates how vignettes can be used to study adoption of technological and institutional innovations in an authoritarian governance regime, and how in this context existing adoption theories can be extended with notions of institutional trust to adequately explain citizens' adoption of technological and institutional innovations in citizen-government relations.

**PRACTICAL AND SOCIAL IMPLICATIONS:** While some argue that social media activity could potentially mitigate democratic deficits caused by the state, in the case of China, the intertwining of state and social media platform renders this argument unsustainable.

**KEY WORDS:** social media, thin participation, digital engagement, China, adoption, innovation

## 1. Introduction

Throughout the world we find social media platforms being used for online conversations between governments and citizens (Mergel 2013, Feeney, Porumbescu 2020, Silva et al. 2019). A systematic review of studies on social media use in citizen-government relations showed that most studies focus on explanatory accounts of governments' presence on social media and on social media management issues, while citizens' motivations for using social media to engage in conversations with government rarely being reported (Medaglia, Zheng 2017). With few exceptions (Lu, Zhang & Fan 2016, Homburg et al. 2020, Medaglia, Zhu 2017, Gintova 2019), researchers have yet to empirically study why citizens publicly voice concerns on governments' social media accounts. This article aims to fill this gap by focusing on which factors determine citizen-initiated exchange of information with government on public social media platforms, and it does so by empirically focusing on the People's Republic of China. Apart from its massive user base (close to 1 billion users of domestic social media platforms, 600.000 Party and government social media accounts (Qin, Strömberg & Wu 2017)), China is of interest because central and local governments have adopted electronic channels for administrative communication for decades (Qin, Strömberg & Wu 2017, Harwit 2014, King, Pan & Roberts 2013); furthermore, it has been argued that in countries lacking strong democratic institutions, social media platforms may serve as alternative platforms for participation and public accountability (Reuter, Szakonyi 2015, Schlæger, Jiang 2014). In this respect, China's blend of (1) an authoritarian governance regime with relatively low scores on democracy indices (ranked on position 153 out of 167 countries in the Economist's Democracy Index, and on position 153 out of 163 countries on Transparency International's corruption index) and (2) encouragement and appreciation of 'beta-version' local digital grassroots initiatives (Homburg et al. 2020, Schlæger, Jiang 2014, Ma 2013) and (3) government investments in electronic channels and services generally (Zhang, Zhu 2020) make China a relevant point in case. Our aim with this article is to contribute to an explanation of citizen-initiated digital participation in China's political and societal context by confronting hypotheses derived from innovation theories, political theory and institutional theories with original survey data that was gathered in the People's Republic of China.

## 2. Chinese citizens' social media use decisions

### 2.1 Citizens' 'thin' participation on social media platforms

In order to develop hypothesis regarding citizens' adoption of social media in citizen-initiated contact with government in China, we extend generic innovation theories such as the Technology Adoption Model (TAM) and Unified Theory of Adoption and Utilization of Technology (UTAUT) (Hooda Nandal,

Singla 2019, Alkrajji 2021, de Araujo, Reinhard & Cunha 2018, Venkatesh et al. 2016, Rana et al. 2016, Kurfali et al. 2017) with social media adoption theories (Homburg et al. 2020, Al-Debei, Al-Lozi & Papazafeiropoulou 2013), theories on digital participation (Landemore 2015, Leighninger 2014, Sjoberg, Mellon & Peixoto 2017) and studies of social media use in China (Qin, Strömberg & Wu 2017, Harwit 2014, King, Pan & Roberts 2013). In terms of types of conversations on social media platforms, we focus on 'thin participation' (ad-hoc sourcing and discussion of issues that affect primarily narrower interests, such as temporal, local infrastructure failures (Leighninger 2014)) as our deductive research design necessitates a relatively unambiguous and time-place independent phenomenon as the basis for hypothesis development and -testing. In the subsequent subsections, we briefly review the more encompassing literature to develop hypotheses with which the occurrence of 'thin' forms of participation on social media networks can be explained.

