Received: 08 December 2020
Accepted: 22 February 2022
UDC: 004.738.5:[303.4:613.83]
DOI: *https://doi.org/10.31299/ksi.30.1.5*

Professional paper

USING SOCIAL MEDIA AS A RECRUITMENT STRATEGY IN WEB SURVEYS

Dijana Jerković
Faculty of Psychology and Educational Sciences
Ghent University
✉ E-mail: *dijana.jerkovic@ugent.be*

ABSTRACT

The main objective in this study was to examine Facebook and Google advertisements as a recruitment strategy in the "European Web Survey on Drugs: patterns of use" project. The Facebook recruitment campaigns invited individuals who lived in Croatia, the Netherlands or Switzerland, who were over 18 years of age and who had consumed at least one drug (cannabis, MDMA / ecstasy, (meth)amphetamines or cocaine) in the past 12 months, to complete a web survey about their patterns of drug use. The Google campaign was focused on participants that lived in Croatia, who were at least 18 years old and had consumed one of the aforementioned drugs in the last year. All campaigns applied a cost per click model. Results showed that the Facebook campaign had the highest number of clicks on the advertisement in Croatia (HR: 14,791; SW: 4,292; NL: 707), as well as eligible participants (HR: 3,581; SW: 1,281; NL: 394), while the Netherlands had the lowest cost per participant (EUR 0.25). The Google campaign in Croatia resulted with 5,677 clicks. The average cost per click differed during the campaign (HRK 0.36-2.73), and a higher budget, did not result in a higher number of clicks. It can be concluded that Facebook and Google advertisements resulted in a broad reach with a reasonable budget, therefore these strategies present a useful tool for recruiting large numbers of participants in surveys on the sensitive topic of drug use.

Keywords: Facebook, Google, advertisements, web survey, drugs

INTRODUCTION

Social media present a group of Internet-based applications that allow creation and exchange of User Generated Content, i.e. the sum of all ways in which people make use of social media (Kaplan and Haenlein, 2010). Social media is used as a common method of communication among young people all over the world, and presents a useful strategy that can be leveraged for research (Ramo and Prochaska, 2012). In the last two decades various social media became popular globally, and simultaneously, paid advertisements have become an integral part of many businesses. They have rapidly been used as a recruitment strategy in health-related research, including mental health, health behaviors, tobacco use, substance use, and medical research (Amon, Campbell, Hawke and Steinbeck, 2014; Batterham, 2014; Choi, Milne, Glozier, Peters, Harvey and Calvo, 2017; Chu and Snider, 2013; Fenner et al., 2012; King, Rourke and Delongis, 2014; Ramo, Hall and Prochaska 2010;

Ramo and Prochaska, 2012; Ramo, Rodriguez, Chavez, Sommer and Prochaska, 2014; Thornton, Batterham, Fassnacht, Kay-Lambkin, Calear and Hunt, 2016). Growing popularity of Internet-based research has been attributed to several factors, including time and financial efficiency, the capacity to reach a geographically diverse sample, and to ensure the anonymity of participants (Temple and Brown, 2011).

In the research among young adult tobacco smokers, Ramo and Hall (2010) compared three recruitment mechanisms for reaching participants through the Internet: Craigslist advertisements, other Internet advertisements, and E-mail invitations through a survey sampling service. The results showed that Internet advertisements yielded the largest proportion of recruited participants and completed surveys overall, even though two other mechanisms were more successful at targeting young adult smokers who went on to complete the survey. Furthermore, Ramo and Prochaska (2012) used Facebook for an online survey of young adult substance use. Among Facebook accounts of those aged 18-25 in the United States, Facebook estimated that 2.8% were reached through tobacco and marijuana keywords. Overall, during the 13-month campaign, ads resulted in 14,808 clicks, 5,237 signed consents, and 1,548 completed surveys. Despite the concerns about sample representativeness, Facebook ads showed to be a useful recruitment source for young-adult smokers about their use of tobacco and other substances. In addition, Thornton, Harris, Baker, Johnson and Kay-Lambkin (2015) examined the feasibility of recruiting participants for addiction research via Facebook advertisements in Australia. Apart from research among adult tobacco smokers (Ramo and Hall, 2010; Ramo and Prochaska, 2012), this was the first study to examine Facebook advertisements as a recruiting mechanism for addiction research, and to examine recruitment of adults of all ages for addiction research via Facebook. The study recruited participants via Facebook advertisement, as well as via more traditional methods (university courses and mail-outs to members of existing research databases). Facebook and non-Facebook samples differed in gender (the Facebook sample consisted of more males), but did not differ significantly in age. The results showed that a greater proportion of people with severe substance use and mental health issues, as well as a greater and more severe range of substance use behaviors, was captured through Facebook advertisements. This is in line with the previous research that examined online recruitment and data collection (Crutzen and Göritz, 2010) in which it was showed that this approach may reduce bias in response to sensitive topics (e.g. substance use and mental health disorders). Other research also confirmed that advertisements are effective in recruiting young people, and low incidence or hard-to-reach populations of substance users (Forgasz, Tan, Leder, McLeod, 2017; Frandsen, Thow, Ferguson, 2016).

Why Facebook and Google advertisements?

