

Recruiting Participants for a Health-Based Study through Facebook Advertising

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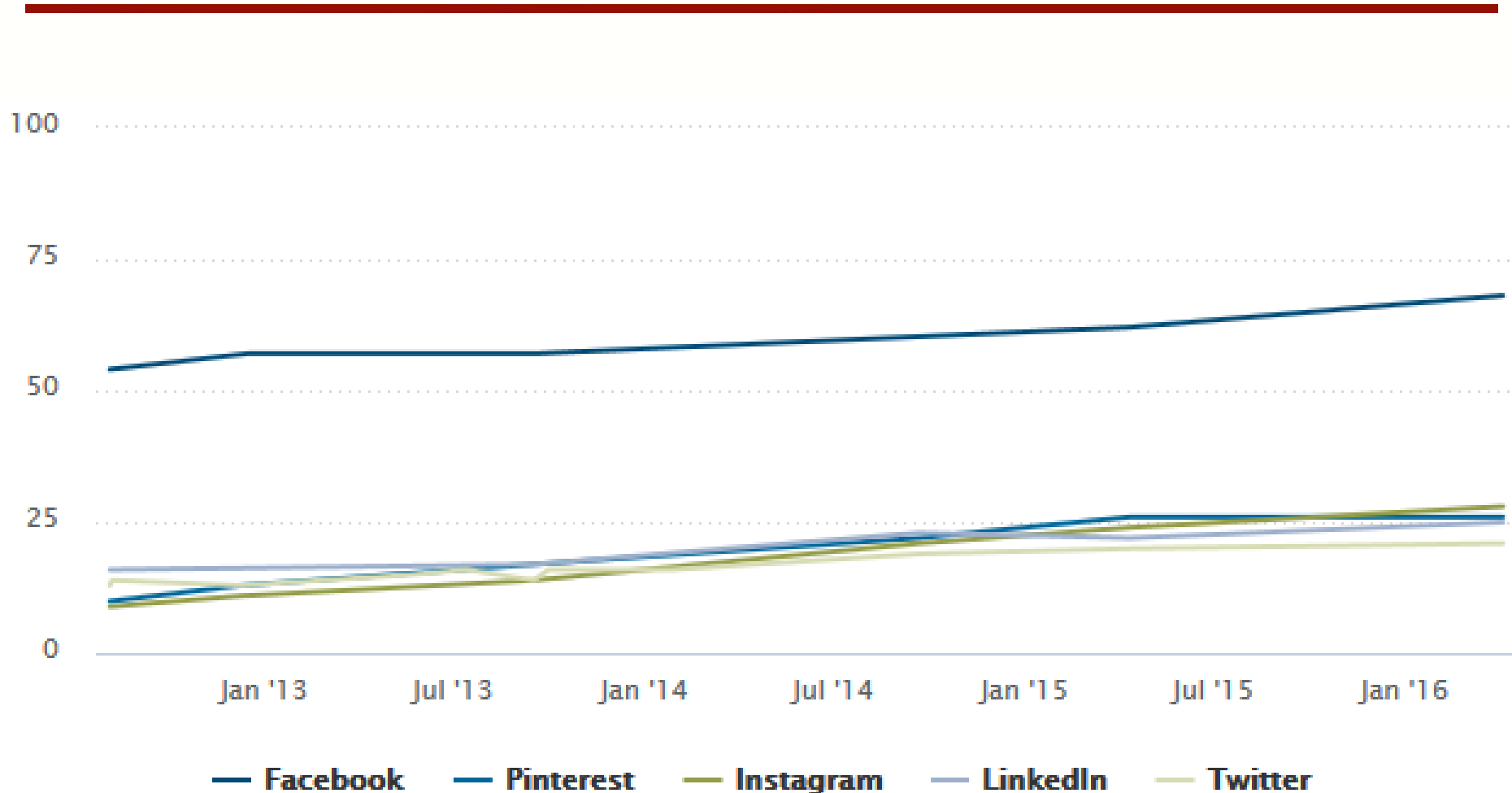
Presentation overview

- Background
- Goals and Design of Study
- Logistics of Implementing Facebook Ads
- Results from Phase I and Phase II of the study
- Limitations and Strengths
- Lessons learned

