

TITLE: VALIDATION OF THE ONLINE POLITICAL ENGAGEMENT SCALE IN A
BRITISH POPULATION SURVEY

RUNNING TITLE: THE ONLINE POLITICAL ENGAGEMENT SCALE

AUTHORS AND AFFILIATIONS:

Ana Isabel Pontes, MSc¹

Matt Henn, PhD¹

Mark D. Griffiths, PhD²

Halley M. Pontes, MSc²

¹: Nottingham Trent University, Division of Politics and International Relations.

²: Nottingham Trent University, Department of Psychology.

CORRESPONDING AUTHOR/REPRING REQUESTS TO:

Name: Ana Isabel Pontes, MSc

Address: Nottingham Trent University, Graduate School, Burton Street, NG1 4BU,
Nottingham, United Kingdom

Phone number: +351 918278195

Email address: anaisabelpontes@gmail.com

ACKNOWLEDGEMENTS: None.

CONFLICT OF INTEREST: The authors declare that they have no conflict of interest.

Validation of the Online Political Engagement Scale in a British population survey

Abstract

Over the last decade, there has been an ever increasing number of citizens using online media to participate in and engage with politics. Social media sites and online blogs have enabled new opportunities for interactive and user-centered political experiences. Currently, there is a general scarcity of psychometrically validated and standardized instruments that assess politically-related constructs (e.g., political engagement, political participation) in the field of political sciences. The main aim of the present study was to develop a standardized psychometric tool to assess online political engagement among the general population that is valid and reliable. The present study examined the psychometric properties of a 7-item Online Political Engagement Scale (OPEnS) that assesses various online political actions people engage with during election campaigns. To develop the scale, data from the 2010 British Election Survey were used, and a total of 3,075 people participated in an online survey, post-election. The main findings obtained in the present study supported the unidimensionality of the online political engagement construct given the results obtained from exploratory and confirmatory factor analyses. The OPEnS appears to be a valid and reliable instrument for assessing this phenomenon, and may be useful in studies investigating newer patterns of online political engagement and disengagement.

Key words: Online political engagement; Psychometric assessment; Representative samples; British Election Study

Introduction

Over the past two decades, there has been a growing academic interest in political engagement and participation in the established democracies (Henn & Oldfield, 2016; O'Toole, 2015). Much of this scholarly interest seems to center on concerns regarding the declining levels of civic engagement, low electoral turnout, and other concerns such as public apathy, skepticism, cynicism, and lack of trust in politics (Dalton, 2008). New media is frequently seen as a solution to such participation and engagement problems (Macková, 2015). Consequently, due to the disillusionment with traditional channels of political participation (e.g., voting, membership in conventional political parties, etc.) (Norris, 2001), an ever increasing number of citizens are now using online media to gather political information on the performance of political institutions, and adjusting their attitudes accordingly (Ceron, 2015). Online media provides citizens with information useful for evaluating the output of political institutions and for making informed choices. However, citizens are also sensitive to how the media skews political news, and this can alter their political trust and evaluation of political institutions (Ceron, 2015). This relatively recent phenomenon has led to increased scholarly research on the impact of Internet use on political engagement (Gibson & Cantijoch, 2013; Norris, 2001) that, despite a lack of agreement on its conceptualization (Ekman & Amnå, 2012; Vaishnav & Ferreira, 2011), can be defined by several activities. These include (i) paying attention to news media (e.g., newspapers, magazines, television, radio, Internet), (ii) having political knowledge or beliefs, (iii) understanding political values, and (iv) holding opinions about, and attitudes towards, political matters (Barrett & Brunton-Smith, 2014). Despite the fact that research examining the dimensionality of online political engagement is sparse, and that online political engagement encompasses seemingly different online activities, several studies have suggested

the construct to be unidimensional in nature (Best & Krueger, 2005; di Gennaro & Dutton, 2006; Jugert, Eckstein, Noack, Kuhn, & Benbow, 2013; Krueger, 2002; Skoric, Ying, & Ng, 2009; Zhang, Johnson, Seltzer, & Bichard, 2009).

Dynamic growth of the Internet is continuously changing the news landscape. Furthermore, social media sites (e.g., *Facebook*, etc.) and online blogs have enabled new opportunities for interactive and user-centered political experiences (Yamamoto, Kushin, & Dalisay, 2015). In fact, the Internet has provided new opportunities for political engagement that were previously unavailable (Macková, 2015; Norris, 2001; Oser, Hooghe, & Marien, 2013). The existing knowledge concerning online political engagement is controversial, with studies either reporting minimal or no evidence of increased political participation through the use of online channels (Boulianne, 2009), or reporting that the Internet increases both offline and online forms of political participation (Mossberger, Tolbert, & McNeal, 2008). Furthermore, studies suggest that the Internet attracts people who are normally underrepresented in political participation (including women, youth and ethnic minorities) (Correa & Jeong, 2010; Mossberger et al., 2008). However, it has been argued that the use of digital technologies merely reinforces existing gaps in political participation, and that the use of interactive services during electoral campaigns is still dominated by those with higher socioeconomic status, educational attainment, and social capital (Prior, 2007).

