

# Determinants and Consequences of Citizens' E-Participation: The Case Study of the App MyHomeCity

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## ABSTRACT

This article aims to discuss the determinants of digital active citizenship behaviors such as the e-participation using reporting urban apps. The article makes a comparative analysis between two groups of citizens: a) 98 users of a reporting app (MyHomeCity) who were selected for the case study); and b) 148 non-users of reporting apps. Users of MyHomeCity revealed higher scores for the satisfaction for life in the city, self-esteem, self-efficacy, and perceived happiness, for all place attachment dimensions and all digital citizenship dimensions except for political activism (online and offline) and critical perspective. The probability of being an app user is predicted by satisfaction for living in the city, place identity (attachment), and digital citizenship dimensions. The implications for public decision makers, app developers, and citizens' organizations are discussed.

## KEYWORDS

Digital Active Citizenship, Digital Citizenship, E-Participation, E-Participatory Urban Apps, Perceived Happiness, Place Attachment, Satisfaction for Living in the City, Self-Efficacy, Self-Esteem

## INTRODUCTION

Citizenship in the twenty-first century has increasingly evolved into an e-participatory construct that includes abilities, thinking and action regarding Internet use, enabling people to understand, navigate, engage in and transform self, community, society and the world. This definition of digital citizenship provided by Choi (2016) accords with notions of critical (Abowitz & Harnish, 2006) or transformative citizenship (Banks, 2008), while Jones and Mitchell (2016) distinguish digital citizenship education from digital literacy education (Internet and computer technical skills). According to Choi (2016), digital citizenship needs to be understood as a multidimensional and complex concept related with our offline (place-based) civic lives.

DOI: 10.4018/IJEPR.2020010102

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Smartphones today play a prevalent role in everyday life, and thus present the possibility that citizens may engage more actively in civil society, opening new channels of communication with urban governance (Höffken & Streich, 2013). According to Höffken and Streich (2013, p.206), electronic participation (e-participation) or mobile participation (m-participation) can be defined as “the use of mobile devices (e.g., mobile phones, smartphones and tablet computers) via wireless communication technology to broaden the participation of citizens and other stakeholders by enabling them to connect with each other, generate and share information, comment and vote.” The increase and extensive use of mobile technologies are thus paramount in promoting and facilitating participation and interaction between citizens and local government, enabling the establishment of collaborative actions.

In this context, citizens are invited to transform their quality of life hence the use of urban apps as co-governance tools has become widespread in contemporary cities and municipalities in order to promote citizen involvement in municipality management (Afzalan & Evans-Cowley, 2015; Ertiö, 2013, 2015; Evans-Cowley, 2012). For example, Mainka, Siebenlist and Beutelspacher (2018) have produced a list of 29 participatory apps in Germany, including Maerker Brandenburg ([maerker.brandenburg.de](http://maerker.brandenburg.de)), which enables direct communication with 117 municipalities. Those authors mapped these apps to compare them based on features and usage (defined by the number of downloads).

Other examples of participatory apps include Colab in Brazil ([www.colab.re](http://www.colab.re)), ChangeExplorer in England (Wilson, Tewdwr-Jones, & Comber, 2017), FixMyCity in Greece ([glyfada.intelligentcity.gr](http://glyfada.intelligentcity.gr)), FixMyStreet Brussels in Belgium (Pak, Chua, & Vande Moere, 2017), MiCiudad in Argentina (Ríos et al., 2017; [appmiciudad.com](http://appmiciudad.com)), MiPueblo in Spain ([inbox-mobile.com/index.html](http://inbox-mobile.com/index.html)), Zurich as good as new in Switzerland (Abu-Tayeh, Neumann, & Stuermer, 2018) and in the United States, CitySourced (Santos, Rodrigues, & Oliveira, 2013; [www.citysourced.com](http://www.citysourced.com)), SeeClickFix (Santos, Rodrigues, & Oliveira, 2013; [seeclickfix.com](http://seeclickfix.com)), Improve Detroit ([detroitmi.gov/ImproveDetroit](http://detroitmi.gov/ImproveDetroit)) and PublicStuff ([www.publicstuff.com](http://www.publicstuff.com)).

All represent examples of e-participation tools that allow a bidirectional channel between citizens and local public administration, comprising a front-end mobile application for users and a back-end web application for local government. Regarding the use of participatory platforms, studies often describe their technical specifications and features, as well as their conceptual architecture (Ríos, 2017; Santos, Rodrigues, & Oliveira, 2013). Moreover, the widespread dissemination and growing use of e-participation tools has also prompted researchers to study the drivers that motivate users to support urban governance by means of their reporting. For instance, Abu-Tayeh et al. (2018) explored the drivers of citizen reporting engagement in terms of other-orientation and self-concern motivational factors. They examined the actual use of the participatory app “Zurich as good as new” by relying on actual use-data/reported data from objective sources (e.g. databases) and noted that both other-orientation and self-concern are significant drivers of citizen reporting engagement, although the effect of the latter is slightly greater. Furthermore, Wilson et al. (2017) assessed the degree to which the use of a participatory app raises awareness of urban change and its potential to affect participatory governance. Using Change Explorer as a case study, Wilson et al. (2017) recognised how the app compelled users to think critically about their areas of residence and the issues they wanted to change. Holding a different perspective, Pak et al. (2017) performed a socio-demographic analysis of civic participation using FixMyStreet Brussels, and identified unequal levels of civic participation, marked by the marginalisation of citizens of certain ethnicities and lower income.

Nevertheless, to date little is known about the underlying factors that motivate citizens to voluntarily engage in participatory reporting platforms. Therefore, discussion of the drivers and inhibitors of e-participation is a research topic that continues to require attention from scholars and practitioners. Moreover, there is a literature gap because no study has yet explicitly analysed the relationship between place attachment (a widespread concept from Environmental Psychology) and other constructs such as digital citizenship or e-participatory governance, within the context of using urban apps.

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