### *2.2 Perceived impact and effectiveness of digital participation*

Innovation theories such as UTAUT (Rana et al. 2016, Kurfali et al. 2017, Venkatesh et al. 2003) present individuals' perceived effectiveness as the most important antecedent of adoption of e-services (Venkatesh, Thong & Xu 2016, Mensah, Adams 2020) In the participation literature, it is reported that citizens' expectations on whether it pays off to voice concerns on social media platforms affect the likelihood that citizens initiate digital conversations (Culver, Howe 2004). Combining this we find that only if citizens think digital participation yields personal or civic benefits and value, they will spend precious time and energy on using social media to initiate a conversation with government (Venkatesh et al. 2016, Al-Debei, Al-Lozi & Papazafeiropoulou 2013, Culver, Howe 2004, Longo 2017). whereas In various empirical studies, a positive association between perceived effectiveness of e-services and intended use was observed (Rana et al. 2016, Kurfali et al. 2017, Mensah, Adams 2020, Carter et al. 2011). This leads us to our first hypothesis that relates to impact, defined as the citizen's belief that social media use helps to solve real-world problems:

H1: The more a citizen feels her or his social media use helps in solving real-world problems, the higher the likelihood a citizen uses social media to address concerns or issues in citizen-government relations [impact].

### *2.3 Capabilities and skills*

In technology adoption studies, elements of the capability approach have been used by hypothesizing that a technology's ease of use is related to adoption; capability was generally found to predict citizens' intentions to use e-government services (Rana et al. 2016, Carter et al. 2011, Carter, Bélanger 2005), whereas no support was observed in a study by Kurfali (Kurfali et al. 2017). In this study we define capabilities and skills as the degree to which citizens believe that they possess the required capabilities and skills to use social media to initiate contact with their government (de Araujo, Reinhard & Cunha 2018). This leads to the formulation of H2.

H2: The more advanced a citizen's social media capability, the higher the likelihood a citizen uses social media to address concerns or issues in citizen-state relations [capabilities and skills].

### *2.4 Social influence*

Literature also states that social influence, the norms held by one's nearest and dearest, influences citizens' decisions to adopt technology (Homburg et al. 2020, Kurfali et al. 2017, Venkatesh et al. 2003, Venkatesh, Thong & Xu 2016, Yang et al. 2018). This statement was supported in e-services studies (Rana et al. 2016, Kurfali et al. 2017, Carter et al. 2011) and social media adoption studies (Homburg

et al. 2020, Al-Debei, Al-Lozi & Papazafeiropoulou 2013). This leads to the formulation of hypothesis 3.

H3: The more a citizen perceives social influence, the higher the likelihood a citizen uses social media to address concerns or issues in citizen-state relations [social influence].

### *2.5 Trust in government and trust in social media ecology*

A number of innovation studies have added the variable 'trust' as addition to the more generic theories such as UTAUT. In general, citizen's trust in government is an individual citizen (A)'s belief that government (B) will act competently, fairly, benevolently and with an eye on integrity and generating public value (Zhang, Zhu 2020, McKnight, Choudhury & Kacmar 2002, Pavlou, Gefen 2005). Trust in government has been found to be the most important determinant of e-services adoption (Carter et al. 2011, Zhu, Azizah & Hsiao 2021). This leads to the formulation of H4:

H4A: The larger a citizen's trust in government, the higher the likelihood a citizen uses social media to address concerns or issues in citizen-state relations [trust in government].

A second connotation of trust in relation to social media refers to trust in the larger ecology of Internet Service Providers (in China, 263.net and China Telecom, for example), social media businesses (Sina Weibo, Tencent, People's Net and Xinhua Net, for instance) and regulatory agencies that govern privacy and safety of transactions (in China a myriad of bodies, including Central Leading Groups, the Ministry of Industry and Information, the State Council Information Office, and the Cyberspace Administration of China (Miao, Zhu & Chen 2018)). Social media platforms are not necessarily designed and built to strengthen democracy, especially so in a Chinese context (Qin, Strömberg & Wu 2017, Harwit 2014, Cairns, Carlson 2016). In our study, we define trust in social media ecology as the degree to which an individual believes that whereas there are potential risks in using social media, he or she will not be confronted with negative consequences. This leads to the fifth hypothesis:

H4B: The higher a citizen's trust in social media ecology, the higher the likelihood a citizen uses social media to address concerns or issues in citizen-state relations [trust in social media ecology].