In the present study the aim was to develop a valid and reliable standardized psychometric instrument to assess online political engagement among the general population for three reasons. Firstly, individuals and groups are now using the Internet more regularly on a daily-basis for many different purposes, and online political engagement is one such activity that has capitalized on using this medium (Vissers & Stolle, 2013). Secondly, politically engaged individuals tend to use online media more than those not politically engaged (Bimber,

Cunill, Copeland, & Gibson, 2015; Krueger, 2002). Finally, no psychometrically validated instrument for online political engagement currently exists.

Research into Online Political Engagement

Numerous studies focusing on the impact of Internet use on political engagement have related it to several politically-related behavioral outcomes (e.g., voting, contacting a politician, donating money to a political campaign, etc.). Moreover, recent studies on political engagement have shown that Internet use can positively influence political engagement (Gibson, Lusoli, & Ward, 2005; Gil De Zúñiga, Puig-I-Abril, & Rojas, 2009; Krueger, 2002; Quintelier & Vissers, 2008). Some authors claim that there is no agreement with regard to the measurement of political participation on the web (Vissers & Stolle, 2013), however, and there is an assumption that the Internet opens opportunities for a completely new type of engagement that is not practiced in the same way offline (Schlozman, Verba, & Brady, 2010; Vitak et al., 2010).

Despite the fact that most of the existing research investigating online political participation has been carried out in US and the UK (Anduiza, Gallego, & Cantijoch, 2010), this phenomenon has been also explored across other countries. In Spain, Anduiza, Gallego and Cantijoch (2010) reported the importance of Internet resources to explain factors of political participation that confirmed previous findings of research carried out mainly in the US and the UK. In Taiwan, Hsieh & Li (2014) concluded that interpersonal factors such as online civic discussions were positively associated with online political participation. When researching online political debates and environmental Internet activism, Tsaliki (2003) reported that in Finland, Netherlands, UK, Spain and Greece, the role of the Internet was a mechanism for social and democratic change, and concluded that information and

communication technologies complemented already existing media techniques rather than displacing them.

While some fear that news in the online environment may have resulted in societal fragmentation and displacement of community concerns, others view the online environment as a space for political re-engagement, particularly for young people (Delli Carpini, 2000). Research indicates that use of online news outlets supplements traditional news consumption (Althaus & Tewksbury, 2000). In fact, online information-seeking is positively related to community involvement, group membership, and political activity (Kwak, Poor, & Skoric, 2006; Taveesin & Brown, 2006). Likewise, online information-seeking has been linked to increases in online interactive civic messaging that ultimately result in higher levels of civic participation (Shah, Cho, Eveland, & Kwak, 2005).

A recent study provided preliminary findings concerning questions relating to online political engagement (Russo & Amnå, 2015). The main aim of that study was to investigate relationships between personality traits and online political engagement. However, little information was given on the psychometric properties of the items as a whole (e.g., content validity, criterion-related validity). Currently, there is a lack of psychometrically validated and standardized instruments assessing politically-related constructs in the field of political sciences (Albacete, 2014). Additionally, and to the best of the authors' knowledge, no previous study has focused exclusively on the development of such an instrument, and the few existing measures lack robust and critical information on their overall validity and reliability. Consequently, given the potential relevance of this construct in predicting several election-related outcomes (e.g., voting intention, actual voting behavior) as suggested by previous research (Barrett & Brunton-Smith, 2014; Norris, 2001; Van Deth, 2014), the main aim of the present study was to develop a valid and reliable standardized psychometric tool to assess online political engagement among the general population.

Methods

Participants

After deleting problematic cases with severe missing values in the data cleaning process, a final representative sample comprising 1,710 participants was obtained. The overall response rate for the post-election wave was 61%, and most of the participants were of white British ethnicity (n = 1558; 91.1%) with a mean age of 54.5 years (SD=17.4; range 18-97 years). Gender distribution was approximately equal with slightly more women (53.3%; n=911) than men (see Table 1).

Instruments

Sociodemographic characteristics were assessed with variables that asked participants about their ethnicity, gender, age, marital status, housing status, age finished full-time education, educational or work-related qualifications, religion, number of people in the household, and annual household income (see Table 1).

Frequency of media usage related to political information was examined with the following questions: ‘*How much time do you spend using the Internet for news or programmes about politics and current affairs?*’ (none, less than ½ hour, ½ hour to 1 hour, 1 to 2 hours, more than 2 hours); ‘*How much did you use the Internet to get or exchange information about the recent general election?*’ (a great deal, a fair amount, not very much, not at all); ‘*Did you make use of the Internet to get news or information about the recent general election held on May 6th?*’ (many times, several times, once or twice, no).