Paid advertisements present a useful recruitment tool, since they enable access to a specific population defined by their interest or search keywords. Literature shows that Facebook and Google advertisements are more effective in recruiting participants than other social media channels and search engines (Ellis, Collin, Davenport, Hurley, Burns and Hickie, 2012; Graham, Bock, Cobb, Niaura, 2006; King et al., 2014; Whitaker, Stevelink and Fear, 2017), which might relate to their popularity. For instance, Facebook is the most popular type of social media with 2.9 billion monthly active users (Statista, 2021a), mainly used among people between 18 and 34 years of age (Statista 2021b).

Facebook Ads Manager is an example of what is known as "paid social", which reflects the practice of advertising on social networks (WorldStream, 2021). Facebook advertisements are visual and compelling to the users, and they enable high potential reach, as well as targeting specific groups of people according to their interests and the ways they behave online. On the other hand, Google is the most used Search Engine (Alexa, 2021) that relies on content communities, i.e. sharing of media content between users (Kaplan and Haenlein, 2010). Google AdWords[8] is a widely used pay-per-click platform, so it has become synonymous to "paid search" (WorldStream, 2021). Google AdWords is split into the Search Network (text ads are put in the search engine results) and the Display Network (visual ads are put on the vast network of sites across the Internet) (Shewan, 2020).

In general, social media advertisements are a fast and inexpensive (Batterham, 2014; Gilligan, Kypri, Bourke, 2014), cost-effective way to recruit large numbers of participants for addiction research (Thornton et al., 2015).

How the advertisements work?

When planning a Facebook campaign, there are variety of specifications that are important to consider, such as creating a Facebook fan page that will enhance visibility of the campaign. Advertisements are created in Facebook Ads Manager (Facebook, 2020) and consist of the headline, text, and image. Based on a survey on mental health, Batterham (2014) concluded that advertisement messages should be closely aligned with the content, without masking the survey material. In addition, he found out that advertising using "problem" terminology was more effective than "positive" terminology (e.g. mental health problems vs. "emotional well-being"). Furthermore, Bennets and colleagues (2019) showed that a single image advertisement was more successful than the multiple-image carousel format, while the multiple formats might be more useful for campaigns that promote goods or products. Authors (Bennets et al., 2019) also emphasized that advertisements should be relevant and interesting, and survey-landing pages should be concise with friendly language.

Costs of the campaign will vary depending on the target population and the nature of the study (Pedersen and Kurz, 2015). In general, the payment amount for the outcomes is determined by an auction process. Researchers could choose the budget of the campaign and adapt daily or choose automatic bidding, which lets Facebook to set the bid that is supposed to result with the optimal outcomes. Facebook advertisements operate on either a cost-per-click or a cost-for-impressions basis that determine the means of payment and how ad exposure is optimized. As outlined on Facebook's business page, "impressions" are defined as the number of times the ads are shown within the target population, "reach" is the number of people who see the ad, and "clicks" presents the number of times the ad was clicked on. Facebook calculates the average "cost per click" as the total amount spent divided by the total number of clicks received. Cost-per-click might be more cost-effective for directing people to a website, while "cost per impression" is a better choice for boosting brand recognition (Schwinn, Hopkins, Schinke, Liu, 2017). In addition, the cost of advertising divided by the eligible recruited participant is considered as "cost per participant", and is an important variable that is also relevant when examining recruitment strategies (Ramo et al., 2010).

8 On 24 June 2018, Google AdWords changed to Google Ads.

Google AdWords are also based on the auction process. When a user searches for certain keywords, which are defined by the advertiser in the campaign, Google displays a short advertisement. The number of times an ad is displayed is dependent on many factors: the budget of the advertiser, competition from other advertisers for the chosen keywords, and the quality of the advertisement, i.e. an estimate of the experience that users have when they see a search ad. Factors that influence quality of the advertisement are numerous, and include relevance of ad text to searchers, as well as the quality of their experience once they reach the landing page. Temple and Brown (2011) described the pricing for AdWords as complex, with different keywords attracting different costs depending on demand, positioning of advertisements, and the "click-through-rates" (i.e. ratio showing how often people who see advertisement end up clicking it). This can vary based on the competition there is in the market. Advertisers can choose to pay each time an advertisement is displayed or each time it is clicked on ("pay-per-click").

How to enhance success of the advertisement recruitment?

A literature search resulted with some suggestions on how to maximize effectiveness of these strategies in recruiting participants. For instance, when using Facebook advertisements, Thornton and colleagues (2016) emphasized that researchers should consider their target group, advertisement wording, and offering incentives. General targeting criteria (location, age, gender) result in broad reach, but when targeting a more specific sample, using listed interests or likes appeared to be more cost-effective. Likewise, Pedersen and Kurz (2015) highlighted that the researcher should understand the Facebook interests of the target population, while advertisements are targeted on users' content (such as "likes"). Furthermore, including information that research is affiliated with a university or some other respectable institution may enhance recruitment (Thornton et al., 2016). Thornton and colleagues (2016) found out that there was limited evidence that offering incentives enhanced recruitment, while there were no significant cost differences among studies that offered them and those that did not. Furthermore, the Facebook recruitment approach might be the most appropriate for targeting large geographically and demographically diverse population groups, or for identifying groups based on specific inclusion criteria (Gilligan et al., 2014).