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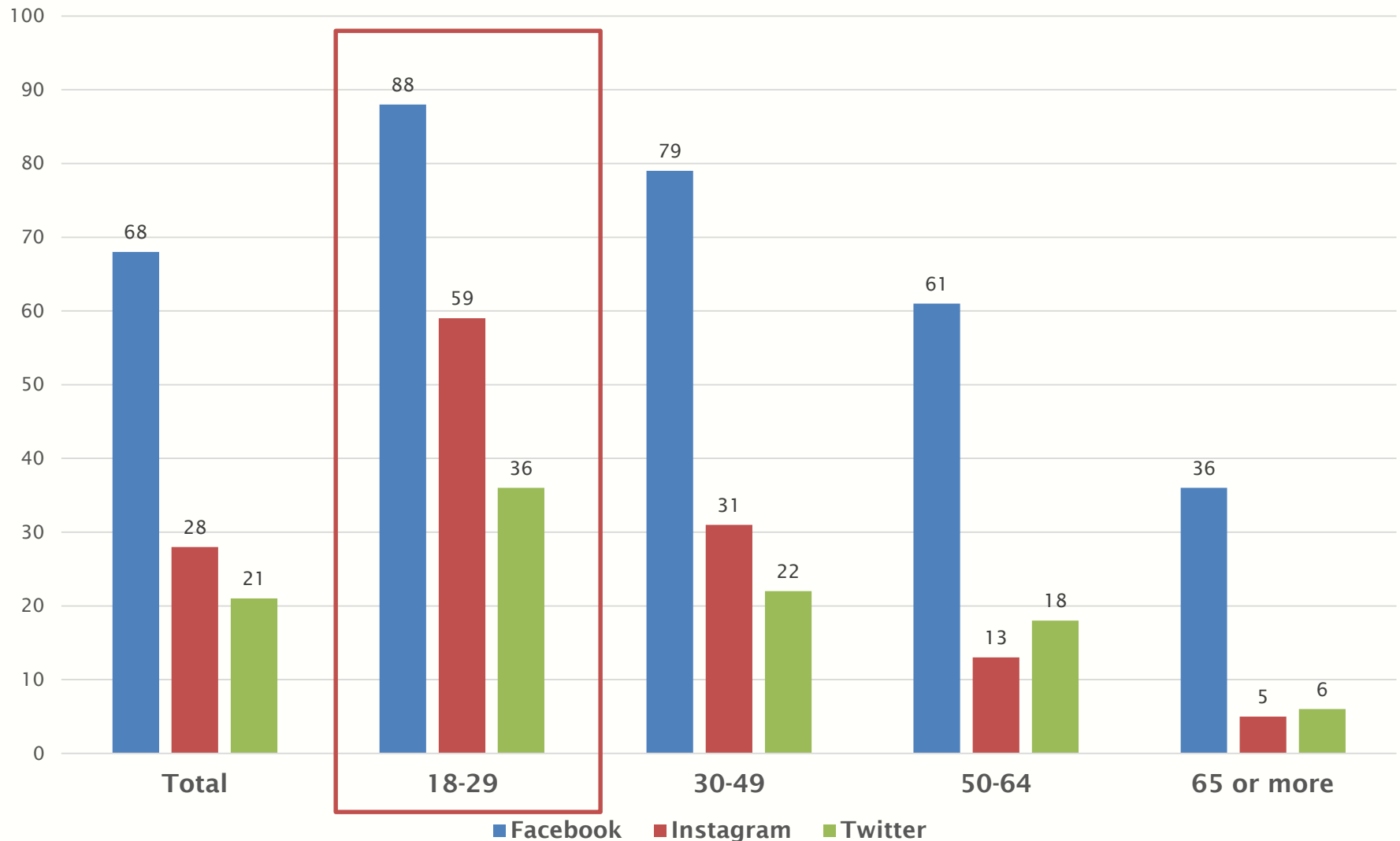
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% of All U.S. adults who use social media



Source: PEW surveys conducted 2012-2016

% of US adults who use each social media platform; by age – PEW 2016



Reasons for recruiting participants through social media

- Consistent increase in the proportion of US adults who use social media
- Potential decrease in the cost of recruitment and data collection
- Recruit hard-to-reach and “rare” populations
- Ease of using “snow ball” sampling methods

Variation in results for studies that have used Facebook as a recruitment tool

Citation	Target population	Recruitment methods	Topic	Incentive	Duration	Completes
Fenner et al. (2012)	16-25 YO Females in Victoria, Australia	FB Ads only	Health	\$25 or \$15 for completing online or in person	19 weeks	278
Pederston et al. (2015)	18 - 34 YO Veterans	FB Ads; Paid likes and Paid promotion of page	Drinking behavior	\$20 Amazon Gift card for	3 weeks and 3 days	812
Kapp et al. (2013)	35 - 49 YO women in US	FB Ads only	Mammography	Raffle for \$50 gift card	10 days	0

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Goals of our client's research study

- Target population
 - Youth 18 to 25
 - Residents of 14 counties in WI
 - Traditionally low responding population
- Topic
 - Perceptions about substance abuse in their community
 - Sensitive questions about drug use and drinking behavior

Concerns about using social media

- Not a probability sample
 - Representation of opioid versus non-opioid users on Facebook
- Non-coverage issue
 - Adult users not on FB
- Disproportionate exposure to ads
 - Heavy users more likely to see ads
- Relationship between use of social media and taking online surveys
- Need to learn about how to use Facebook to recruit participants

