

Title: Designing and validating the Digital Activism Scale (DAS): an instrument to measure online activism on social media

Abstract for the Political Communication Division

Digital technologies such as social media have significantly changed the ways in which citizens can engage in civic and political life. Our political repertoires have expanded with new modes of action such as using protest hashtags or joining online groups involved in political issues (Theocharis, 2015; Theocharis & van Deth, 2018). Bennett & Segerberg (2012) have labelled these changes as the emergence of connective action, which describes the functioning of digitally networked action. The past decade, taking public action has increasingly become an act of personal expression. Hereby, a new logic of participation has emerged where 'sharing' is the starting point of civic participation, enabled by various personal communication technologies such as social media (Bang, 2005; Bennett, 2012; Bennett & Segerberg, 2012).

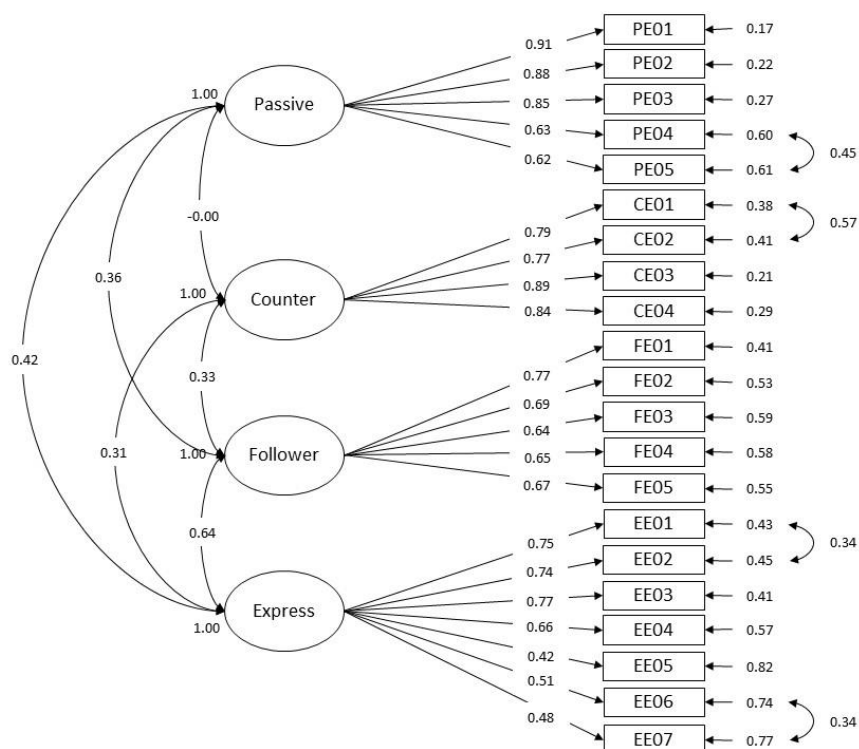
The majority of empirical studies towards the topic focus on the predictive relationship between digital media uses and offline political engagement such as voting (Boulianne, 2015, 2018; Skoric, Zhu, Goh, & Pang, 2015). In contrast, little research has been devoted to unravelling the possible predictors of online engagement (Büchi & Vogler, 2017; Spaiser, 2012; Vromen, Loader, Xenos, & Bailo, 2016). Although the need to study the changing dynamics of political participation through social media has been emphasized by many scholars, an instrument to capture these diverse modes of engagement seems lacking (Bennett & Segerberg, 2012; Gibson & Cantijoch, 2013; Loader, Vromen, & Xenos, 2014; Theocharis & van Deth, 2018; Vromen et al., 2016).