In their study on recruiting and enrolling women for a randomized clinical trial to teach support skills to female partners of male smokeless tobacco users, Akers and Gordon (2018) concluded that Facebook can target those participants who would be unlikely to actively search information, and therefore would not be accessible via Google advertisements. On the other hand, Google AdWords would be an obvious option when recruiting participants for a study in which the topic is related to words participants are likely to type in search engines, as Morgan, Jorm and Mackinnon (2013) showed in their study on depression, and Muñoz, Barrera, Delucchi, Penilla, Torres, Pérez-Stable (2009) in their work on tobacco cessation intervention.

THE PRESENT STUDY

The work in this study was part of the first wave of the European Web Survey on Drugs, coordinated in 2016 by the European Monitoring Centre for Drugs and Drug Addiction. In this pilot-survey

various recruitment strategies were used. Among them, Facebook advertisements were applied in Croatia, the Netherlands, and Switzerland, while Google advertisements were used in Croatia only. The aim of this paper was to explore and compare Facebook advertisement strategies across the countries included in the study and to explore Google advertisement strategy in Croatia to gain insights for optimizing Facebook and Google advertisement strategies for drug-related surveys in Europe. In line with that, each country devised its own advertisement strategy, and had freedom to choose which campaign factors to include in it.

METHOD

The Facebook recruitment campaigns invited individuals who lived in Croatia, the Netherlands or Switzerland, who were older than 18 and who had consumed at least one drug (cannabis, MDMA / ecstasy, (meth)amphetamines or cocaine) in the past 12 months to complete a web survey about their patterns of drug use. The Google campaign was focused on the participants that lived in Croatia, who were at least 18 years old and had consumed one of the aforementioned drugs. The survey was conducted by the national institutions in the included countries[9]. Participants were able to participate in the survey by clicking on the hyperlink within the advertisements, after which they were redirected to the Lime Service survey website. Where needed, ethical permission was gained by relevant national institutions (e.g. Ethical Committee at the Faculty of Education and Rehabilitation Sciences, University of Zagreb approved the Croatian survey). Facebook users could also visit Facebook pages that were used for the promotion of the survey.

Recruitment through Facebook ads

Advertisements consisted of an image, short information about the survey, and a hyperlink to the questionnaire (Jerković, Lotar Rihtarić, Horvat, 2017). In line with the aim of this paper, each country created its own campaign, and decided which factors to include, and therefore the picture used differed among the countries. In their campaigns, Croatia and Switzerland used the image of a girl relaxing on the sofa and seemingly floating in space, while the Netherlands had the image of young people dancing (Picture 1; Picture 2).

Picture 1. Image used in Croatian and Swiss advertisements

9 The survey was conducted by the Office for Combating Drug Abuse of the Government of the Republic of Croatia, the Faculty of Education and Rehabilitation Sciences of the University of Zagreb in Croatia, the Trimbos Institute in the Netherlands, and Addiction Suisse, Ecole des Sciences Criminelles of the University of Lausanne in Switzerland.

Picture 2. Image used in the Dutch advertisement

Among the countries included in the study, campaigns differed in advertisement languages, number of advertisements, targeting criteria, duration, and budget (Table 1). All advertisements were shown on Desktop and Mobile interfaces, but differed in placements. The Netherlands and Switzerland used broad targeting criteria (location, age, and language), while Croatia included 28 additional criteria based on the potential interests of the target group. Facebook policy does not allow promotion of any illegal activities (e.g. drugs), and therefore interests were focused on some music styles, popular DJs, singers, and events. Since the focus was on clicking on the advertisement, the cost per click model was applied, as in previous work (e.g. in Ramo & Prochaska, 2012). In addition, the Netherlands offered participation in a lottery to participants who clicked on the advertisement, while the two other countries did not have incentives.

Table 1. Elements of the Facebook and Google recruitment campaigns: ad languages, number of ads, targeting criteria and duration

Specifications	Facebook			Google
	Croatia	Netherlands	Switzerland	Croatia
Ad languages	Croatian, English	Dutch, English	German, French, English	Croatian, English
Number of ads	2 (different placement)	1	3 (different placement, language)	7 format sizes
Targeting criteria	Country, age, language, music-related interests (28)	Country, age, language	Country, age, language	Country, age, language, interest / history of visiting certain websites (5 categories)
Duration (2016)	4-18 April	9-29 September	25 May-4 July	23-30 May
Budget	€ 1,232.00	€ 100.00	€ 1,677.09 [10]	€ 460.00

10 The total amount was 1,791 CHF; the currency rate from 31/12/2016 was applied (*http://chf.fxexchangerate.com/eur-2016_12_31-exchange-rateshistory.html*)

Recruitment through Google AdWords

Like the Facebook campaign, the Google paid advertisement in Croatia consisted of the same image, short information about the survey, and a link to the questionnaire. Besides basic criteria (country, language, age), Table 1 shows that the advertisement was served to the users who had interest in or a history of visiting certain websites. Groups were targeted for four affinities categorized by Google based on different styles of music and nightlife enthusiasts (e.g. Affinity audiences (reach) ›Nightlife Enthusiasts), and one custom group that was created (e.g. Custom group: audience affinity described by websites and interests they showed or had a history of visiting. > *www.ultraeurope.com*; in total, this category included seven websites). To enhance the presence of the advertisement on various web pages, five different advertisement formats were used (e.g. 336x280.jpg). The rationale for this was the fact that some web pages serve just one size of an advertisement, which was not possible to predict in advance. The pay-per-click method was chosen, since it is more cost-effective for directing users to a survey website.