### *2.6 Social Media Anxiety*

Political theory shows insights relating to social media anxiety, defined as citizen's general negative affective emotion of arousal that results from consequences of individual citizens' use of social media that are beyond the control of that particular citizen. According to Qin, Strömberg and Wu, Chinese officials, agencies and Chinese Communist Party cadres use social media to monitor public sentiments, and use them as a propaganda space through which citizen discontent is contained within tolerable limits (Qin, Strömberg & Wu 2017). Authorities' responsiveness to citizen voice on social media platforms continues to exist up to the point where authorities suspect social protests are gaining traction (Sullivan 2014) then they will most likely intensify censorship and trolling through occupying social media in an attempt to clip ties of emerging social organization (King, Pan & Roberts 2013, Cairns, Carlson 2016, Meng, Pan & Yang 2017). Thus, Chinese citizens, who are described as relatively wild and outspoken in their online behaviors (Hassid 2012), are individually free to express themselves on social media platforms like Sina Weibo, but collectively, they are chained to a practice of surveillance, censorship and possibly prosecution (King, Pan & Roberts 2013, Meng, Pan & Yang 2017). In Homburg et al's study, anxiety was found to be negatively associated with social media use in China (Homburg et al. 2020). This leads to the final hypothesis:

H5: The more a citizen experiences social media anxiety in citizen-state relations, the lower the likelihood a citizen uses social media to address concerns or issues in citizen-state relations [social media anxiety].

Before empirically testing our hypotheses we have identified gender (Venkatesh, Morris & Ackerman 2000), age (Liébana-Cabanillas, Sánchez-Fernández & Muñoz-Leiva 2014) and education level (Liébana-Cabanillas, Sánchez-Fernández & Muñoz-Leiva 2014, Yera et al. 2020) as controls.

### 3. Methodology

#### 3.1 Vignette Survey

Taking into account the deductive character of the research objective, we chose a *large-n* online survey research design to gather data among Chinese citizens. In a questionnaire we presented respondents with vignettes in which a protagonist speaks up on issues linked to relatively uncontested government tasks that appeal to a target audience as wide as possible without specifying a specific time frame or locality (infrastructure maintenance, tax assessment, and public health). More specifically, we described a situation in which a protagonist observes a pothole in a public road, is confronted with an obvious mistake in a tax assessment, and missed out on a vaccination summon (the vignettes are included in Appendix A). In order to prevent a respondent's preference for specific platforms to interfere with the measurement, we refrained from mentioning specific platforms in the vignettes. Respondents were asked to score the perceived realism of the situation (using a two-item Likert scale which is only used for validation purposes) and the degree to which he or she would react in the same way when confronted with such a situation (a proxy for the adoption of social media in citizen-government relations). The use of vignettes in survey research over more generic and abstract survey items like 'I would use social media to speak up about public issues' brings with it the advantage that validity is increased as responses are embedded in a more concrete, realistic context; furthermore, impact of social desirability is limited (Wallander 2009, Steiner, Atzmüller & Su 2017). Reported levels of realism are reported in Table I. As levels of perceived realism were satisfactory, we found no reason to exclude specific vignettes on the basis of these reported realism levels.

REALISM SCORES (SCALE OF 1-5)	CRONBACH'S ALPHA (#ITEMS)	M (SD)
'POTHOLE' VIGNETTE ('V POTHOLE')	.65 (2)	4.33 (.64)
'TAXES' VIGNETTE ('V TAX')	.79 (2)	4.04 (.88)
'VACCINATION' VIGNETTE ('V VACCINATION')	.84 (2)	4.18 (.87)

Table I: perceived realism for vignettes on a scale of 1-5

#### 3.2 Measurement

Adoption of social media is measured with three items which register the respondents' likeliness of acting the same as the protagonist in the vignette did. All variables were measured using multiple Likert items based on constructs found in existing studies (Homburg et al. 2020, Carter, Bélanger 2005, McKnight, Choudhury & Kacmar 2002, Osman et al. 1994), yet slightly adapted to fit the context of social media use in Chinese citizen-government relations. All items are reported in Appendix B.