Online Political Engagement Scale (OPeNS). The OPeNS indicators comprised questions already embedded within the BES survey, rather than questions developed by the present authors. This was because the focus of our study was to investigate the psychometric

properties of all indicators used in the BES survey aimed at assessing online political engagement. The new OPEnS assessed participants' use of several Internet-related resources to engage in politics. The questions provided the following prompt to participants: *'During the election campaign did you visit any of the following websites and if so, how frequently?'* and asked them to rate seven items: 1) *'official national or local websites of the political parties'*; 2) *'local candidates' websites'*; 3) *'political blogs (e.g. Conservative Home, Iain Dale's Blog Spot, Lib Dem Voice, Political Betting, Labour List)'*; 4) *'social networking groups (e.g. Facebook) organized around a political issue'*; 5) *'online video channels (e.g. YouTube) to view official or unofficial videos about election issues, party leaders or local candidates'*; 6) *'Twitter sites of parties, leaders, or local candidates'*; and 7) *'news organization websites (e.g. BBC, Guardian, Daily Mail)'*. Participants rated each item on the following 4-point scale: 3 = 'Many times', 2 = 'Several times', 1 = 'Once or twice', and 0 = 'Never visited'. Total online political engagement scores are obtained by simply summing all seven questions, with a response range of 0 to 21, with higher scores indicating higher levels of online political engagement. For comparison purposes, researchers may classify participants as online politically-engaged (i.e., if score is ≥ 1) or non-online politically-engaged (i.e., if score is 0).

Procedures

The present study utilized data collected for the 2010 British Election Study (BES), one of the largest and longest running social surveys in Great Britain. The BES examines why people vote, and how and why they vote the way they do (BES, 2015). The 2010 BES includes panel data collected over a four-year period, as well as cross-sectional data from the time of the election itself. The eligible population for this study was all individuals resident in British private households and south of the Caledonian Canal aged 18 years or older. The present study only used data collected from the post-election wave to develop the new psychometric

instrument assessing online political engagement as the items of this instrument were included in that particular wave. As with a recently published study (i.e., Canale, Santinello & Griffiths, 2015), the present study adopted a similar approach to scale validation using secondary data.

The fieldwork for the BES cross-sectional data collection was conducted by *TNS-BMRB*, a British social research agency, from May 7 to September 5, 2010. The sampling technique utilized a multistage design comprising five stages. The sampling unit was the parliamentary constituency. In total, 200 were selected comprising 149 constituencies in England, 29 in Scotland, and 22 in Wales. The post-election wave followed as many participants who had taken part in the pre-wave as possible (N=1,816) along with the addition of a top-up sample (N=3,219) in order to maintain the sample size and reduce bias due to attrition. Subsequently, a total of 3,075 participants were interviewed for the post-election wave. Of these, 1,843 participants (i.e., 60% of those interviewed) returned the self-completion questionnaire.

The post-election survey consisted of a face-to-face computer assisted interview and a mail-back paper questionnaire that included questions relating to online behavior. Following the face-to-face interview, a mail-back questionnaire was left with each participant together with a pre-paid postal envelope. Postal reminders were sent out to participants, and both participants and interviewers entered several prize draws to bolster response rates. Weighting of the data was applied to ensure representativeness of the British population. The weighting was carried out in two stages. Firstly, design weights were created to account for unequal selection probabilities, and secondly, non-response weighting was applied to account for differential response between different groups. The full details regarding the sampling and procedures of the study are outlined in detail in the technical report available on the 2010 BES official website (see <http://www.britishelectionstudy.com/custom/uploads/2014/04/2010BESTechnicalReport.pdf>).

Statistical analyses and analytical strategy

Statistical analyses comprised (i) descriptive statistics of the main sample's characteristics and (ii) a psychometric examination of the OPEnS with both IBM SPSS v.20 and Mplus v.7.2. (IBM Corp, 2011; Muthén & Muthén, 2012). The main psychometric analyses included assessment of the new scale's validity (i.e., construct and criterion-related) and reliability. Construct validity was investigated by performing an initial exploratory factor analysis (EFA), followed by a confirmatory factor analysis (CFA) on the seven OPEnS items, Criterion-related validity was examined via Pearson product-moment correlation coefficients between the OPEnS and the frequency of media usage variables. Finally, reliability analysis comprised the analysis of the Cronbach's alpha of the OPEnS.

Results

Descriptive statistics

Table 1 summarizes the sample's main socio-demographic characteristics. Approximately half of the sample was married (51%) and the majority owned its own property (74%). Participants reported finishing their full-time education at different ages, with the most commonly reported ages being 15 years or younger (25.6%) followed by 16 years (25.4%). Most participants stated that they held either an educational or work-related qualification (76.6%). The vast majority confirmed having five or fewer people in their household (98.6%) and an average annual household income of £30,000 or less (56.1%).

Please insert Table 1 about here.

Construct validity

Exploratory Factor Analysis (EFA)

Before conducting confirmatory factor analysis (CFA) on the seven OPEnS indicators, a preliminary psychometric analysis was conducted using exploratory factor analysis (EFA) in order to inform the factorial solution to be tested in the CFA. The EFA was conducted using the Principal Axis Factoring extraction method with Promax (oblique) rotation on all seven indicators of the OPEnS on the whole sample (n=1,710). Accordingly, the number of components to be extracted was determined through an examination of the scree plot (Cattell, 1966) in combination with the Kaiser criterion (i.e., all factors with eigenvalues greater than one) (Kaiser, 1960). Furthermore, the factor loading thresholds adopted as the criteria to retain items were the following: $\lambda_{ij} \geq .50$ and/or parallel loadings $\lambda_{ij} < .20$ (Ferguson & Cox, 1993).