RESULTS AND DISCUSSION

The results gained confirm findings from the previous research in the field (Ramo and Hall, 2010; Ramo and Prochaska, 2012; Thornton et al, 2015) that social media advertisements can be successfully used to recruit young adult participants in an online survey on substance use. In the further text, elements of the Facebook and Google campaigns used in the survey are described and discussed.

Facebook advertisements

Campaigns among the countries differed in most of the included elements. Total reach was the highest in Croatia (598,401), followed by Switzerland (231,921), while the Netherlands reached the smallest number of people (23,656). This might be because the Netherlands had a modest budget and used only one advertisement with a less appealing image for the campaign. Furthermore, results based on Facebook statistics and the survey database showed that Croatia had the highest number of clicks and reached the highest number of eligible participants (those older than 18, who lived in Croatia and did not have obvious flaws in responses, such as providing inconsistent data), followed by Switzerland and the Netherlands (Figure 1). The huge number of clicks among Croatian participants might be related to more detailed targeting criteria, as is mentioned by Gilligan and colleagues (2014).

Despite a smaller number of people reached, among those who saw the advertisement in each country, the Netherlands had the highest proportion (55.7%) of eligible participants. It is possible that participation in the lottery influenced motivation of Dutch participants, as mentioned by Thornton and colleagues (2016). Differences among countries might also reflect their experience in conducting web surveys. For instance, the Netherlands has long tradition in conducting drug-related web surveys[11]. It is possible that Dutch participants were more willing to participate in web

11 Further Insights into aspects of the illicit EU drugs markets by Trautman, Kilmer and Turnbull (2013); Global Drug Survey that has been present in the Netherlands since 2014.

surveys based on their previous experience, while Croatian and Swiss participants were curious to click on the advertisement, but in a lesser proportion motivated to participate in the survey.

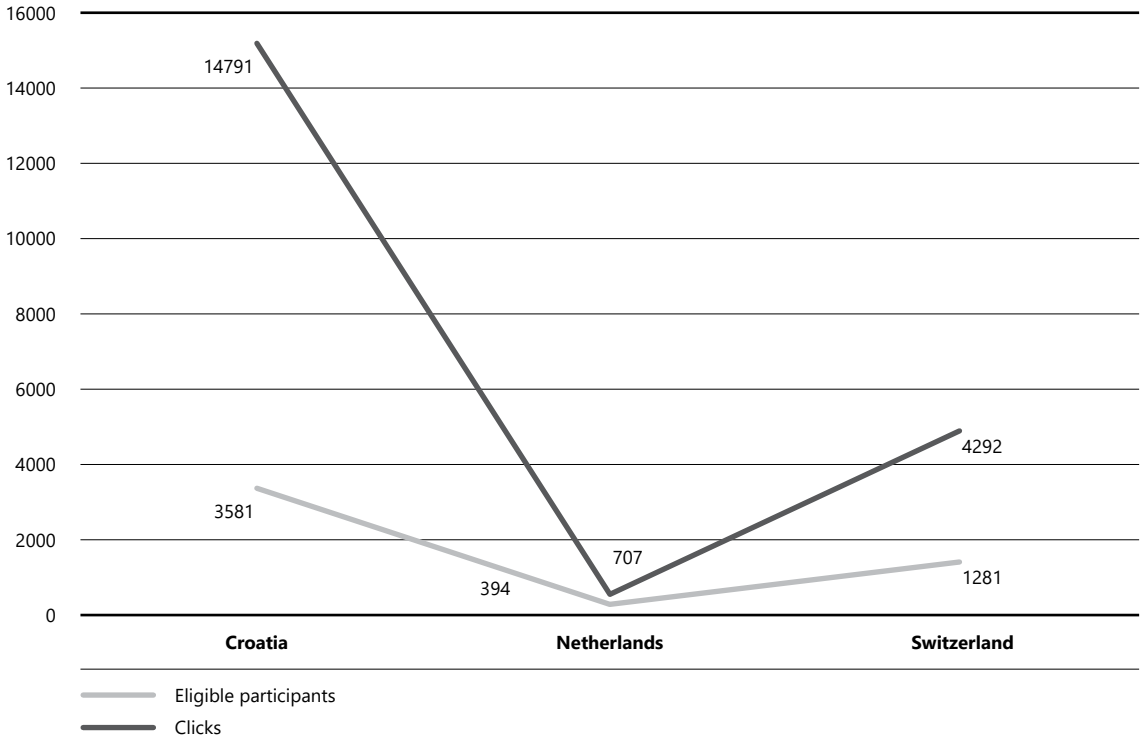

Figure 1. Number of clicks and eligible participants in Facebook campaigns

Costs per click and per participant also differed among countries. Cost per click was the cheapest in Croatia, while it was the most expensive in Switzerland (Figure 2). Since Facebook advertisements work as an auction, there are plenty of other advertisers who are trying to get the same space and to reach the target group (Gotter, 2018). It is possible that there were more advertisers in Switzerland that were bidding at the time of the campaign, which could have influenced the higher costs in this country. In addition, cost per participant was the cheapest in the Netherlands, which might reflect the fact that the Dutch participants showed more interest in the topic, and/or were more used to online surveys than participants in other included countries.

