

HEALTH PROMOTION AND CAMPAIGNS; HEALTH INFORMATION, HEALTH BEHAVIOURS, LIMITATIONS AND RISK

INTRODUCTION

Health information, health behaviours, and social support are the three main types of content that are commonly shared on social media platforms. Access to accurate health information can positively affect an individuals' well-being. Media Campaigns primarily concerned with health promotion are mostly directed towards large populations in society for example, through television, newspapers, internet and now social media. Campaigns such as these also compete with powerful social norms, product marketing, behaviours driven by addiction, habits, beliefs and ideas. (Wakefield et.al 2014) In this essay, we identify how social media has transformed the promotion of health policy by examining how people communicate and share information, as well as the limitations and risks that include the spread of misinformation. (Roy, Malloy 2023) For example, social media has become a platform for misinformation with regards to health practices such as vaccination (Steffans et. al 2020)

Over the past few decades various media campaigns have aimed to affect health-risk behaviours (e.g. tobacco and alcohol use, heart disease risk behaviours) and to encourage health prevention and monitoring, for example, screening that checks for early signs of disease before patients report symptoms. With the introduction of social media, health promotion has become more interactive and accessible compared to brochures and public announcements primarily used prior to the introduction of the internet. Social media has transformed how people communicate and share information, and for this reason is a powerful tool for assessment and the promotion of health policy. Recent events related to COVID-19 are an example where social media was effectively used to raise public awareness of a health issue, promoting behavioural changes increasing protection against COVID-19 and the spread of the disease. (Al-Dmour et. al 2020) A platform that can reach large populations has also become a powerful tool to raise awareness of disease and health issues promoting healthy behaviours. Although social media can be used by health professionals to promote health policy, such a widely used platform can also provide encouragement and support in real time by offering advice and sharing success stories. There is a question however, as to how social media participants process the accuracy or falsehood of information, as this can influence the effectiveness of health campaigns distributed by health professionals.

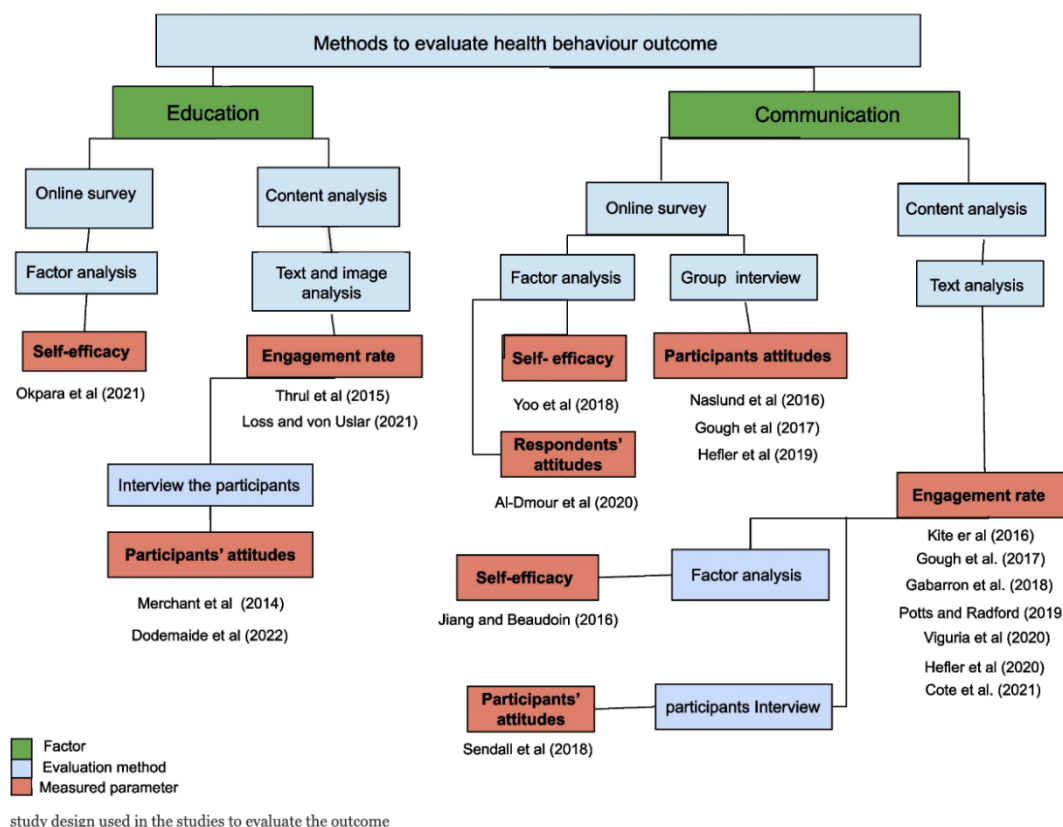
RESEARCH AND METHODOLOGY

An integrative review published in 2022 on the application of social media in health promotion campaigns focused on the methodologies used to assess the outcomes of behaviour change programs. Their research identified papers published between 2010 and 2020. Of the 674 citations, 28 (4.1%) studies were included in the review, within which 18 methodologies which aimed to evaluate the impact of social media in health promotion campaigns towards behaviour change, were further analysed using concept mapping. "The