The appropriateness for conducting the EFA was confirmed by the Kaiser–Meyer–Olkin Measure of Sampling Adequacy (KMO = .82) and Bartlett’s Test of Sphericity ($\chi^2 [21] = 4183.045, p < .0001$) results (Hair et al., 2010; Malhotra, 1999). The analysis revealed a single factor explaining 49.9% of the total variance of the construct and was extracted after five iterations (see Table 2).

Please insert Table 2 about here.

Confirmatory Factor Analysis (CFA)

In order to address the construct validity of the OPEnS and to further verify the suitability of its proposed one-factor solution, a CFA with robust weighted least squares estimation (WLSMV) was performed on the sample (n=1,710) on the seven OPEnS indicators. These were all ordinal and this estimator does not assume normally distributed variables and provides the best option for modelling categorical or ordered data (Brown, 2015). To assess the model’s goodness of fit, several fit indices were examined using the following

recommended thresholds of interpretability as suggested by the literature: χ^2/df (1; 4), root mean square error of approximation (RMSEA) (0.05; 0.08), RMSEA 90% CI with its lower limit close to 0 and the upper limit $<0.08, p\text{-close} > 0.05$, weighted root mean square residual (WRMR) (≤ 1.0), comparative fit index (CFI), and Tucker–Lewis fit index (TLI) (0.90; 0.95) (Bentler, 1990; Bentler & Bonnet, 1980; Bollen & Long, 1993; Hu & Bentler, 1999; Yu, 2002) As a result, the analysis of the first-order one-factor solution provided an excellent model fit for the OPEnS with all seven standardized factor loadings being statistically significant and above .70. More specifically, χ^2 (14) = 39.7, $\chi^2/df = 2.8$; RMSEA = 0.033 [90% CI 0.021-0.045], $p\text{-close} = .991$; WRMR = .798; CFI = .987; TLI = .980 (see Figure 1).

Please insert Figure 1 about here.

Criterion-related validity

Given the known links established in the literature between political engagement and media consumption in general (Boulianne, 2009; Vitak et al., 2010; Yamamoto, Kushin, & Dalisay, 2013), it was expected that the same behavioral pattern would occur online. Hence, criterion-related validity of the OPEnS may be demonstrated in a case where a positive association is found between this measure and the aforementioned variables related to frequency of media usage. The results of this analysis are shown in Table 3. Moreover, the OPEnS was positively associated with all three criterion variables. The strongest association observed was with the variable ‘*Did you make use of the Internet to get news or information about the recent general election held on May 6th?*’ [$r(1705) = .77, p < .001$], a very high positive association (Mukaka, 2012). These results appear to warrant the criterion-related validity of the OPEnS as all hypothesized associations were statistically significant in the expected direction.

Please insert Table 3 about here.

Reliability

Cronbach's alpha for all seven items of the OPEnS was estimated in order to ascertain the scale's internal consistency. The results of this analysis provided satisfactory results as the estimated coefficient was $\alpha = .81$. In addition, the Cronbach's alpha was not enhanced by excluding any of the seven items, and inter-item correlations were relatively high in general (i.e., $\geq .30$). Furthermore, corrected item-total correlation coefficients ranged from a minimum of .44 (item 6) to a maximum of .59 (item 1), further supporting the reliability of the OPEnS.

Discussion

The use of the Internet has dramatically facilitated individuals' access to politically relevant information and provided new possibilities for political learning, engagement, and action. Consequently, there is a need to further investigate online political behaviors because individuals' Internet use has already acquired political significance. Furthermore, an increasing number of citizens regularly use the Internet to read and learn about government policies and actions, discuss issues with one another, and obtain information that facilitates more active participation and engagement in politics (Anduiza, Jensen, & Jorba, 2012). In the present study, the concepts of political engagement and political participation were used interchangeably in comparison to other studies because previously published studies tend not to differentiate between these two concepts.

The purpose of the present study was to examine the psychometric properties of a newly developed instrument to assess online political engagement and fill an important gap in the current political and social science literature. The main findings obtained supported the

undimensionality of the online political engagement construct given the results obtained from both EFA and CFA analyses (i.e., acceptable fit indices and factor loadings) performed on the new scale. Additionally, the validity of the OPEnS at the construct, and criterion-related level was warranted, and its internal consistency was adequate. Although the findings encountered in this study were robust, they are still preliminary in nature, and therefore further psychometric testing of the OPEnS is needed, especially in diverse cultural contexts because politically-oriented behaviors and attitudes might differ in other countries.

The extant literature suggest that online political participation is distinct from offline political participation in terms of its underlying mechanisms. Accordingly, traditional offline political participation requires time and civic skills, and those resources seem less necessary when exerted in an online environment (Best & Krueger, 2005) as Internet use dramatically reduces the usually required time and effort to engage in politics. This is because online tasks and activities may be performed much quicker than if they were carried out in the offline context (e.g., emailing elected representatives is much quicker and easier than sending them a letter) (Best & Krueger, 2005). Scholars have long thought that a participatory democracy benefits from political discussion among citizens. Some studies have supported the notion that a citizen's discussion of public affairs leads to political engagement and participation (Wyatt, Katz, & Kim, 2000), and therefore, it is understandable that people who are more politically active online tend, in general, to be more interested about political issues and more enthusiastic in exchanging political information (Wolfsfeld, Yarchi, & Samuel-Azran, 2015).