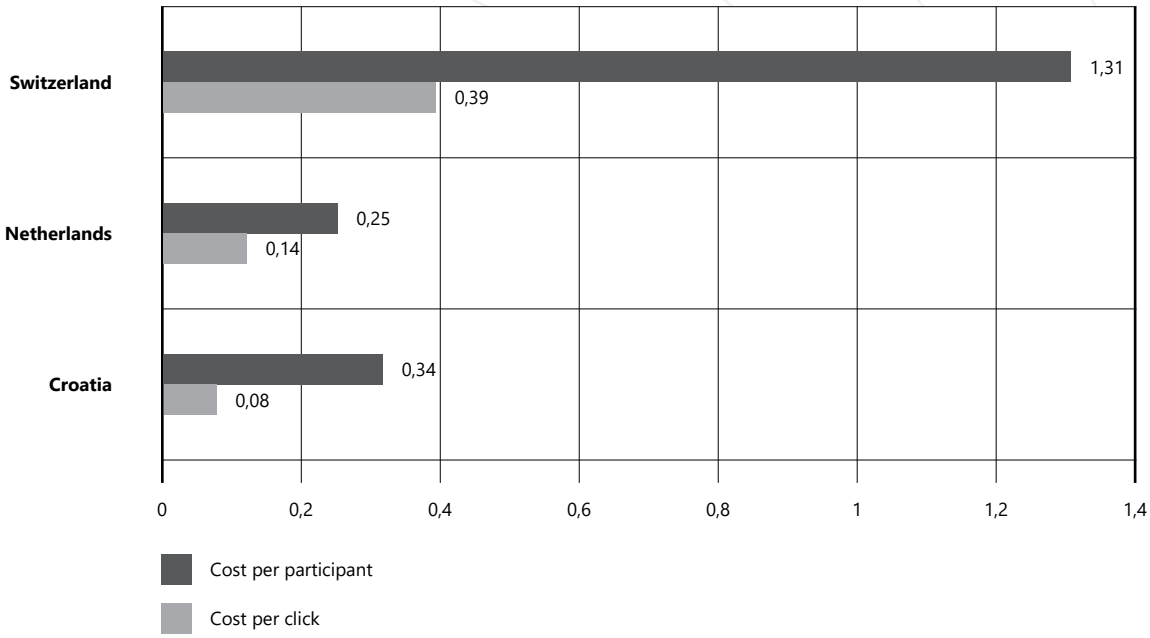

Figure 2. Costs per click and per participant in EUR in Facebook campaigns

Samples in the survey countries differed in age and gender. In the Croatian and Swiss sample, the biggest age group was between 18-24 years (Croatia: M=24.36, SD=6.50; Switzerland: M=25.16, SD=7.97), while the largest proportion among Dutch participants was between 25-34 years (M=30.25, SD=8.35). This might reflect differences in motivation to participate in online surveys, but also variations in preferences of social networks among different age groups in included countries. More information on characteristics of participants is available in Jerković, Lotar Rihtarić, Van Laar, Horvat, Udrisard, and Matias (2019). Other research also showed that Facebook is especially effective in targeting young people (e.g. Ramo et al., 2014; Thornton et al., 2016). In all of the countries involved, most participants were males (around two thirds of Croatian and Swiss, and a half of Dutch participants). Since drugs are used more by males, predominance of the male participants was expected and consistent with other research (Ramo et al., 2010; Ramo & Prochaska, 2012; Frandsen et al., 2016; Thornton et al, 2015).

As shown, campaigns used different approaches in the participating countries; therefore conclusions on the key factors for a successful campaign are quite limited. In spite of that, it might be concluded that duration of the campaigns did not influence the results, since the most effective was the shortest campaign, which was conducted in Croatia. Aspects that should be carefully examined in future surveys are targeting criteria and segmenting target groups (Zhang, Mildenberger, Howe, Marlon, Rosenthal and Leiserowitz, 2020), which could result in broad reach of diverse groups of drug users.

Google advertisements

The Google campaign in Croatia lasted for a week and resulted with 5,677 clicks. Since Google statistics counts the number of clicks, and not people reached, it cannot be concluded how many of those who clicked on an advertisement participated in the survey. Google carries out statistics on some socio-demographic characteristics of users who clicked on the advertisement, but only for those who were registered on some of the Google services (e.g. Gmail account). For one third of the sample information on gender is not available, and in the rest of the sample, males and females are equally present. In addition, participants in the age group 25-34 years were the most active.