### 3.3 Data gathering, data screening and sample characteristics

In order to gather the data, a local market research firm was commissioned to distribute the questionnaire among a panel of Chinese adult citizens. The questionnaire was phrased in Mandarin and pretested by a Chinese native speaker. Data was not gathered through river-sampling but via double opt-in, actively managed research panels; respondents have to sign up and provide personal information before being eligible for inclusion in randomized survey panels. This allows for the composition of a more representative panel from which data are extracted. In order to avoid self-selection, survey invitations did not include specific details about the contents of the survey and were kept very general. Between 23 July and 30 July 2020, responses from 307 respondents could be recorded in the data set. Data cleaning procedures did not result in the identification of unengaged respondents or otherwise suspicious data. We checked for the occurrence of common method bias by inspecting the total variance in an unrotated principal component analysis of all Likert items in data set, and found that the first factor accounted for 28.6% of total variance, implying that none of the factors explain the majority of variance and common method bias is not likely to have occurred during the process of data gathering.

Table II provides information of the composition of our sample and compares it to known estimates of the Chinese population. The study sample displays a fairly representative gender balance, with an overrepresentation of highly educated citizens and an underrepresentation of senior citizens. Overall, we assess this sample as adequate and useful for purposes of hypothesis testing.

VARIABLE	THIS STUDY'S SAMPLE	WEIBO USERS (Medaglia, Zhu 2017)	TOTAL 2020 CHINA POPULATION <sup>1,2</sup>
FEMALE	55%	49%	49%
HIGHER EDUCATION	88%	76%	18%
AGE <24	22%	49%	29%
AGE 24-33	34%	39%	16%
AGE 34-45	21%	11%	14%
AGE > 46	20%	2%	41%

Table II: Comparison of characteristics of study sample, Weibo Users and total Chinese population of gender, education and age

## 4. Findings

A principle component analysis was carried out in order to identify the underlying structure of the measured variables in the data set and assess convergent and discriminant validity of the measurement items. All Likert items showed a correlation of at least .3 with at least one other item, suggesting factorability. The Kaiser-Meyer-Olkin measure for sampling adequacy was .874 (well above the required minimum of .6) and Bartlett's test of sphericity was significant ( $\chi^2(435) = 5244.587$ ,  $p < .001$ ). All communalities were above .3, further confirming that each item shared at least some common variance with at least one other item. Given the aforementioned considerations, factor analysis was deemed to be suitable with all items. With Varimax rotation, a simple factor structure could not be realized with all items included. It was concluded that the items for 'trust in government' and 'trust in social media ecology' loaded on a single construct, suggesting that respondents did not

<sup>1</sup> <https://www.populationpyramid.net/china/>, last accessed donderdag, september 16, 2021.

<sup>2</sup> 2019 OECD data, [https://www.oecd.org/education/education-at-a-glance/EAG2019\\_CN\\_CHN.pdf](https://www.oecd.org/education/education-at-a-glance/EAG2019_CN_CHN.pdf), last accessed Saturday, 23 January 2021.

differentiate between trust in government and trust in the organizational ecology of businesses and regulators that allow for the operation of social media platforms. Therefore, we constructed one eight-item scale and labelled it 'trust in institutions'; consequently, it was not possible to test hypotheses 4A and 4B, and in the analysis we tested hypothesis 4, relating trust in institutions with the likelihood a citizen uses social media to address concerns in citizen-state relations. Eventually a 7-factor solution could be identified with which 69.5% of total variance could be explained. The descriptives are reported in Table III.