Studies that drove the client's decision to use Facebook

Study	Target Population	Methods	Duration	Incentive	Completes
Admassu et al. 2015	Maryland 18+	FB Ads; FB Page; Community Pages on FB; Weekly updates on Page, Paid likes	February and March 2015 (3 weeks)	\$50 and \$100 Amazon gift cards weekly drawing	6,623
Flewelling & Livingston, 2014	Vermont 18 - 25	Post cards, FB ads, Posters, Community Organizations	March and April 2014 (6.5 weeks)	\$250 grand prize and several \$100 prize drawings	3,200

Designing the study we embedded in client study

- Experiment: 2 x 2 experimental design
 - One image versus multiple images
 - One \$200 drawing versus Four \$50 drawings
- We decided against running multiple images
 - Too many confounding factors when using multiple images
- Staggered design
 - We didn't want the target population to be exposed to both ads simultaneously
 - Run each incentive condition on a week by week basis

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Various recruitment techniques for Facebook

Recruitment method	Definition
Facebook advertisements	Paid advertisements that appear in people's newsfeed or right hand corner of desktop
Facebook page	Page that one can set up for a study <ul style="list-style-type: none">• Page promotions• Paid likes• Boosted posts
Facebook groups	Open groups that are managed by admins
Community pages	Pages created by other community members or stakeholders

Logistics of using Facebook to place advertisements

- Creating a Facebook account for UWSC
- Creating a Facebook page for the project
- Creating advertisement and choosing images
- Creating text for Facebook advertisement

Create a page

Create a Page

Create a Facebook Page to build a closer relationship with your audience and customers.



Local Business or Place



Company, Organization or Institution



Brand or Product



Artist, Band or Public Figure



Entertainment



Cause or Community

Study of Substance Use in Wisconsin

The screenshot shows a Facebook page for the 'Study of Substance Use in Wisconsin'. The page header includes the Facebook logo, the page name, a search bar, and navigation links for 'UW', 'Home', and 'Find Friends'. The main content area features a post from July 19, 2016, with a photo of a diverse group of young adults. The post text asks if users live in Wisconsin and are 18 or older, inviting them to participate in a survey for a chance to win \$200. Below the post is a sponsored advertisement for Qualtrics Survey Solutions. The right-hand sidebar contains a 'Community' section with an 'Invite your friends' button, statistics for likes (106) and followers (103), an 'About' section with a 'Message Now' button and a website link, and a language selection menu. A bottom navigation menu on the left includes 'Home', 'About', 'Photos', 'Likes', and 'Posts', along with a 'Create a Page' button.

Study of Substance Use in Wisconsin

Home

About

Photos

Likes

Posts

Create a Page

Liked Following Share

Learn More Message

Community

Community

Invite your friends to Follow this Page

106 people

103 people

About See All

Message Now

www.dhs.wisconsin.gov/aoda/sudindex.htm

Community

English (US) · Español · Português (Brasil) · Français (France) · Deutsch

Privacy · Terms · Advertising · Ad Choices · Cookies · More

Facebook © 2017

Study of Substance Use in Wisconsin

July 19, 2016

Do you live in Wisconsin and are 18 years of age or older? If so, your community needs to hear from you! Answer questions about knowledge and use of substances. Chance for 1 winner to get \$200!

<https://uwmadison.co1.qualtrics.com/SE/...>

Online Survey Software | Qualtrics Survey Solutions

Qualtrics sophisticated online survey software solutions make creating online surveys easy. Learn more about Research Suite and get a free account today.