Table 2 shows number of impressions, click-through rate, clicks, average cost per click (CPC), and the budget spent (in Croatian kuna) on the advertisements on each day of the campaign. The number of clicks differed among the days, and most of them were registered during the weekend (Saturday and Sunday), which is similar to the results gained by Schwinn and colleagues (2017) on Facebook advertisements. In this campaign it was not specified when the advertisements would appear (except that they would be shown continuously over the specified days), so it is not possible to explain the campaign's popularity during the weekend. In addition, a bigger budget did not result in a higher number of clicks. It can also be noticed that the average cost per click differed during the campaign, and was not related to the ensured budget. This is because there are many factors that influence the calculation of an average cost per click, and one of them is the quality score – a metric to determine how relevant and useful an advertisement is to a user. Calculation of the quality score is not simple, since it depends on the click through rate, relevance, and landing page (Shewan, 2020). Furthermore, the Google campaign is based on the auction whose purpose is to determine advertisement rank, that is, where each ad will be positioned. This is based on the maximum bid and the quality score, and presents a starting point for determining how much the advertiser pays each time someone clicks on the advertisement (Shewan, 2020). When calculating the price, the ad rank of the person below is considered, which results in different advertisement prices across the days.

Table 2. Number of daily impressions, clicks, and costs of the Google advertisements

Days of the campaign	Impressions	Click-through rate (%)	Clicks	Average cost-per-click (HRK)	Costs (HRK)
Tuesday	137,152	0.17	234	2.73	636.96
Wednesday	227,455	0.27	608	0.65	398.03
Thursday	236,727	0.31	731	0.36	266.19
Friday	197,814	0.30	603	0.38	230.26
Saturday	223,581	0.53	1,192	0.39	467.26
Sunday	245,468	0.50	1,236	0.38	475.34
Monday	466,717	0.23	1,073	0.93	1,000.91

In this campaign, the advertising format of 300x250 pixels was most frequently shown on advertising network and it collected the largest number of clicks. In addition, Google Analytics also provided information on the clicks that were targeted through certain categorization criteria. In this survey, around three quarters of clicks were based on the custom group that was defined for the purpose of this survey.

CONCLUSION COMMENTS

This survey shows that a social media recruiting strategy can be a useful mechanism for targeting young drug users in an online survey. Some of the reasons for that are related to the fact that social media is widely used among younger age groups (Statista, 2021b), advertisements can be shown to the participants based on their interest, and anonymity can easily be ensured in this type of research (Temple and Brow, 2011). Since advertisements consist not only of the text, but also of an image, young drug users can easily identify with the shown context, and perceive advertisements as attractive to click on.

The Facebook advertisement campaign was the most successful in Croatia. There were many factors that could have influenced this result, such as the fact that Croatia applied more specific targeting criteria, and that there were possible variations in Facebook popularity among the included countries, as well as between the age groups, etc. The Google campaign also resulted in a vast number of clicks in a brief period (5,677 clicks in a week), but it is not clear which factors contributed to the variations in the number of clicks per a day, since a bigger budget did not result in more clicks. Further surveys are needed to better understand factors that are related to successful campaigns.

It is necessary to mention the limitations of this survey. Advertisement strategy can only reach people who have access to the Internet. As emphasized by Forgasz and colleagues (2017), Facebook ads can only reach those who have a Facebook account, have signed up to Facebook, and included personal characteristics that match those set in the advertisement, and who log into Facebook during the Facebook campaign. In addition, clicking on an ad is positively associated with the amount of time spent on Facebook, and therefore the sample disproportionately includes those who spent considerable time on Facebook (Schwinn et al., 2017). Furthermore, convenience sampling was open to self-selection bias, and therefore our results cannot be generalizable. In addition, convenience sampling methods that do not set demographic quotas while targeting might result in a substantial number of homogeneous participants, which could have been the case in this survey (Jerković et al., 2019). This is because Facebook's marketing algorithms maximizes clicks on the advertisement by sending it to the users that the algorithm recognizes as those who will click on an advertisement with high probability. Therefore, Zhang and colleagues (2020) recommend that researchers should establish demographic strata, to avoid "homogenization" of the sample. Another limitation is the presence of many potential cofounders (e.g. varying Facebook popularity in the survey countries and within diverse types of drug users).

Described recruitment strategies differed in many aspects and therefore their results are not easily comparable. In spite of that, they managed to reach a high number of participants in a brief period, and with a reasonable budget. These results show that information gained through Facebook and

Google advertisement strategies could be used as an additional source of information alongside the more traditional surveys that are conducted on a representative sample.

REFERENCES

Alexa (2021). *The top 500 sites on the web.* Downloaded from: *https://www.alexa.com/topsites* (25.11.2021.)

Akers, L., & Gordon J. S. (2018). Using Facebook for Large-Scale Online Randomized Clinical Trial Recruitment: Effective Advertising Strategies. *Journal of Medical Internet Research, 20(11),* e290. *https://doi.org/10.2196/jmir.9372*

Amon, K. L., Campbell, A. J., Hawke, C., & Steinbeck, K. (2014). Facebook as a recruitment tool for adolescent health research: A systematic review. *Academic Pediatrics, 14(5),* 439–447. *https://doi.org/10.1016/j.acap.2014.05.049*

Batterham, P. J. (2014). Recruitment of mental health survey participants using Internet advertising: content, characteristics, and cost effectiveness. *International Journal of Methods in Psychiatric Research, 23(2),* 184–191. *https://doi.org/10.1002/mpr.1421*

Bennetts, S. K., Hokke, S., Crawford, S., Hackworth, N. J. Leach, L. S., Nguyen, C., Nicholson, J. M., & Cooklin, A. R. (2019). Using Paid and Free Facebook Methods to Recruit Australian Parents to an Online Survey: An Evaluation. *Journal of Medical Internet Research, 21(3),* e11206. *https://doi.org/10.2196/11206*