<b>GENDER (1=FEMALE)</b>	<b>.55 (.49)</b>				
<b>AGE</b>	31.1 (7.7)				
<b>EDUCATION (1=HIGHER)</b>	.88 (.31)				
<b>V POTHOLE</b>	.83 (3)	4.14 (.72)			
<b>V TAX</b>	.90 (3)	3.75 (1.01)			
<b>V VACCINATION</b>	.89 (3)	4.10 (.86)			
<b>V ALL VIGNETTES</b>	.88 (9)	3.99 (.70)			
<b>1. PERCEIVED IMPACT</b>	.87 (4)	3.93 (.79)	1	1.407	
<b>2. CAPABILITY AND SKILLS</b>	.79 (5)	4.16 (.61)	.250***	1	1.078
<b>3. TRUST IN INSTITUTIONS</b>	.89 (8)	3.97 (.72)	.518**	.209**	1
<b>4. SOCIAL MEDIA ANXIETY</b>	.82 (3)	3.10 (.96)	.009	-.034	.018

Table III: scale reliability, descriptives and correlations (\* p < 0,05; \*\* p < 0,01; \*\*\* p < 0,001)

Multiple regression analysis was deemed appropriate to test the hypotheses as the correlations between the independent variables and relatively low Variance Inflation Factor (VIF) scores signal no problems with multicollinearity, a scatter plot of standardized residuals signaled no issues with homoscedasticity, and Q-Q plots revealed a relatively normal distribution. Table IV summarizes the results of the regression analysis in terms of estimated standardized coefficients for the each of the regression equations, and for the regression equation in which responses to three vignettes are combined.

	POTHOLE		TAXES		VACCINATION		ALL	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
GENDER (1=FEMALE)	-.010	-.039	-.071	-.088	-.018	-.036	-.018	-.045
AGE	.034	.009	-.012	-.029	.006	-.009	.002	-.022
EDUCATION (1=HIGHER EDUCATION)	.072	.046	.075	.036	-.006	-.045	.044	.005
IMPACT		.117*		.207*		.126*		.178**
CAPABILITY AND SKILLS		.185***		.121*		.224***		.201***
TRUST IN INSTITUTIONS		.389***		.158*		.199**		.316***
SOCIAL MEDIA ANXIETY		.008		-.066		-.037		-.029
<i>F</i>	.607	17.496***	.963	7.449***	.046	8.385***	.209	16.151***
<i>R</i> <sup>2</sup>	.006	.291	.009	.149	.000	.165	.002	.275

Table IV: regression results (\* $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ )

Regression analyses provide support for hypothesis 1 (support in all three vignettes separately and combined,  $\beta = .178$ ,  $p < 0,01$ ), hypothesis 2 (support in all three vignettes separately and combined,  $\beta = .201$ ,  $p < 0,001$ ), and hypothesis 3 ( support in all three vignettes separately and combined,  $\beta = .316$ ,  $p < 0,001$ ). Hypotheses 4 is not supported (no significant impact in vignettes separately or combined,  $\beta = -.029$ ,  $p = n.s.$ ). The largest impact on social media use stems from trust in institutions and the overall explained variance is 27,5%.

## 5. Conclusion and discussion

In this study, we have tested various hypotheses regarding citizens' 'thin' online political participation efforts on social media platforms in China, a country with a large social media user base, and in which authoritarian rule is blended with encouragement of participation at especially local levels (Schlæger, Jiang 2014). Our findings suggest that citizens' perceived participation impact, capability and skills, and trust in institutions significantly impact Chinese citizens' use of social media platforms to interact with government, whereas no significant impact was found for social media anxiety.

With these findings, we add to the emerging academic literature, and to an improved theoretical understanding of adoption of social media platforms in citizen-government relations. First of all, we have theorized adoption of social media platforms beyond more or less rather inward-looking adoption and diffusion models like Technology Adoption Model (TAM, (Davis, Bagozzi & Warshaw 1989)) and the Unified Theory of Adoption and Utilization of Technology (UTAUT, (Venkatesh et al. 2003)). By including variables like trust in government, trust in social media ecology (which were merged into trust in institutions in this particular study) and social media anxiety, we also address citizens' awareness of political and institutional opportunities and constraints in which social media platforms are being used and in which use of technology may have detrimental impacts for its users, especially in an authoritarian governance regime. Second, with a focus on citizens' side of the story of

social media adoption, we have complemented existing literatures that focus on adoption of social media platforms by government agencies (Silva et al. 2019, Bonsón et al. 2012, Faber, Budding & Gradus 2020, Bonsón, Perea & Bednárová 2019, Agostino 2013, Hofmann et al. 2013).

