

Beyond the Algorithm: Decoding the Influence of Recruitment Sources on Participant Engagement in Online Intervention Studies

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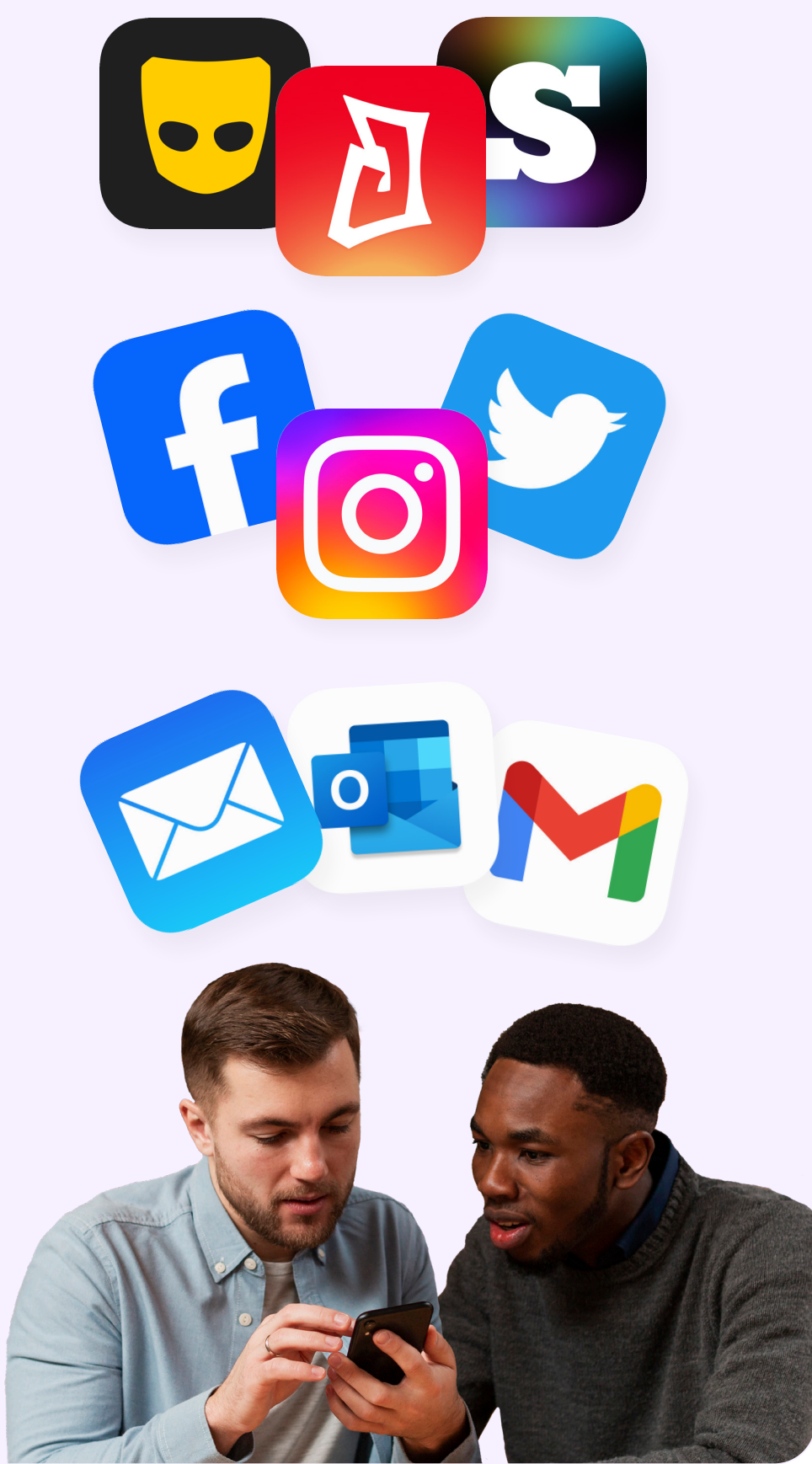
Background

- Online studies offer significant advantages over in-person studies, including access to geographically hard-to-reach populations, cost efficiency, and convenience.
- They are particularly useful for engaging sexual, gender, and racial minority communities in HIV research.
- Challenges often faced by online studies include maintaining participant retention and engagement.
- Our analysis investigated how recruitment source, along with HIV status, age, gender identity, and ethnicity, are associated with study engagement rates.

Description

- HealthMpowerment Stigma* (HMP Stigma) was a 12-month app-based randomized controlled trial conducted from July 2020 to September 2022.
- The aim was to increase HIV testing and viral suppression among sexual, gender, and racial minority individuals aged 15-29, both living with and without HIV.
- We enrolled a total of 750 participants across the United States who were assigned male at birth (AMAB).
- Participants were recruited using the same ad copy and creative through four different channels:

- ① **ADS ON DATING APPS:** We ran ad flights on Grindr, Jack'd, and Scruff.
- ② **SOCIAL MEDIA ADS:** We leveraged platforms such as Facebook, Instagram, and Twitter for advising.
- ③ **STUDY LISTSERVS:** Listservs from prior studies were also employed to recruit potential participants.
- ④ **OTHER METHODS:** Referrals, in-person recruitment, and flyer distribution supplemented our recruitment efforts.



- We tracked study engagement through the completion of follow-up surveys at 3, 6, 9, and 12 months.

Lessons Learned

- Multivariate logistic regression was used to examine the relationship between recruitment sources and high study engagement (completing ≥ 3 follow-up surveys).
- Participants recruited through social media ads (AOR=2.757, $p=0.004$) and study listservs (AOR=2.232, $p=0.028$) had greater odds of high engagement, compared to those recruited from dating sites.
- Participants living with HIV (AOR=0.619, $p=0.050$), between ages 20-24 (AOR=0.537, $p=0.010$), or identifying as a gender minority (AOR=0.313, $p<0.001$) were all less likely to demonstrate high engagement, regardless of recruitment source.
- Hispanic/Latino identity was not associated with differences in engagement rates.

COVARIATE	N(%)	AOR	95% CI	P-VALUE
RECRUITMENT SOURCE				
Dating Apps	394 (52.5)		Reference	
Social Media Ads	202 (26.9)	2.757	1.381, 5.503	0.004
Study Listservs	118 (15.7)	2.232	1.081, 4.610	0.030
Other Methods	36 (4.8)	0.703	0.262, 1.884	0.483
HIV STATUS				
Living without HIV	520 (69.3)		Reference	
Living with HIV	230 (30.7)	0.619	0.384, 0.999	0.050
AGE (Median=25, SD=3.3)				
25-29	445 (59.3)		Reference	
15-19	69 (9.2)	1.211	0.451, 3.250	0.704
20-24	236 (31.5)	0.537	0.334, 0.863	0.010
GENDER IDENTITY				
Cisgender	666 (88.8)		Reference	
Gender Minority	84 (11.2)	0.313	0.175, 0.559	<0.001
ETHNICITY				
Non-Hispanic	432 (57.6)		Reference	
Hispanic/Latino	318 (42.4)	1.253	0.744, 2.110	0.397

Conclusions / Next Steps

- Social media ads and study listservs are effective for recruiting highly engaged participants.
- Further explore factors influencing retention and engagement in online studies and develop targeted approaches to improve engagement among specific demographic groups.



Social media ads and study listservs are effective recruitment sources of highly engaged participants, underscoring their value in a comprehensive recruitment strategy.

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