UWMADISON.CO1.QUALTRICS.COM

Like Comment Share

18 Chronological

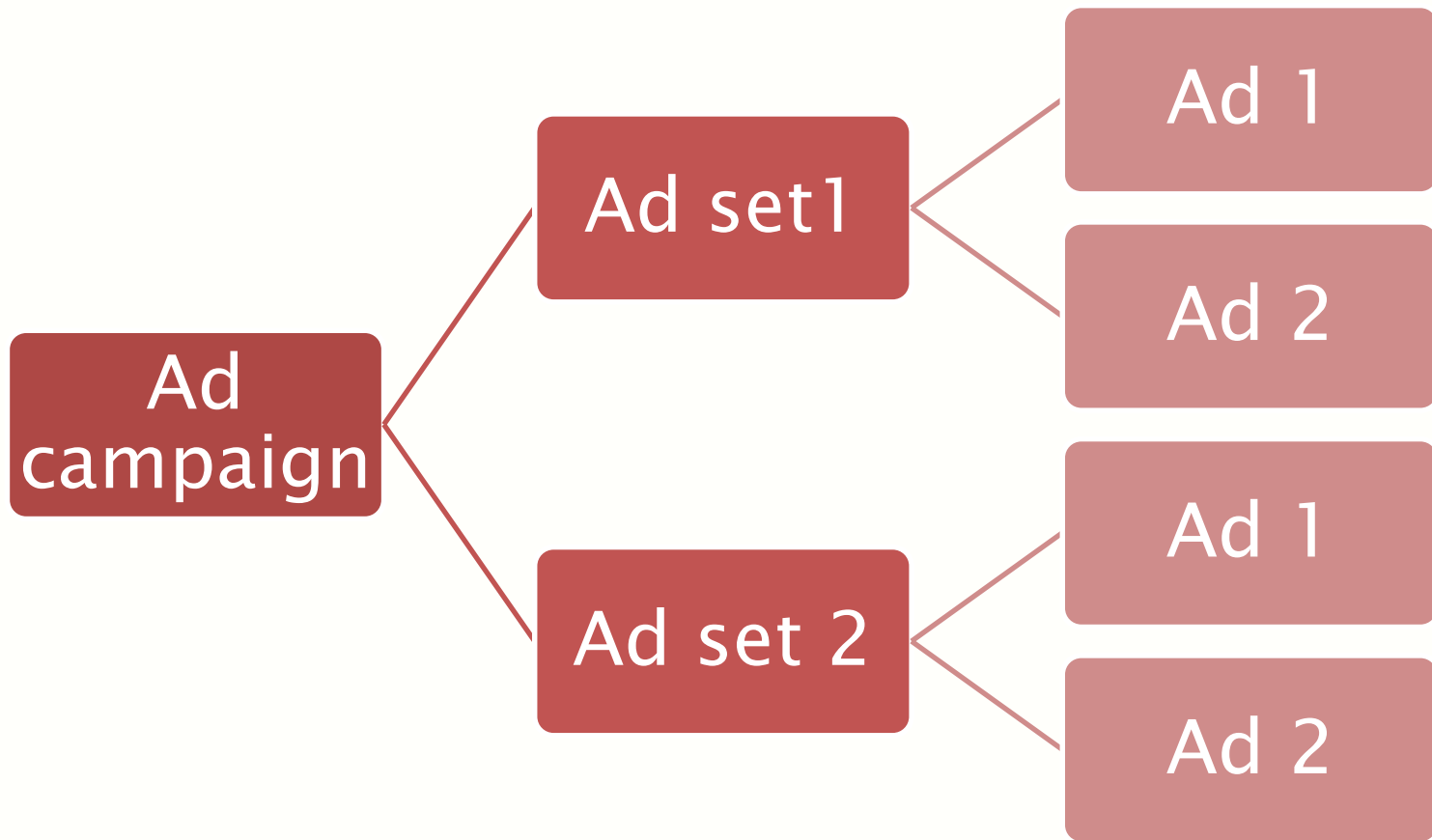
113 shares

View all 2 comments

Write a comment..

Press Enter to post.

Structure of an ad-campaign in Facebook



Add the link to Qualtrics survey

The screenshot displays the Facebook Ads Manager interface. On the left is a vertical menu with various campaign objectives. The 'Send people to your website' option is selected and highlighted in blue. A tooltip points to this option with the text: 'Use the clicks to website objective to send people to your website.' The main area shows the 'Send people to your website' objective selected, with a description: 'Increase the number of visits to your website.' Below this, a URL field is highlighted with a red oval, containing the text: `https://uwmadison.co1.qualtrics.com/SE/?SI`. Further down, there is a 'Facebook Pixel' section with a 'Create a Pixel' button. At the bottom, the 'Campaign Name' field contains the text 'Qualtrics Survey' and a 'Create Ad Account' button is visible.

Choose the location of target population



Target Ads to People Who Know Your Business

You can create a Custom Audience to show ads to your contacts, website visitors or app users. [Create a Custom Audience.](#)