This study confirms a role for individual users' perceived impacts (benefits and value), yet underlines the importance of trust in institutions for the explanation of adoption of social media platforms. This conclusion is consistent with previous studies on adoption of online transactions (Gefen, Karahanna & Straub 2003) and e-government services (Rana et al. 2016, Carter et al. 2011). However, it must be noted that from this study, it can be concluded that the notion of trust in all institutions that enable social media platforms matter, at least in the context of China; obviously, trust in institutions – a feature of a relationship between citizens and government - may exacerbate or remedy citizens' perceived risks and uncertainties. While some argue that interaction on social media platforms could potentially mitigate democratic deficits caused by the state, in the case of China, the intertwinement of state and social media platform makes this argument unsustainable. Perhaps surprisingly, social media anxiety, an intuitively related yet conceptually and statistically distinct concept related to one's internalized negative affective emotion, yielded no significant impact on citizens' social media use. These notions underline policy relevance of our study: in the absence of institutional trust, the availability of social media channels does not suffice to entice citizens to initiate digital conversations with government. Future, applied policy research is suggested to identify policy measures through which institutional trust can be increased, and governments can actually foster citizen inputs in policy making.

As every study, this study does not come without limitations. First of all, a cross-sectional vignette survey of social media adoption in China can only be interpreted as a mere snap shot of digital citizen-state interactions in an evolving, and sometimes rapidly changing socio-political reality of domestic and international turmoil. Second, the study of social media in citizen-state relations in China brings with it some aspects that are interpreted in China as sensitive, which limits possibilities to measure specific variables (including but not limited to 'trust in government') using survey questionnaires. Thirdly, in this study we have explicitly limited ourselves to 'thin' forms of political participation (citizens' reactions to poor public service quality) on China's domestic social media platforms in order to improve our understanding of adoption and diffusion of social media among Chinese citizens. Arguably, it is also of interest or even necessary to expand the scope of studies to 'thicker' forms of political participation, such as public opinion formation over diplomatic incidents (Cairns, Carlson 2016) and environmental disputes (Li et al. 2016). Fourthly, as every vignette bears with it a certain level of artificiality and there are risks of misrepresentation when vignettes are presented to respondents sampled from a rather generic population (which could apply to vignettes two and three), vignettes could also be designed in such a way that more topical and more specific time- and locality-specific characteristics are included, with the administration of the survey being limited to specific regions or segments of target populations, thereby increasing the validity of the measurement of responses to vignettes. Fifthly, although our relatively small sample proved to be large enough for hypothesis testing using regression analyses and was representative in terms of age and gender distributions, future research could focus on composing larger samples with a more representative sample in terms of education level.

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## Appendix A (Online resource)

VIGNETTE LABEL	VIGNETTE TEXT
'POTHOLE'	Trudy lives in a small urban community and travels to a neighboring city four times a week by a public road. Trudy notices that due to weather conditions, the condition of the road deteriorates up to the point where there are big cracks and holes in the road. As Trudy travels down this road regularly, she knows where the cracks and holes are, but she realizes that other people might crash and hurt themselves. Trudy is worried about what might happen to fellow-citizens and uses the public social media account of the public works agency responsible for road maintenance to post pictures of the holes and cracks in the road, and to notify the public works agency of the bad condition of the road under her own name.
'TAXES'	Vincent is a small business owner, as all people Vincent has to pay taxes on his revenues. Vincent has appropriately filed his taxes and did not make any mistakes. However, to Vincent's surprise the amount of taxes he has to pay according to the tax collection agency is far higher than it should be. Obviously, they have made a mistake and need to adjust the amount of tax Vincent needs to pay. Vincent is upset about this and decides to voice his discontent about this on the public social media page of the tax collection agency under his own name.
'VACCINATION'	Rebecca is a mother of two children and wants her children to be vaccinated against common diseases. The health department of the country in which Rebecca is a resident offers these vaccinations for free. Every parent in this country will receive a letter when their child is a certain age, appealing them to visit their doctor to obtain their vaccinations. Apparently, the health department has made a mistake and forgot to send the letter to Rebecca. Her children therefore missed their vaccination at the appropriate age. Rebecca is worried about this and decides to ask the health department on how she should proceed in order for her children to still obtain their vaccinations on their public social media under her own name.