Choi, I., Milne, D. N., Glozier, N., Peters, D., Harvey, S. B., & Calvo, R. A. (2017). Using different Facebook advertisements to recruit men for an online mental health study: Engagement and selection bias. *Internet Interventions, 8,* 27–34. *https://doi.org/10.1016/j.invent.2017.02.002*

Chu, J. L., & Snider, C. E. (2013). Use of a social networking web site for recruiting Canadian youth for medical research. *Journal of Adolescent Health, 52(6),* 792–794. *https://doi.org/10.1016/j.jadohealth.2012.12.002*

Crutzen, R., & Göritz, A. S. (2010). Social desirability and self-reported health risk behaviours in web-based research: three longitudinal studies. *BMC Public Health, 10,* 720. *http://www.biomedcentral.com/1471-2458/10/720*

Ellis, L. A., Collin, P., Davenport, T. A., Hurley, P. J., Burns, J. M., & Hickie, I. B. (2012). Young Men, Mental Health, and Technology: Implications for Service Design and Delivery in the Digital Age. *Journal of Medical Internet Research, 14(6),* e16. *https://doi.org/10.2196/jmir.2291*

Facebook (2020). *Facebook ads.* Downloaded from: *https://www.facebook.com/business/products/ads* (06.12.2020.)

Fenner, Y., Garland, S. M., Moore, E. E., Jayasinghe, Y., Fletcher, A., Tabrizi, S. N., Gunasekaran, B., & Wark, J. D. (2012). Web-Based Recruiting for Health Research Using a Social Networking Site: An Exploratory Study. *Journal of Medical Internet Research, 14(1),* e20.

Forgasz, H., Tan, H., Leder, G., & McLeod, A. (2017). Enhancing survey participation: Facebook advertisements for recruitment in educational research. *International Journal of Research & Method in Education. https://doi.org/10.1080/1743727X.2017.1295939*

Frandsen, M., Thow, M., & Ferguson, S. G. (2016). More Traditional Advertising Methods for Recruitmnet Eligible Participants to Health Research Studies: A Randomized, Controlled Clinical Trial. *Journal of Medical Internet Research, 5(3),* e161.

Gilligan, C., Kypri, K., & Bourke, J. (2014). Social networking versus Facebook advertising to recruit survey respondents: A quasi-experimental study. J*ournal of Medical Internet Research, 16(9). https://doi.org/10.2196/resprot.3317*.

Graham, A. L., Bock, B. C., Cobb, N. K., & Niaura, R. (2006). Characteristisc of smokers reached and recruited to an Internet smoking cessation trial: A case of denominators. *Nicotine and Tobacco Research, 8(1),* 43–48.

Global Drug Survey (2014). *Global Drug Survey.* Downloaded from: *https://www.globaldrugsurvey.com/past-findings/the-global-drug-survey-2014-findings/* (01.12.2020.)

Gotter, A. (2018). *The Complete Resource to Understanding Facebook Ads cost.* Downloaded from: *https://adespresso.com/blog/facebook-ads-cost/* (11.06.2019.)

Jerković, D., Lotar Rihtarić, M., & Horvat, T. (2017). *Facebook ads as recruitment for online drug surveys: the Holy Grail? Lisbon Addictiones conference presentation.* Downloaded from: *http://www.emcdda.europa.eu/system/files/attachments/6843/11H00_2_Dijana%20Jerkovic.ppt* (30.11.2020.)

Jerković, D., Lotar Rihtarić, M., Van Laar, M., Horvat, T., Udrisard, R., & Matias, J. (2019). Using Facebook Ads as a Recruitment Strategy for Web Surveys on Drugs: Experience from the European Web Survey on Drugs. *Adiktologie, 19(2),* 67–74. *https://doi.org/10.35198/01-2019-002-0002*

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons, 53(1),* 59–68.

King, D. B., Rourke, N. O., & Delongis, A. (2014). Social Media Recruitment and Online Data Collection: A Beginner ' s Guide and Best Practices for Accessing Low-Prevalence and Hard-to-Reach Populations. *Canadian Psychology, 55(4),* 240–249.

Morgan, A. J., Jorm, A. F., & Mackinnon, A. J. (2013). Internet-Based Recruitment to a Depression Prevention Intervention: Lessons From the Mood Memos Study. *Journal of Medical Internet Research, 15(2),* e31. *https://doi.org/10.2196/jmir.2262*.

Muñoz, R. F., Barrera, A. Z., Delucchi, K., Penilla, C., Torres, L. D., & Pérez-Stable, E. J. (2009). International Spanish/English Internet smoking cessation trial yields 20% abstinence rates at 1 year. *Nicotine and Tobacco Research, 11(9),* 1025–1034.

Pedersen, E. R., & Kurz, J. (2016). Using Facebook for health-related research study recruitment and program delivery. *Current Opinion in Psychology,* 9, 38–43.

Ramo, D. E., & Prochaska, J. J. (2012). Broad Reach and Targeted Recruitment Using Facebook for an Online Survey of Young Adult Substance Use. *Journal of Medical Internet Research, 14(1),* e28.