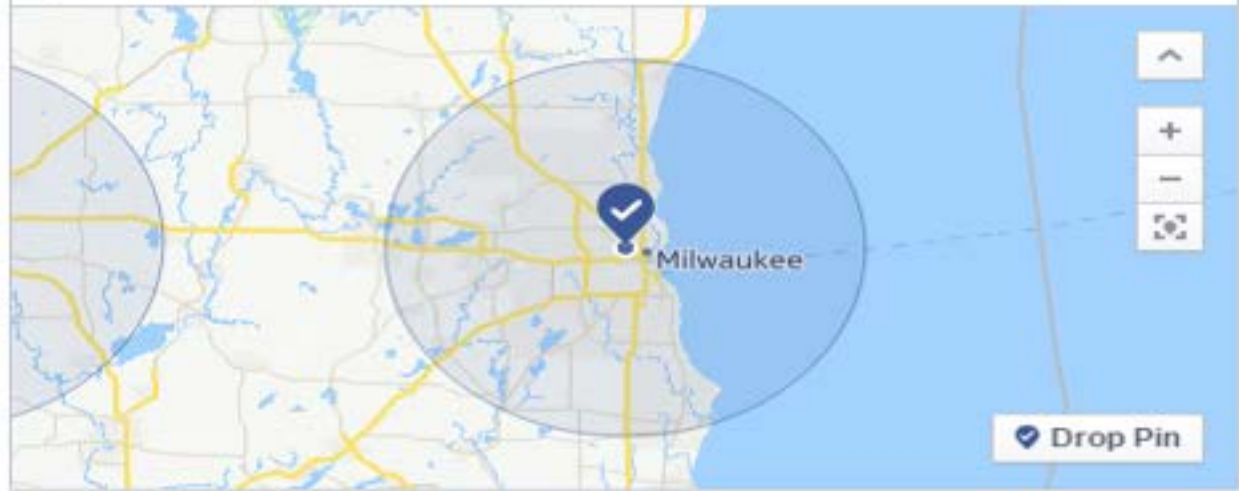
Locations

- Everyone in this location
- People who live in this location
- People recently in this location
- People traveling in this location

Madison, Wisconsin + 25mi

Milwaukee, Wisconsin + 25mi

Include | Add locations



Choose the age, gender and other characteristics

Age ⓘ -

Gender ⓘ

Languages ⓘ

Detailed Targeting ⓘ **INCLUDE** people who match at least ONE of the following ⓘ

| |

[Exclude People](#)

Estimated Reach

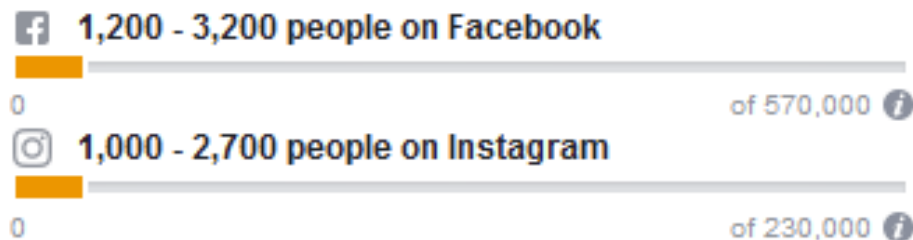
Audience Definition



Your audience selection is fairly broad.

Potential Reach: 770,000 people

Estimated Daily Reach



This is only an estimate. Numbers shown are based on the average performance of ads targeted to your selected audience.

Set a daily budget for your ad set

Budget & Schedule

Define how much you'd like to spend, and when you'd like your ads to appear. [Learn more.](#)

Budget ⓘ

Daily Budget ▾

\$20.00

\$20.00 USD

Actual amount spent daily may vary. ⓘ

Schedule ⓘ

- Run my ad set continuously starting today
- Set a start and end date

You'll spend no more than **\$140.00** per week.

Optimization for Ad Delivery ⓘ

Link Clicks to Your Website ▾

Bid Amount ⓘ

- Automatic - Let Facebook set the bid that helps you get the most link clicks at the best price.
- Manual - Enter a bid based on what link clicks are worth to you.

When You Get Charged ⓘ

- Impression (CPM)
- Link Click (CPC)

Ad Scheduling ⓘ

- Run ads all the time
- Run ads on a schedule

Ad scheduling only works with lifetime budgets.

Delivery Type ⓘ

- Standard - Show your ads throughout the day - Recommended
- Accelerated - Show your ads as quickly as possible

Impressions versus clicks

- Impressions
 - Measures how widely and often ads were “seen” among target audience
 - Facebook measures an ad impression the moment an ad enters the screen of a desktop browser or mobile app
- Clicks
 - Indicate how often link was clicked
 - Facebook recommends pay by “clicks” when your aim is to drive people to a website
 - Link to the survey

Ad placement

Ad Preview

1 of 1

✓ Desktop News Feed	Remove
✓ Mobile News Feed	Remove
✓ Instagram	Remove
✓ Audience Network ⓘ	Remove
✗ Desktop Right Column	Add

Audience Network: Ad Placement



Elements of a Facebook Ad

Ad Label



Descriptive Text



90 characters

Headline

Extra 20% Off Sale at Tea

25 characters

Newsfeed link Description

Display Link

www.teacollection.com

Button

Shop Now

30 characters

Design elements considered for ad

- Text for various components of the advertisement
- The kind of picture to use for the study
 - With or without images of people in the picture
- Choosing an appropriate button for the ad and where it should lead to
 - “Learn More”

Facebook Study Ad

Ad Label



Study of Substance Use in Wisconsin

Sponsored ·

Like Page

Do you live in Wisconsin and are 18 years of age or older? If so, your community needs to hear from you!

Descriptive text



Headline

Chance for 1 winner to get \$200!

