

The Need for Focused Research on Coercion, Deception and Manipulation in Persuasive Use of Social Media

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1 Introduction

Persuasive technologies are increasingly being scrutinized for practices and usage involving coercion, deception and manipulation [1]. In particular, among the most dominant social media industry platforms, these threats are increasingly becoming a growing matter of concern. The emerging trend of hybrid warfare [2] [3], the Cambridge Analytica scandal [4] and the 2016 United States presidential election [5] has all brought these issues worldwide attention. The challenges and threats involved are complex and the involved platforms are closed source and highly secretive concerning their practices. However, the persuasive design community in general has been reluctant to engage in this area of research. It is becoming increasingly clear, that these threats are of great importance to end-users and possibly democracy itself [6]. Clearly, the persuasive technology research community can offer important socio-technical insights, which can contribute to a better understanding of how users are being deceived. The aim of the poster is to showcase the current state of research into coercive and deceptive practices from a persuasive technology perspective and propose directions for further research. This could lead to a better understanding of how users of social media are being coerced, deceived and manipulated. Contributing to improved information literacy, strengthening our defenses against these threats.

2 Method

Based on an unreleased systematic literature review, the current state of research into coercion, deception and manipulation within persuasive technology as a field is presented. Summarized and categorized in accordance to the technologies examined and utilized theory. The literature review was carried out using the SCOPUS database. The search result was 28 articles and after sorting according to relevancy, 12 was selected. These were then encoded and analysed using NVivo 12 Pro.

3 Results

In general, most research defines persuasive technologies as being in opposition to deception and coercion. Little work has been done on the subject directly, reflecting the adherence to Fogg's original definition [7] and perhaps the focus on ethics in BCSS and design contexts, in which ethics are of the highest importance. The main corpus of the work has been done in recent years, perhaps due the previously mentioned scandals. Yet in 2008 Weiksner, Fogg and Liu [8] did analyse and identify coercive strategies and practices in third party applications on the then newly released Facebook Platform. Since then little attention has been given to deceptive practices in social networking sites. Burr, Cristianini and Ladyman [9] proposes a model of autonomous agent to user interaction and a conceptual framework. Among the identified interactions they find coercion and deception. Both appears to be widely used on both Facebook and YouTube. They deal with the endogenous intent of the system designer. Specifically, how these systems deliver information using AI. The metrics used by these intelligent agents when personalising and tailoring the user experience is often manipulated by bad actors [10], using such tactics as botting or clickfarming [11]. Kampik, Nieves and Lindgren [12] identifies coercive strategies in several systems, including Facebook and YouTube. They conclude that a redefining of the scope and aim of the persuasive technology community is needed and they propose new research directions in coercive and deceptive systems and strategies. The most comprehensive theory proposed for studying deception is the PSD model and OC-matrix by Kukkonen [13]. The PSD model has found wide usage within BCSS related research, but it has not yet been applied in the study of deception. Much work has been in terms of ethics and coercion. Discourse ethics has been proposed as an ethical framework for persuasive technologies [14] [15]. Smids deals with the notion of voluntariness [16], as a prerequisite for persuasion and discusses how this relates to coercive and manipulative technology usage. Several studies deals with persuasion within a very specific technological contexts and with little appliance outside of that particular technology.

4 Conclusion

There is a need for further research and a more focused orientation into deceptive, coercive and manipulative practices in persuasive technologies. Special attention should be given to identifying the persuasive or coercive intent as well as specific strategies in the use of social media, as this would clearly distinguish between challenges related to end-user content and challenges which are intrinsic to the systems. Both of which are important and largely connected. The PSD model is largely underutilized within this area of research and further work should try to apply the PSD model to the analyses of coercion, deception and manipulation in persuasive technology.

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