Ramo, D. E., Hall, S. M., & Prochaska, J. J. (2010). Reaching young adult smokers through the Internet: Comparison of three recruitment mechanisms. *Nicotine and Tobacco Research, 12(7),* 768–775. *https://doi.org/10.1093/ntr/ntq086*

Ramo, D. E., Rodriguez, T. M. S., Chavez, K., Sommer, M. J., & Prochaska J. J. (2014). Facebook recruitment of young adult smokers for a cessation trial: Methods, metrics, and lessons learned. *Internet Interventions, 1,* 58–64.

Schwinn, T., Hopkins, J., Schinke, S. P., & Liu, X. (2017). Using Facebook ads with traditional paper mailings to recruit adolescent girls for a clinical trial. *Addictive Behaviors, 65,* 207–213.

Shewan, D. (2020). *How Much Does Google Ads Cost? WorldStream: Online Advertising Made Easy.* Downloaded from: *https://www.wordstream.com/blog/ws/2015/05/21/how-much-does-adwords-cost* (04.10.2020.)

Statista (2021a). *Most famous social network sites worldwide as of October 2021, ranked by number of active users.* Downloaded from: *https://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/* (25.11.2021.)

Statista (2021b). *Distribution of Facebook users worldwide as of October 2021, by age and gender.* Downloaded from: *https://www.statista.com/statistics/376128/facebook-global-user-age-distribution/* (25.11.2021.)

Temple, E. C., & Brown, R. F. (2011). A Comparison of Internet-Based Participant Recruitment Methods: Engaging the Hidden Population of Cannabis Users in Research. *Journal of Research Practice, 7(2),* Article D2. Downloaded from: *http://jrp.icaap.org/index.php/jrp/article/view/288/247* (30.11.2020.)

Thornton, L., K., Harris, K., Baker, A. L., Johnson, M., & Ka-Lambkin, F. J. (2015). Recruiting for addiction research via Facebook. *Drug and Alcohol Review, 35(4),* 494–502.

Thornton, L., Batterham, P. J., Fassnacht, D. B., Kay-Lambkin, F., Calear, A. L., & Hunt, S. (2016). Recruiting for health, medical or psychosocial research using Facebook: Systematic review. *Internet Interventions, 4,* 72–81.

Trautmann, F., Kilmer, B., & Turnbull, P. (eds.) (2013). *Further Insights into aspects of the illicit EU drugs markets.* Publication Office of the European Union.

Whitaker, C., Stevelink, S., & Fear, N. (2017). The use of Facebook in recruiting participants for health research purposes: A systematic review. *Journal of Medical Internet Research, 19(8),* e290. *https://doi.org/10.2196/jmir.7071*.

WorldStream (2021). *Facebook Ads vs Google AdWords: Which Should You Be Using? WorldStream: Online Advertising Made Easy.* Downloaded from: *https://www.wordstream.com/facebook-vs-google* (25.11.2021.)

Zhang, B., Mildenberger, M., Howe, P. D., Marlon, J., Rosenthal, S., & Leiserowitz, A. (2020). Quota sampling using Facebook advertisements. *Political Science Research and Methods, 8(3),* 558–564. *https://doi.org/10-1017/psrm.2018.49*.

UPORABA DRUŠTVENIH MEDIJA KAO STRATEGIJA REGRUTIRANJA U ONLINE ISTRAŽIVANJIMA

Dijana Jerković
Odjel za specijalnu edukaciju
Fakultet psihologije i edukacijskih znanosti
Sveučilište u Ghentu

SAŽETAK

Glavni cilj ovog istraživanja bio je ispitati primjenu Facebook i Google oglasa kao strategija regrutiranja u "Europskom web istraživanju droga: obrasci uporabe". Facebook kampanje su pozvale osobe starije od 18 godina koje žive u Hrvatskoj, Nizozemskoj ili Švicarskoj i koje su u prethodnih 12 mjeseci konzumirali barem jednu drogu (kanabis, MDMA / ecstasy, (met)amfetamine ili kokain) da ispune online upitnik o vlastitim obrascima uporabe. Google kampanja je bila fokusirana na osobe starije od 18 godina koje žive u Hrvatskoj i koje su u prethodnoj godini konzumirali barem jednu od navedenih droga. Rezultati su pokazali kako je Facebook kampanja rezultirala najvećim brojem klikova na oglas u Hrvatskoj (HR: 14 791; SW: 4 292; NL: 707), kao i najvećim obuhvatom sudionika koji su udovoljavali kriterijima uključivanja (HR: 3 581; SW: 1 281; NL: 394), dok je Nizozemska imala najniži trošak po sudioniku (EUR 0,25). Google kampanja u Hrvatskoj rezultirala je s 5 677 klikova. Prosječni trošak po kliku varirao je tijekom kampanje (HRK 0,36-2,73), a veći budžet nije rezultirao većim brojem klikova. Može se zaključiti da su Facebook i Google oglasi rezultirali širokim obuhvatom i razumnim budžetom u datom vremenskom okviru, stoga ove strategije predstavljaju koristan alat za regrutiranje velikog broja sudionika u istraživanja o osjetljivoj temi uporabe droga.

Ključne riječi: Facebook, Google, oglasi, online istraživanje, droge