Answer questions about knowledge and use of substances. One lucky winner will win \$200.

Newsfeed link description

[CLICK HERE TO ENTER OUR STUDY](#)

[Learn More](#)

Phases of the project

- Phase I
 - Use of Facebook ads only
 - This phase lasted from 7/20/2016 to 8/30/2016
- Phase II
 - Use of Facebook ads accompanied by other recruitment methods
 - Emails to community partners
 - Reaching out to other Facebook pages of community partners
 - This phase lasted from 8/31/2016 to 12/28/2016

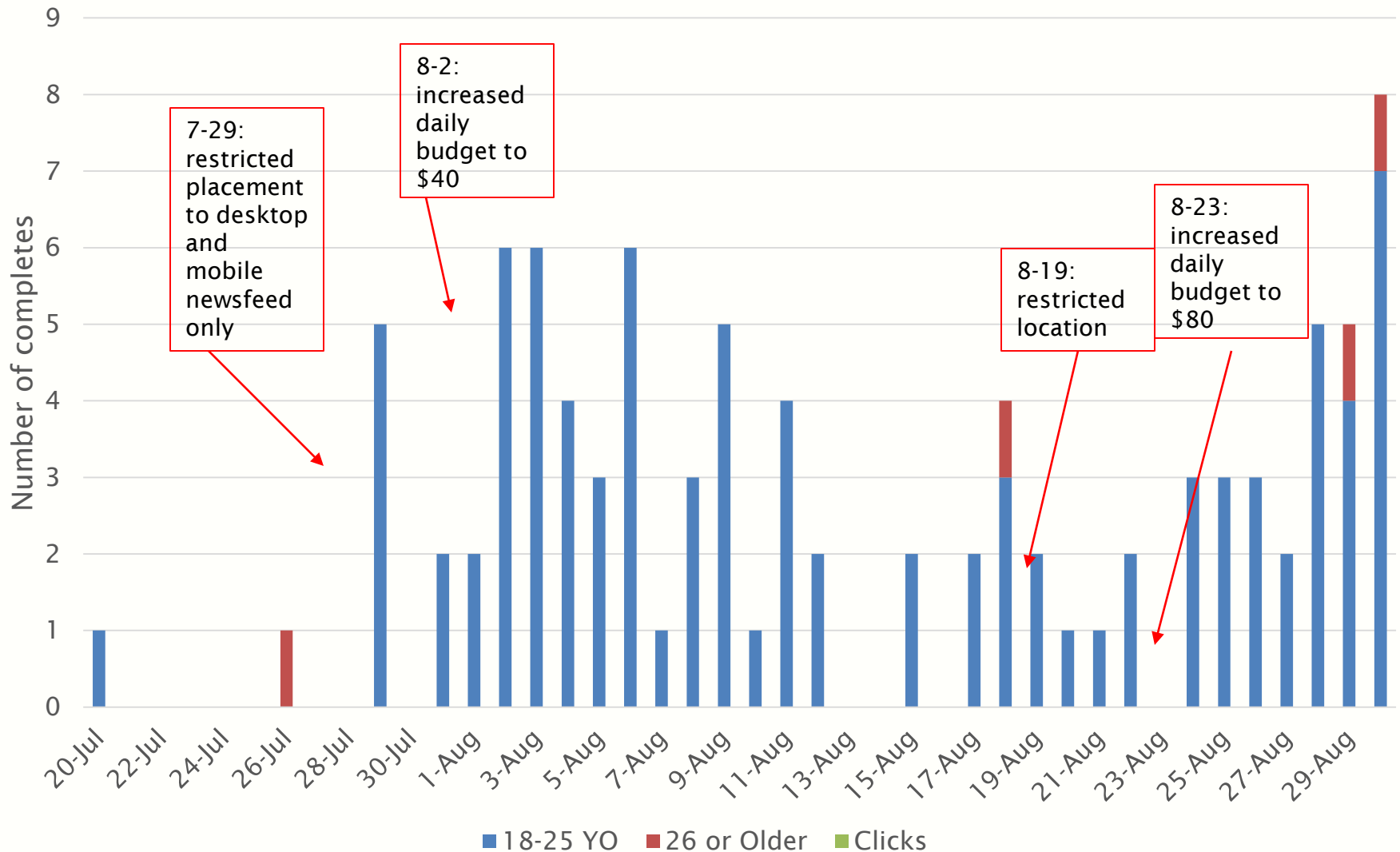
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Phase I: Facebook performance measures

Measure	Defintion	Values
Impressions	Number of times an ad appeared in the viewable area of a device	396,520
Average views per person		4.08
Reach	Number of people who saw the ad	97,262
Unique link clicks	Number of people who clicked the ad	2,920
Average link clicks per day	Unique link clicks divided by number of days	71
Button clicks	Number of times the action button on the ad was clicked	154
Link Click Through Rate	Number of link clicks divided by the number of impressions	0.84%

