

Case Study: Inappropriate Use of Surveys – Research Methods and Professional Practice – Michael Geiger

The inappropriate use of surveys can not only harm those directly affected, but can also have an impact on society as a whole, as illustrated by the Cambridge Analytica case study. In the case of Cambridge Analytica, supposedly harmless surveys were conducted via Facebook, in which up to 87 million people took part (Confessore, 2018). Following the survey, more information was collected from the survey participants via their profiles. The psychological questionnaire in combination with the extensive information about the participants was then demonstrably used to influence important democratic decisions such as the presidential election in the USA in 2016 and 'Brexit', the democratic vote on whether the UK should remain in the European Union (Confessore, 2018).

In both cases, voters were persuaded to vote in the political interest of a voting decision by individualized advertising with false information. While this was the candidate Donald Trump in the case of the presidential election in the USA, the information campaign in the case of 'Brexit' referred to the decision to leave the UK from the European Union. This shows that not only the voters directly affected by the advertising were manipulated by distorting their political perception and thus impaired, but even the democracy as a whole, as this shook the principle of free voting (Day, 2022). It should be noted that the misuse of personal data violates the General Data Protection Regulation (GDPR), so that such misuse of personal data and information is not only ethically reprehensible but also punishable. Presthus & Sønslie (2021) have recorded five typical reasons for violation of personal information regarding the GDPR:

- 1) Unlawful processing of personal information.
- 2) Disclosure of personal information.
- 3) Failure to act on subject rights.
- 4) Failure to secure personal information.
- 5) Insufficient cooperation with supervising authorities.

Inappropriate uses of surveys can have many facets. Bad or biased surveys can lead to erroneous results and conclusions. Examples include the demonstrably false assumption, based on biased surveys for decades by a minority of physicians, that vaccination leads to homosexuality (Beese, 2022). While this assumption is stigmatizing and discriminatory for homosexuals, this pseudo-knowledge also poses an enormous health risk for people who do not get vaccinated based on these claims. In addition, the health of the entire population is even affected, since diseases that are considered to be eradicated by vaccination can return due to a lack of herd immunity (Centers for Diseases Control and Prevention, 2022). Another factor in the inappropriate use of surveys are those that come to an explicit conclusion without being a statistically valid representative. Illustrative examples are election polls, which are classified as statistically valid in Germany, although they demonstrably do not meet this requirement (Brandenburgische Landeszentrale für politische Bildung, 2017). Aspects of variance, standard deviation, statistical error or the consideration of survey groups are often not or only insufficiently considered in surveys. The imminent danger emanating from such surveys is that these results will not be questioned and checked for validity by other people and will be used as a basis for argumentation. With regard to information technology, poorly designed or executed surveys can lead to incorrect assumptions, for example with regard to the

security perception of Internet users or user behaviour. From a professional point of view, this can lead to bad decisions by companies that suffer financial damage or endanger the safety of users. But the misuse of sensitive personal data of survey participants can also result in psychological or even physical damage to the persons concerned, for example if discrediting information is published or home addresses or similar sensitive data are used irresponsibly.

The reflection therefore shows that the inappropriate use of surveys can have a variety of negative consequences. These can not only affect the people involved in the surveys, but can even cause damage at the national societal level, as the example of Cambridge Analytica shows. However, the danger emanating from incorrect assumptions and conclusions should not be underestimated either, since incorrect information can sometimes persist for decades and have unforeseen consequences. Those who carry out a survey should therefore always be aware of the responsibility they bear, deal responsibly with the personal information of the participants in surveys and carry out the evaluation of the data conscientiously and present them transparently.

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