results showed that 10 studies (55.5%) adopted quantitative methods and five studies (27.7%) used mixed methods and three studies (16.6%) used qualitative methods. Facebook and YouTube were used more for intervention purposes to change health behaviour. Twitter and Instagram were used more to observe the trend of changes in health behaviour. Six studies (33.3%) adopted Social Cognitive Theory and one study (5.5%) applied the Transtheoretical Model as the framework to evaluate the outcome.” (Ghahramani, et. al, 2022) These results showed that social media has a potential to promote behaviour change, however, the study of long-term change was outside the scope of social media campaigns. Although it is beyond the scope of this paper to examine all the findings the following study design shows how the review identified education and communication to be the most influential factors evaluating behaviour change as an outcome of health promotion programs. (Ghahramani, et.al 2022)

Fig. 5

From: “The potential of social media in health promotion beyond creating awareness: an integrative review”



Ghahramani, A, De Courten, M, Prokofieva, M., (2022) “The potential of social media in health promotion beyond creating awareness: an integrative review” *BMC Health* 22 Article number: 2402.

The review identified Facebook and YouTube as effective platforms used for education and intervention purposes to promote positive health behaviour, whereas Twitter and Instagram were used to study the trend of change. Most studies adopted Social Cognitive Theory (SCT) as a health promotion framework to evaluate health behaviour change. Social Cognitive Theory “proposes that the environment, behaviour, and personal and cognitive factors all interact as determinants of each other” (Laranjo, 2016) Self-efficacy, observation learning, and self-regulation are all concepts of SCT and are well suited to social media which can serve as a source of like-minded information sharing, verbal persuasion and feedback and social support. (Ghahramani, et.al 2022)

Research is still limited with regards to the effectiveness of social media campaigns aimed at improving individual awareness and knowledge of health information that motivates healthy behaviour change. An online cervical cancer study aimed at prevention behaviours was conducted to find out whether participation in social media Twitter messages that focused on HPV and cervical cancer prevention increased awareness, knowledge and behaviour related to getting HPV and Pap tests. During this study 765 participants completed a baseline survey, assigned to nine-person groups on a health connect platform. Study participants were mostly white (71%) college educated (64%) and over 26 years old. 900 tweets were then distributed randomly to 9 women in each online group for five days. A personalized message feed was given to each participant comprising 20 tweets per day. A post survey was completed by 569 participants. During the whole process participants were part of an online group where they were to share and comment on shared messages. (Lyson, H et al. 2018) HPV was assessed by asking one question: "Have you ever heard of HPV? HPV stands for Human Papillomavirus" Five more were put forward exploring the participants knowledge and awareness of HPV in relation to cervical cancer, sexual contact, AIDS and whether the participants knew of a vaccine prevention. Having completed these questions participants then were assessed with yes or no questions asking whether they had received the full 3 doses of the HPV vaccine available. (Lyson, H et al. 2018) Finally, the women were asked another question asking whether they had ever had a Pap smear test to check for cervical cancer?"

The McNemar's test, a statistical test used on paired nominal data, was used to compare baseline and post survey results. All analyses were conducted in S.A.S 9.4. *p values 0.05* considered to be statistically significant. The online study that examined the effectiveness of spreading tailored messages on a social media platform about HPV revealed that although there was a slight change in awareness, however, most of the participants already had substantial knowledge prior to the experiment and 5 days was not long enough to change behaviours. (Lyson, H et al. 2018)

Despite its benefits, some studies have identified concerns relating to the use of social media in health care. For example, vaccination misinformation is widespread on social media. The effectiveness of vaccines in combating the spread of disease is mostly dependant on mass vaccination programmes to reach a high proportion of those at risk in society, such as was witnessed during the COVID-19 pandemic. One qualitative study sampled 21 participants responsible for social media from vaccine promoting organisations. Using framework analysis to explore the resulting data, vaccine promoting organisations faced numerous obstacles in reaching audiences, insufficient resources and limited personal experience in using the medium because the platform is relatively new, were just a few of the obstacles experienced. As a result, opportunities to counter misinformation were missed. Furthermore, the results found that health organisations were observed broadcasting health related information one way and were not engaging in a participatory two-way approach. "Joining conversations and interacting authentically are key principles for effectively using social media to communicate and manage risk". (Steffens, 2020)