As happens offline, it has already been noted that online participatory activities attract less people than mere informational activities (Jensen, 2013), and some authors have argued that Internet use has the potential to advantage those already engaged in political activity (Bimber et al., 2015; Krueger, 2002). Due to the fact that the OPEnS has good psychometric properties, future studies can incorporate it quickly and accurately to assess how people engage

politically online. For instance, further research should be undertaken to provide further insight into the potential relationship between online political engagement and interest in politics, and likelihood to vote.

Although the present findings are promising, there are a number of potential limitations that should be taken into account. The findings concerning the validity of the OPEnS could be further explored by examining its association with other established measures of the same construct (e.g., concurrent validity). However, because the present study only involved secondary data analysis, little could be done by the present researchers in this regard. Moreover, it is necessary to ascertain the invariance of OPEnS to determine if its psychometric properties (i.e., configural, metric, and scalar invariance) hold across different countries and cultures, since previous cross-cultural studies consistently found that levels of involvement in political activities vary greatly in different cultures (Van Deth, Montero, & Westholm, 2007). The present study utilized self-report data, and is therefore prone to recall bias and social desirability bias. Only three indicators were used to assess criterion validity (i.e., *How much time do you spend using Internet for news or programmes about politics and current affairs?*; *How much did you use the Internet to get or exchange information about the recent general election?*; and, *Did you make use of the Internet to get news or information about the recent general election held on May 6th?*); consequently it would be of theoretical and methodological value to examine other relevant criteria related to political engagement (Gibson & Cantijoch, 2013). For instance, future studies might assess to what extent online political engagement as assessed by the OPEnS can predict both voting intentions and actual voting behavior in the general population. In sum, the development of the OPEnS provides a psychometric framework for the investigation of online political engagement and paves the way to future exploratory and empirical research into political engagement.

Conclusion

The findings of the present study demonstrate that online political engagement as measured with the OPEnS represents a valid and reliable approach to its assessment at several levels. Firstly, the brevity of this scale renders it suitable for limited and large-scale surveys. Secondly, although the OPEnS conceptualizes online political behavior as a unidimensional construct, its items assess a wide variety of online political engagement behaviors. Finally, the use of the OPEnS may be useful in studies investigating newer patterns of online political engagement and disengagement.

References

- Albacete, G. G. (2014). *Young people's political participation in western Europe: Continuity or generational change?* New York: Palgrave Macmillan.
- Althaus, S. L., & Tewksbury, D. (2000). Patterns of Internet and traditional news media use in a networked community. *Political Communication*, 17(1), 21-45. doi: 10.1080/105846000198495
- Anduiza, E., Gallego, A., & Cantijoch, M. (2010). Online political participation in Spain: The impact of traditional and Internet resources. *Journal of Information Technology & Politics*, 7(4), 356-368. doi: 10.1080/19331681003791891
- Anduiza, E., Jensen, M., & Jorba, L. (Eds.). (2012). *Digital media and political engagement worldwide: A comparative study*. New York, NY: Cambridge University Press.
- Barrett, M., & Brunton-Smith, I. (2014). Political and civic engagement and participation: Towards an integrative perspective. *Journal of Civil Society*, 10(1), 5-28. doi: 10.1080/17448689.2013.871911
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246. doi: 10.1037/0033-2909.107.2.238
- Bentler, P. M., & Bonnet, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588-606. doi: 10.1037/0033-2909.88.3.588
- BES. (2015). *Get started*. <http://www.britishelectionstudy.com/get-started/#.VhJlKCsQiL0>. Assessed 5 October 2015.
- Best, S. J., & Krueger, B. S. (2005). Analyzing the representativeness of Internet political participation. *Political Behavior*, 27(2), 183-216. doi: 10.1007/s11109-005-3242-y
- Bimber, B., Cunill, M. C., Copeland, L., & Gibson, R. (2015). Digital media and political participation: The moderating role of political interest across acts and over time. *Social Science Computer Review*, 33(1), 21-42. doi: 10.1177/0894439314526559
- Bollen, K. A., & Long, J. S. (1993). Introduction. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 1-9). Newbury Park: Sage.
- Boulianne, S. (2009). Does Internet use affect engagement? A meta-analysis of research. *Political Communication*, 26(2), 193-211. doi: 10.1080/10584600902854363
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research (second edition)*. New York: Guildford.

- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1(2), 245-276. doi: 10.1207/s15327906mbr0102_10
- Ceron, A. (2015). Internet, news, and political trust: The difference between social media and online media outlets. *Journal of Computer-Mediated Communication*, 20(5), 487-503. doi: 10.1111/jcc4.12129
- Correa, T., & Jeong, S. H. (2010). Race and online content creation: Why minorities are actively participating in the web. *Information, Communication & Society*, 14(5), 638-659. doi: 10.1080/1369118X.2010.514355
- Dalton, R. J. (2008). Citizenship norms and the expansion of political participation. *Political studies*, 56(1), 76-98. doi: 10.1111/j.1467-9248.2007.00718.x
- Delli Carpini, M. X. (2000). Gen.com: Youth, civic engagement, and the new information environment. *Political Communication*, 17(4), 341-349. doi: 10.1080/10584600050178942
- di Gennaro, C., & Dutton, W. (2006). The Internet and the public: Online and offline political participation in the United Kingdom. *Parliamentary affairs*, 59(2), 299-313. doi: 10.1093/pa/gsl004
- Ekman, J., & Amnå, E. (2012). Political participation and civic engagement: Towards a new typology. *Human Affairs*, 22(3), 283-300. doi: 10.2478/s13374-012-0024-1
- Ferguson, E., & Cox, T. (1993). Exploratory factor analysis: A users' guide. *International Journal of Selection and Assessment*, 1(2), 84-94. doi: 10.1111/j.1468-2389.1993.tb00092.x
- Gibson, R., & Cantijoch, M. (2013). Conceptualizing and measuring participation in the age of the Internet: Is online political engagement really different to offline? *The Journal of Politics*, 75(03), 701-716. doi: doi:10.1017/S0022381613000431
- Gibson, R. K., Lusoli, W., & Ward, S. (2005). Online participation in the UK: Testing a 'contextualised' model of Internet effects. *British Journal of Politics & International Relations*, 7(4), 561-583. doi: 10.1111/j.1467-856X.2005.00209.x
- Gil De Zúñiga, H., Puig-I-Abril, E., & Rojas, H. (2009). Weblogs, traditional sources online and political participation: an assessment of how the Internet is changing the political environment. *New Media & Society*, 11(4), 553-574. doi: 10.1177/1461444809102960
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis. A global perspective (seventh edition)*. Upper Saddle River, CA: Pearson Prentice Hall.

- Henn, M., & Oldfield, B. (2016). Cajoling or coercing: would electoral engineering resolve the young citizen–state disconnect? *Journal of Youth Studies*, *19*(9), 1259-1280. doi: 10.1080/13676261.2016.1154935
- Hsieh, Y. P., & Li, M-H. (2014). Online political participation, civic talk, and media multiplexity: how Taiwanese citizens express political opinions on the Web. *Information, Communication & Society*, *17*(1), 26-44. doi: 10.1080/1369118X2013.833278
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1-55. doi: 10.1080/10705519909540118
- IBM Corp. (2011). *IBM SPSS Statistics for Windows, version 20.0*. New York: IBM Corp.
- Jensen, J. L. (2013). Political participation online: The replacement and the mobilisation hypotheses revisited. *Scandinavian Political Studies*, *36*(4), 347-364. doi: 10.1111/1467-9477.12008
- Jugert, P., Eckstein, K., Noack, P., Kuhn, A., & Benbow, A. (2013). Offline and online civic engagement among adolescents and young adults from three ethnic groups. *Journal of Youth and Adolescence*, *42*(1), 123-135. doi: 10.1007/s10964-012-9805-4
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, *20*(1), 141-151. doi: 10.1177/001316446002000116
- Krueger, B. S. (2002). Assessing the potential of Internet political participation in the United States: A resource approach. *American Politics Research*, *30*(5), 476-498. doi: 10.1177/1532673x02030005002
- Kwak, N., Poor, N., & Skoric, M. M. (2006). Honey, I shrunk the world! The relation between Internet use and international engagement. *Mass Communication and Society*, *9*(2), 189-213. doi: 10.1207/s15327825mcs0902_4
- Macková, A. (2015). Czech politicians go online: Is this e-democracy or just a campaign move? In P. Lorentz, D. Smahel, M. Metykova & M. F. Wright (Eds.), *Living in the digital age* (pp. 164-180). Brno: Masarykova univerzita.
- Malhotra, N. K. (1999). *Marketing research: An applied orientation*. Upper Saddle River, NJ: Prentice Hall.
- Mossberger, K., Tolbert, C. J., & McNeal, R. S. (2008). Digital citizenship: The Internet, society, and participation (pp. 1). Cambridge MA: MIT Press.
- Mukaka, M. M. (2012). A guide to appropriate use of correlation coefficient in medical research. *Malawi Medical Journal*, *24*(3), 69-71.

- Muthén, L. K., & Muthén, B. O. (2012). *Mplus user's guide seventh edition*. Los Angeles: Muthén & Muthén.
- Norris, P. (2001). *Digital divide: Civic engagement, information poverty, and the Internet worldwide*. Cambridge: Cambridge University Press.
- O'Toole, T. (2015). Beyond crisis narratives: Changing modes and repertoires of political participation among young people. In K. Kallio, S. Mills & T. Skelton (Eds.), *Politics, citizenship and rights* (Vol. 7, pp. 1-15). Singapore: Springer Singapore.
- Oser, J., Hooghe, M., & Marien, S. (2013). Is online participation distinct from offline participation? A latent class analysis of participation types and their stratification. *Political Research Quarterly*, 66(1), 91-101. doi: 10.1177/1065912912436695
- Prior, M. (2007). *Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections*. Cambridge: Cambridge University Press.
- Quintelier, E., & Vissers, S. (2008). The effect of Internet use on political participation: An analysis of survey results for 16-year-olds in Belgium. *Social Science Computer Review*, 26(4), 411-427. doi: 10.1177/0894439307312631
- Russo, S., & Amnå, E. (2015). The personality divide: Do personality traits differentially predict online political engagement? *Social Science Computer Review*. <http://ssc.sagepub.com/content/early/2015/04/24/0894439315582487.abstract> doi:10.1177/0894439315582487. Assessed 13 October 2015.
- Schlozman, K. L., Verba, S., & Brady, H. E. (2010). Weapon of the strong? Participatory inequality and the Internet. *Perspectives on Politics*, 8(2), 487-509. doi: doi:10.1017/S1537592710001210
- Shah, D. V., Cho, J., Eveland, W. P., & Kwak, N. (2005). Information and expression in a digital age: Modeling Internet effects on civic participation. *Communication Research*, 32(5), 531-565. doi: 10.1177/0093650205279209
- Skoric, M. M., Ying, D., & Ng, Y. (2009). Bowling online, not alone: Online social capital and political participation in Singapore. *Journal of Computer-Mediated Communication*, 14(2), 414-433. doi: 10.1111/j.1083-6101.2009.01447.x
- Taveesin, N. J., & Brown, W. J. (2006). The use of communication technology in Thailand's political process. *Asian Journal of Communication*, 16(1), 59-78. doi: 10.1080/01292980500467590
- Tsaliki, L. (2003). Electronic citizenship and global social movements. *First Monday*, 8(2). <http://ojs-prod-lib.cc.uic.edu/ojs/index.php/fm/article/view/1032>. Assessed 29 October 2016.

