

Using Emerging Technologies to Improve Public Services

Short Abstract:

Many developed countries face serious challenges to their public services, including education, employment, healthcare, housing, internal security and social welfare, due to their aging populations coupled with growing unrest and frustration among their youth. The widening intergenerational gap between these groups has also hurt social harmony and peace in recent years, raising concerns about the effectiveness of current processes being used to develop and implement public policies to address these serious issues. In this paper, we use a public policy co-creation perspective to develop a conceptual framework for more effective participation of the elderly and youth in the public consultation process. Next, we aim to test this framework by combining two emerging technologies - Gerontology and Gamification - to develop a Mobile App, and use it to conduct an empirical study in Hong Kong. We expect this study to help bridge intergenerational gap and lead to more effective public policies.

Keywords: co-creation perspective; intergenerational gap; public policies

Citation

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Introduction

Hong Kong is a rapidly aging society with the number of elderly (aged 65 years and above) to almost double from 1.27 million to 2.44 million (from 18% to 32% of total population) by 2038 (Wong & Yeung, 2019). Thus, almost one in every three people will be an elderly at 2038. The number of people aged 75 or above is expected to almost triple from 0.57 million to 1.40 million (from 8% to 18% of total population). By contrast, the proportion of youth (below 18 years old) is expected to decline from 14.4% to 12.5% in 2038. These demographic trends pose major challenges for Hong Kong SAR government and public policy makers for public services, such as education, employment, healthcare, housing, law and order, and social welfare, which are likely to be further compounded by the increasing intergenerational gap resulting in a decline in intergenerational contact and communication (Chan & Wang, 2019; Wong, Lau, & Yeoh, 2018).

Specifically, Hong Kong is today an age-segregated society with widely divergent attitudes, beliefs, opinions and perceptions among its different age groups, made worse by a great deal of uncertainty about the socio-economic future. For example, the elderly are in an emotional state of regret, disappointment, loneliness, alienation, and social exclusion, made worse by their concerns about poor health, unemployment (Higgins & Vyas, 2018), and financial insecurity (Kühner, Lau, Jiang, & Wen, 2019). The youth also express disenchantment, alienation, disfranchisement, and despondency with their current lives (Wong & Zheng, 2017). Unfortunately, public policies aimed to help these divergent age-groups overcome their concerns and play an active role in the society do not appear to be very effective (Ho, Chui, & Borschel, 2017; Wong & Zheng, 2017).

This paper aims to address these serious socio-economic challenges by using the public policy co-creation perspective to develop a conceptual framework that would provide a better understanding of the attitudes and perceptions of the youth and the elderly and the challenges faced by them in the rapidly changing Hong Kong society and economy. Next, we aim to test this framework by combining two emerging technologies - Gerontechnology and Gamification - to develop a Mobile App and use it to conduct an empirical study in Hong Kong. We expect our findings to help governments and public policy makers to address the twin problems of youth unrest and social exclusion faced by the rapidly aging population, by developing more effective public policies to encourage these two groups to engage with each other in a more meaningful manner.

Theoretical Background

Intergenerational gap: Although there are intergenerational gaps and negative perceptions toward other age groups, the intergroup contact theory argues that there is a possibility to bridge the gap and change the perception if certain situational factors are fulfilled (Allport, 1954; Gaertner, Dovidio, & Bachman, 1996; Pettigrew, 1998). In view of the growing intergenerational conflicts, researchers have identified ways to bridge the connections between the elderly and the youth, such as elderly visits to schools, youth visits to elderly centres, and participation in interactive activities and games (e.g., Aday, Sims, & Evan, 1991; Chapman & Neal, 1990).

Gamification: With the development of technology, the context of video-game play can be a useful tool to motivate changes in intergenerational perceptions according to intergroup contact theory. Video games can be used as a facilitator for social interactions and development of positive intergenerational perceptions of the players from different age groups by encouraging the players to achieve common goals and equal status (Aarsand, 2007; Chua, Jung, Lwin, & Theng, 2013). Moreover, technology can help elderly to have a healthier and more comfortable aging life (Peek, et al., 2014; Reeder et al., 2013). Buck et al. (2017) study the elderly experience of a web-based and tablet-delivered self-care program and find there are improved goal attainment and satisfaction with life for the elderly with the use of tablet.

Gerontechnology: Gerontechnology is an emerging multidisciplinary field that combines gerontology and technology, that aims to create and sustain a technological environment to improve the quality of physical, mental, and social lives of the elderly, covering their safety, housing, mobility and transport, communication, leisure, and work-related needs. Past research on Gerontechnology focuses mainly on products and not on services, especially those aiming to improve the well-being of the elderly, and ignores issues related to intergenerational gap.

Public Policy Co-creation Perspective: Co-creation is an emerging theme in public policy reform around the world and is being seen as the means to improve the planning and delivery of public services, in response to the recent deficit in trust between the governments and common people (Osbourne et al., 2016). It is also seen as a mechanism to trigger active participation of citizens and communities in the formulation of effective public policies and regulations (Brandsen, Steen, & Verschuere, 2018). In this study, we aim to use two emerging technologies, Gerontechnology and Gamification, to develop an online/mobile application (App) as a means to collect and process knowledge about the attitudes and perceptions of the youth and the elderly toward current public policies and then involve them in the process of co-creation of new public policies using an evidence-based public policy-making and implementation mechanism.

Methodology

We plan to implement this study in five distinct stages. We would begin with primary research to understand the socio-economic issues faced by the youth and the elderly and to develop the specifications and the scope for a Mobile App (Lieberoth, 2015), which will help us decide its capabilities and features (Stage 1). Next, we will use a team of research assistants to develop the App and test it with a sample of our target population, consisting of the youth and the elderly in Hong Kong (Stage 2). We would then collect data through the App and use it to test our conceptual model about the current public policies related to the issues faced by the youth and the elderly in Hong Kong (Stage 3), such as youth unrest, social exclusion and neglect of the elderly, intergeneration gap/conflict, and volunteerism, etc. Finally, we would use our findings to provide some useful insights and recommendations to Hong Kong government and public policy makers to help them revise the current policies and develop new polices (Stage 4), to address the ongoing and upcoming socio-economic challenges faced by the Hong Kong society in general and the youth and the elderly in particular. Finally, we plan to disseminate our results to the academic audience via journal articles, conferences, seminars and workshops. We would also share these with the general public via popular press, social media and internet (Stage 5).

Conclusion and Implications

We would use the data collected from the periodic surveys through the App to assess the current public policies related to the youth and elderly welfare and develop recommendations for Hong Kong government and its various departments and agencies on a regular basis. We would also actively collaborate with NGOs and other stakeholders to design our surveys and engage in regular discussions with them to develop our recommendations. This research would help Hong Kong government accomplish its objectives in relation to the elderly and community service sector, namely (1) develop a sustainable workforce for elderly service, (2) improve the use of information technology of service providers and users, (3) enhance age-friendliness of the community, and (4) ensure financial sustainability of elderly service. Similarly, this research would also help address several priority areas for youth development devised by Hong Kong government, including education, work, health, volunteerism, work, global perspectives, multi-faceted development, and youth engagement and community participation. Our findings would also support the Youth Development Strategy for Hong Kong (YDC, 2018) that aims to use volunteering to encourage the youth to participate in community affairs and to cultivate their own initiative to have positive social change and develop more generic skills, with the use of more technology.

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