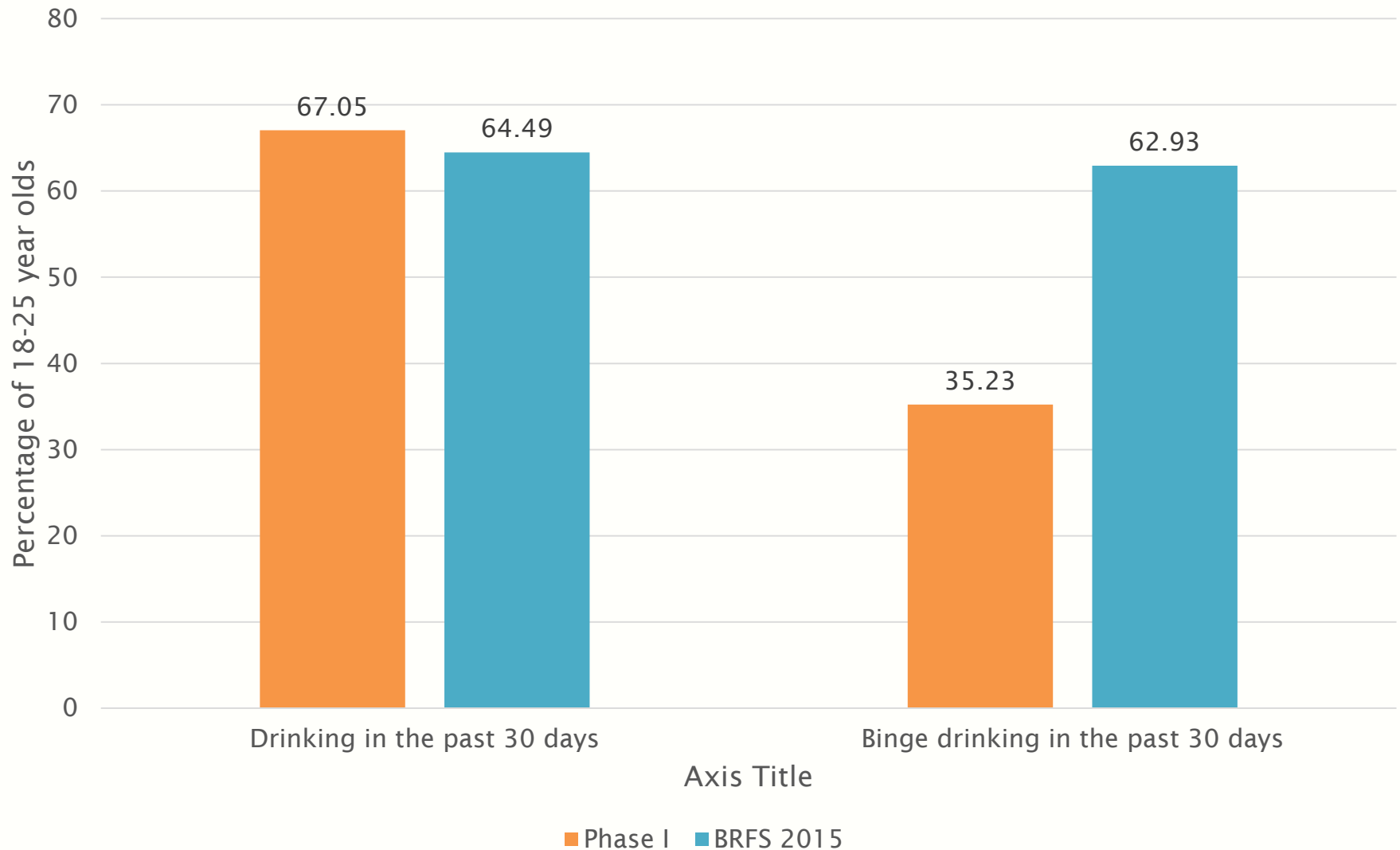
Phase I: Completes by day and age group (up-to and including 8/30)



Phase I: Cost for completes

	Cost
Cost for Facebook ads only	\$1656
Time for Project management (Jun - Aug)	~164 hrs