- Vaishnav, C., & Ferreira, P. (2011). Internet and political engagement: A new integrated model of cyber-democracy. <http://ssrn.com/abstract=1992387>. Assessed 27 February 2016.
- Van Deth, J. W. (2014). A conceptual map of political participation. *Acta Politica*, 49(3), 349-367.
- Van Deth, J. W., Montero, J. R., & Westholm, A. (2007). *Citizenship and involvement in European democracies: a comparative analysis*. London: Routledge.
- Vissers, S., & Stolle, D. (2013). The Internet and new modes of political participation: online versus offline participation. *Information, Communication & Society*, 17(8), 937-955. doi: 10.1080/1369118X.2013.867356
- Vitak, J., Zube, P., Smock, A., Carr, C. T., Ellison, N., & Lampe, C. (2010). It's complicated: Facebook users' political participation in the 2008 election. *Cyberpsychology, Behavior, and Social Networking*, 14(3), 107-114. doi: 10.1089/cyber.2009.0226
- Wolfsfeld, G., Yarchi, M., & Samuel-Azran, T. (2015). Political information repertoires and political participation. *New Media & Society*. doi: 10.1177/1461444815580413
- Wyatt, R. O., Katz, E., & Kim, J. (2000). Bridging the spheres: Political and personal conversation in public and private spaces. *Journal of Communication*, 50(1), 71-92. doi: 10.1111/j.1460-2466.2000.tb02834.x
- Yamamoto, M., Kushin, M. J., & Dalisay, F. (2013). Social media and mobiles as political mobilization forces for young adults: Examining the moderating role of online political expression in political participation. *new media & society*, 17(6), 880-898. doi: 10.1177/1461444813518390
- Yamamoto, M., Kushin, M. J., & Dalisay, F. (2015). Social media and mobiles as political mobilization forces for young adults: Examining the moderating role of online political expression in political participation. *New Media & Society*, 17(6), 880-898. doi: 10.1177/1461444813518390
- Yu, C. F. (2002). *Evaluating cutoff criteria of model fit indices for latent variable models with binary and continuous outcomes (Doctoral dissertation)*. <http://statmodel2.com/download/Yudissertation.pdf>. Assessed 27 February 2016.
- Zhang, W., Johnson, T. J., Seltzer, T., & Bichard, S. L. (2009). The revolution will be networked: The influence of social networking sites on political attitudes and behavior. *Social Science Computer Review*, 28(1), 75-92. doi: 10.1177/0894439309335162

Table 1. Main Socio-Demographic Characteristics of the Sample.

N	1.710
Gender (female, %)	911 (53.3)
Age (years) (mean, SD)	54.5 (17.4)
Ethnicity (n, %)	
White British	1.558 (91.1)
Other white background	27 (1.6)
Other	125 (7.3)
Marital Status (n, %)	
Married	872 (51)
Living with a partner	144 (8.4)
Separated (after being married)	53 (3.1)
Divorced	152 (8.9)
Widowed	219 (12.8)
Single (never married)	268 (15.7)
Refused	2 (.1)
Housing Status (n, %)	
Own	1.266 (74)
Rent	426 (24.9)
Neither	16 (.9)
Refused	2 (.1)
Age Finished full-time education (n, %)	
≤ 15 years	438 (25.6)
16 years	434 (25.4)
17 years	151 (8.8)
18 years	174 (10.2)
≥ 19 years	478 (28)
Still a full-time student at school	14 (.8)
Still a full-time student at university	19 (1.1)
Do not know	2 (.1)
Educational or work-related qualifications (yes, %)	1.310 (76.6)
Belong to religion (yes, %)	950 (55.6)
People in the household [†] (n, %)	
≤ 5	1.664 (98.6)
≥ 6	25 (1.4)
Annual household income [†] (n, %)	
≤ £30,000	813 (56.1)
≥ £30,000	562 (38.8)
Do not know	73 (4.3)

Note: [†]: Variable with at least one case with missing value.