The internet and social media have been instrumental to world communication and information democratization, however, the downside of such an open space communication

platform is that it has allowed individuals to hide behind masks. (Ahmed 2020) Furthermore, social media networks have given a platform for participants to not only connect with products and build relationships with others, but to have a voice to stand up for causes or to join groups that profess ideologies. (Ahmed, 2020) Another perspective to consider in any psychological research into social media is technology itself. If the main motivation for an individual's desire to use social media is to connect with others because social relationships are necessary for our well-being, (Ahmed, 2020) social media algorithms are programmed to select content that is likely to be shared. For this reason, "the interplay of psychological tendencies and technological optimization can thus easily lead to viral spread of misinformation online". (Ecker (2022)

Misinformation generated through social media and online was potentially harmful during the COVID-19 pandemic and was evident in a variety of different forms. For example, claims that coconut oil kills the virus to conspiracy theories about the virus being created as a biological weapon in China. Misinformation can have numerous effects on an individual's behaviour such as turning to ineffective remedies, hoarding products and in the case of COVID-19 not adhering to health advice and inadvertently spreading disease. (Pennycook, et. al 2020). The Director-General of the World Health Organisation said, "We're not just fighting an endemic; we're fighting an infodemic". (Ghebreyeses, 2020)

Previously published research (Lazer, et. al 2018) proposed an inattention-based account of misinformation sharing on social media. This account points out that people are generally able to tell truth from falsehood, and yet false misleading content is still shared because social media content focuses on and gets distracted by factors other than accuracy (eg. Partisan alignment) A few years later during the pandemic in 2020 another study was carried out investigating the role that inattention plays in the sharing of COVID-19-related content. (Pennycook, 2020)

Study 1 "tested for a dissociation between accuracy judgements and sharing intentions" (Pennycook, 2020) In this study 1000 participants evaluated a set of true or false news headlines from authoritative sources about COVID-19. Participants were recruited using Lucid an online quota sampling matching U.S. public on age, gender, ethnicity, and geographical region. Pictures with headlines were presented in the format of Facebook posts. Truth discernment defined as the difference in accuracy judgements between true and false headlines was the focus. Yes/no questions were asked as to the accuracy of the headlines and whether participants would share on Twitter or Facebook. Participants also completed a general-science knowledge questionnaire. A Medical Maximizer-Minimizer Scale (MMS; Scherer et al., 2016) was administered to establish which participants seek health care regularly for minor conditions and those who generally avoid health care. Evidence was presented showing that people share false claims about COVID-19 partly because they fail to think sufficiently about whether the content is accurate or false when sharing, however, their opinions changed when asked about accuracy first prior to sharing. "Greater cognitive reflection and science knowledge were associated with stronger discernment" (Pennycook, 2020) This study suggested that "nudging people to think about accuracy is a simple way to improve choices about what to share on social media". (Pennycook, 2020)

DISCUSSION

This study has established that health information, health behaviours, and social support are the three main types of content that are commonly shared on social media platforms. Social media has transformed the promotion of health policy by examining how people communicate and share information, however, it is important to consider the limitations and risks that include the spread of misinformation. (Roy, Malloy 2023) (Steffans et. al 2020) An integrative review published in 2022 on the application of social media in health promotion campaigns focused on the methodologies used to assess the outcomes of behaviour change programs. Facebook and YouTube were effective platforms used for education and intervention purposes to promote positive health behaviour. Whereas Twitter and Instagram were more beneficial in analysing the trend of change. Vaccine promoting organisations faced numerous obstacles in reaching audiences due to insufficient resources and limited personal experience. As a result, opportunities to counter misinformation were missed. Furthermore, the results found that health organisations observed broadcasting health related information were not engaging in a participatory two-way approach. Evidence was also presented from studies which showed that encouraging people to think about accuracy before sharing is a simple way to improve people's choices about what to share on social media. (Pennycook, 2020)

Social media is becoming a popular and innovative communication education tool, offering opportunities to modify health behaviour. Information on how to use social media for health promotion campaigns is growing, however, "there is a need to evaluate the approaches used to change health behaviour, rather than only creating awareness". (Ghahramani, 2022)

Ghahramani, A, De Courten, M, Prokofieva, M., (2022) "The potential of social media in health promotion beyond creating awareness: an integrative review" BMC Health 22 Article number: 2402.

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