Comparison of drinking behavior Phase I and BRFSS2015

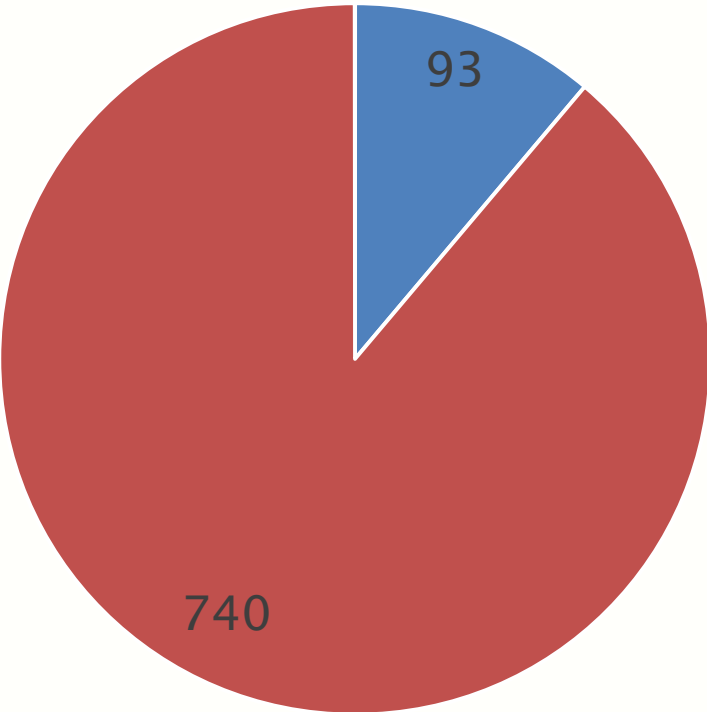


Phase II of the project

- Emails to community members to share link via different channels
- Promoting page on other community Facebook pages
- Email lists through community partners

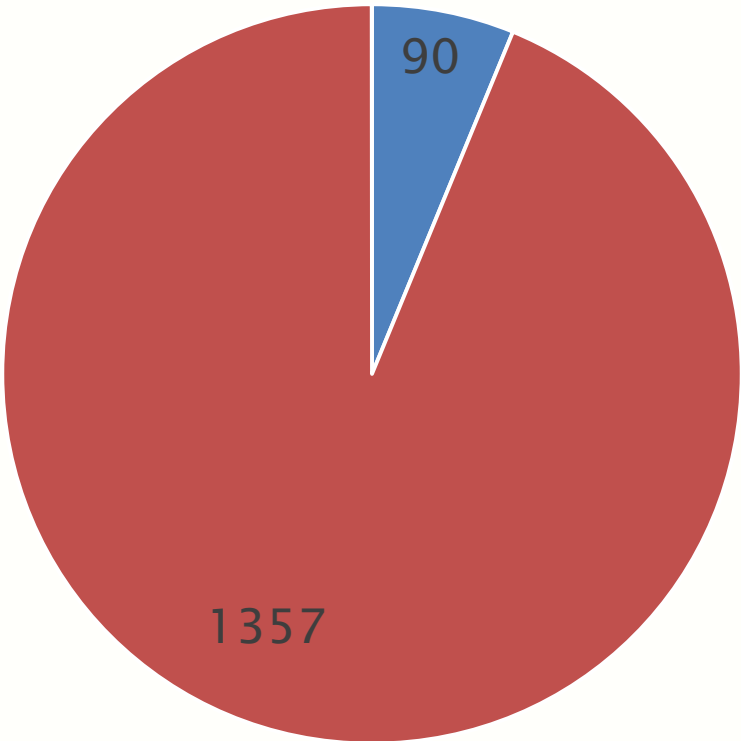
Phase II: Completes by age groups and source

Facebook



■ 18-25 years ■ 26 or more

Other sources



■ 18-25 years ■ 26 or more

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Limitations

- Not a probability sample
- Lack of control
 - No control over the sample – no random assignment
 - Facebook algorithms – designed for optimizing advertisements and not experimental designs
- Black box nature of Facebook
 - Change of rules and behavior
 - Facebook has already changed the layout of their ad campaign goals
- It might not always work

Strengths

- Control over daily expenditure or monthly budget
- Once approved the ads are very easy to activate or pause
- Easy to specify unique and rare populations by using key words or searching “Facebook Groups”

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Lessons Learned

- Guaranteed promised incentives (e.g., payments) likely perform better than no incentives or lotteries
 - Bilgen et al. 2016 (\$0, \$5 or \$10 incentive)
 - Pedersen et al. 2015 Veterans study with \$20 amazon gift card incentive
- Recruitments that involve other methods perform better
 - Reaching out to other relevant page administrators
 - Reaching out to other Facebook groups
- Better to use as a complimentary rather than primary method of recruiting participants

Additional thoughts

- Recruitment relies on:
 - Visual appeal
 - Algorithms
- How does this interact with:
 - Frequency of use
 - Types of Facebook user that do surveys
 - Facebook face being put forward

Thank You!

For copies of this presentation or more information, contact:

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Please visit us at:
www.uwsc.wisc.edu

Post card effort by client

- 12000 random sample of 18-25 YO using DOT mailing lists
 - Two post cards with no pre-incentive
 - Offered to be entered into a drawing for \$200
- Received 318 completes
- Response Rate of 3%