Table 2. Summary of the results from the EFA on the Online Political Engagement Scale (OPeNS) seven items (n = 1,710).

Item^a	<i>Factor Loadings</i>		<i>Communalities</i>	
	Factor 1^{b, c, d}	Initial	Extraction	
1	.67	.42	.45	
2	.61	.41	.38	
3	.67	.43	.45	
4	.67	.47	.45	
5	.73	.47	.54	
6	.61	.43	.38	
7	.54	.28	.29	

a: Item description were omitted from the table for the sake of clarity.

b: Eigenvalue = 3.49.

c: Percentage of the Total Variance Explained = 49.9%.

d: Only one factor was possible to be extracted from the EFA after 5 iterations.

Table 3. Correlation matrix between media usage behavior the Online Political Engagement Scale (OPEnS).

Measure	Pearson's r	R ²
Criterion 1	.53*	28.1%
Criterion 2	.62*	38.4%
Criterion 3	.77*	59.3%

Note:* Correlation is significant at .01. **Criterion 1:** 'How much time do you spend using the Internet for news or programmes about politics and current affairs?'; **Criterion 2:** 'How much did you use the Internet to get or exchange information about the recent general election?'; **Criterion 3:** 'Did you make use of the Internet to get news or information about the recent general election held on May 6th?'

OPEnS

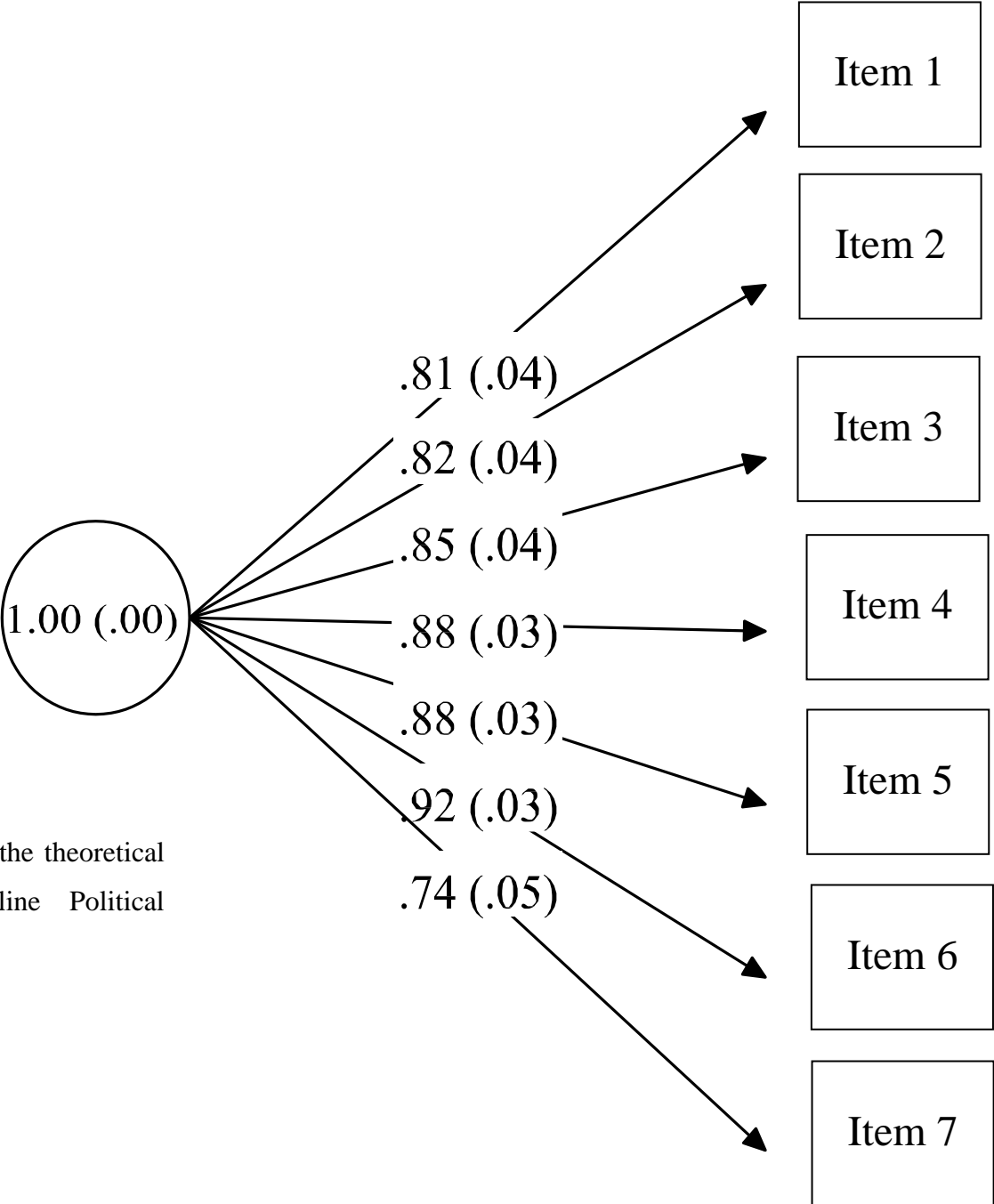


Figure 1. Graphical representation of the theoretical and empirical model of the Online Political Engagement construct.