## Appendix B (Online resource)

VARIABLE	BASED ON	LIKERT ITEMS (1=COMPLETELY DISAGREE 5=COMPLETELY AGREE)
<b>PERCEIVED EFFECTIVENESS</b>	(Venkatesh et al. 2003)	<p>PE1 Posting messages on governments' public social media accounts would help in solving my problems</p> <p>PE2 Posting messages on governments' public social media accounts increases my chances of realizing my objectives</p> <p>PE3 Posting messages on governments' public social media accounts allow me to solve my problems more quickly</p> <p>PE4 Posting messages on governments' public social media accounts would help my effectiveness in dealing with problems</p>
<b>EASE OF USE</b>	(Venkatesh et al. 2003)	<p>EU1 Learning how to use social media is easy for me</p> <p>EU2 I find social media are easy to use</p> <p>EU3 It is easy for me to become skillful at using social media</p> <p>EU4 I find it easy to get social media tools to do what I want to do</p>
<b>FACILITATING CONDITIONS</b>	(Bamberg, Schmidt 2003)	<p>FC1 I have the resources necessary to use social media</p> <p>FC2 I have the knowledge necessary to use social media</p> <p>FC3 Using social media is not compatible with the rest of my online activities (R)</p> <p>FC4 I can get help from others when I have difficulties using social media</p>
<b>TRUST IN SOCIAL MEDIA ORGANIZATIONAL INFRASTRUCTURE</b>	(Carter, Bélanger 2005, Zhou 2011)	<p>T1 Social media have enough safeguards to make me feel comfortable using them to post personal opinions/experiences</p> <p>T2 I feel assured that legal and technological structures adequately protect me from problems on social media</p> <p>T3 I feel confident that encryption and other technological advances on social media make it safe for me to use it</p> <p>T4 In general, social media are now a robust and safe environment</p>
<b>TRUST IN GOVERNMENT</b>	(McKnight, Choudhury & Kacmar 2002)	<p>TIG1 I feel that my government communicates information honestly</p> <p>TIG2 I feel that my government is capable of doing its task</p> <p>TIG3 I feel that my government is fair</p> <p>TIG4 I feel that my government wants what is best for its citizens</p>
<b>SOCIAL MEDIA ANXIETY</b>	(Osman et al. 1994)	<p>SMA1 Any problems resulting from the actions by the characters in the stories will never go away</p> <p>SMA2 Something terrible would happen if I did what the characters in the stories did</p> <p>SMA3 While what the characters in the stories did could be harmful, I would be okay (R)</p> <p>SMA4 I am afraid of what may happen if I did what the characters in the stories did</p> <p>SMA5 Any problems resulting from what the characters in the stories did will go away in time (R)</p> <p>SMA6 Doing what the characters in the stories did could cause serious problems</p> <p>SMA7 My computer/telephone/tablet could be compromised if I did what the characters in the stories did</p>
<b>USE (X=PROTAGONIST'S NAME IN VIGNETTE)</b>	(Moody, Siponen & Pahnla 2018)	<p>USE1 I would do the same as X did</p>

**REALISM**

(Moody, Siponen & Pahnila 2018)

USE2 I would have also posted a message on the agency's social media page

USE3 I would have done the same as X did when confronted with the same situation

REALISM1 The situation is realistic

REALISM2 I can image this situation happening to people