Following the procedure of DeVellis (2012), a multi-phase scale development approach was used in order to develop and examine the psychometric properties of a new instrument, called the Digital Activism Scale. In the first phase of the study, an item pool was developed, based on an extensive literature review and the evaluations of an expert panel. Each item covered a specific behaviour such as *'Indicated that you would attend or are interested in a Facebook event in the context of the climate*

debate', 'Became a member of a Facebook group concerning the climate debate' or 'trolled in the context of the climate debate'. The initial item pool consisted of 39 items. These items were presented to the expert panel of communication scientists and a media psychologist. Based on their evaluation and recommendations, the item pool was further reduced to 32 items which were used in the second phase of the study. The second phase consisted of a questionnaire completed by 595 youngsters (mean age 17.15 years old), with 59.1% males and 40.9% females. To investigate the construct validity of the scale, exploratory (EFA) and confirmatory factor analysis (CFA) were performed. Also, item convergent and divergent validity were assessed, as well as the internal consistency of the scale using Cronbach's alpha.

EFA was conducted to explore the latent factor structure of our scale. The analysis revealed a four-factor model (passive engagement, counter engagement, follower engagement and expressive engagement) containing 21 items that jointly accounted for 56.65% of the observed variance. All fit indices were satisfactory. Moreover, our scale showed good item convergent and divergent validity and a good reliability of the DAS.

Figure 1. Measurement model



The results of this study showed that the designed instrument is a valid and reliable measure for assessing the different ways in which people employ social media as a means to inform and express themselves and possibly influence others (both citizens and government) on political and social issues. To our knowledge, our study is the first to report on a validated instrument to capture political and civic engagement on a social media platform. As four theoretical distinct constructs are included in the scale, our scale allows future research to gain a more profound and nuanced insight in the different ways citizens might employ social media platforms for civic and political purposes.

References

- Bang, H. (2005). Among everyday makers and expert citizens. In J. Newman (Ed.), *Remaking governance: Peoples, politics and the public sphere* (pp. 159–178). Bristol: The Policy Press.
- Bennett, W. L. (2012). The personalization of politics: Political identity, social media, and changing patterns of participation. *The ANNALS of the American Academy of Political and Social Science*, 644(1), 20–39.
- Bennett, W. L., & Segerberg, A. (2012). The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society*, 15(5), 739–768.
- Boulianne, S. (2015). Social media use and participation: a meta-analysis of current research. *Information Communication and Society*, 18(5), 524–538.
<https://doi.org/10.1080/1369118X.2015.1008542>
- Boulianne, S. (2018). Twenty Years of Digital Media Effects on Civic and Political Participation. *Communication Research*. <https://doi.org/10.1177/0093650218808186>
- Büchi, M., & Vogler, F. (2017). Testing a Digital Inequality Model for Online Political Participation. *Socius*, 3, 2378023117733903. <https://doi.org/10.1177/2378023117733903>

- DeVellis, R. F. (2012). *Scale Development: Theory and Applications*. SAGE Publications.
- 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*(3), 701–716.
- Loader, B. D., Vromen, A., & Xenos, M. A. (2014). The networked young citizen: social media, political participation and civic engagement. *Information Communication and Society*, *17*(2), 143–150.
- Skoric, M. M., Zhu, Q., Goh, D., & Pang, N. (2015). Social media and citizen engagement: A meta-analytic review. *New Media & Society*, *18*(9), 1817–1839.
<https://doi.org/10.1177/1461444815616221>
- Spaiser, V. (2012). Empowerment or democratic divide? Internet-based political participation of young immigrants and young natives in Germany. *Information Polity*, *17*(2), 115–127.
- Theocharis, Y. (2015). The Conceptualization of Digitally Networked Participation. *Social Media + Society*, *1*(2), 2056305115610140. <https://doi.org/10.1177/2056305115610140>
- Theocharis, Y., & van Deth, J. W. (2018). The continuous expansion of citizen participation: a new taxonomy. *European Political Science Review*, *10*(1), 139–163.
- Vromen, A., Loader, B. D., Xenos, M. A., & Bailo, F. (2016). Everyday making through Facebook engagement: young citizens' political interactions in Australia, the United Kingdom and the United States. *Political Studies*, *64*(3), 513–533.