

Social Media as a Tool for Survey Recruitment: Opportunities and Challenges

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Dissertation subject: *Engaging Digital Societies: Opportunities and Challenges of Social Media Recruitment for Survey Research*
- Research interests: survey research (esp. online surveys), social media research, digital behavioral data, experiments, social inequality and discrimination

Motivation

Why look beyond traditional participant recruitment?

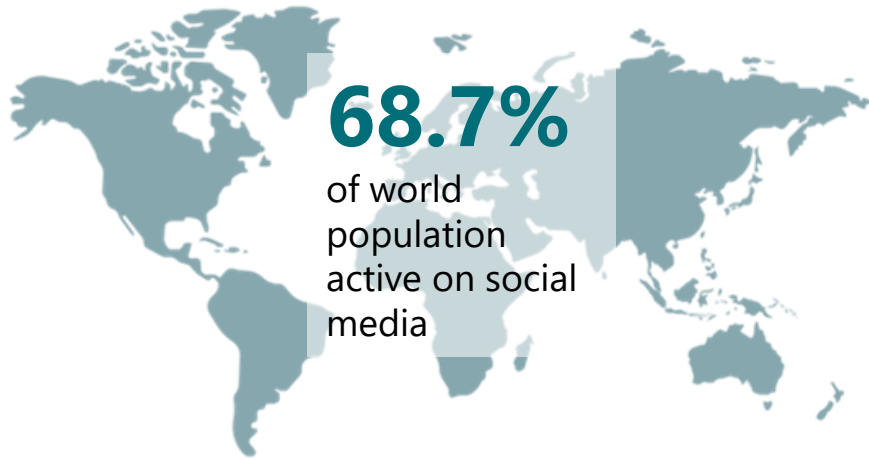
- Declining response rates regardless of sampling frames or survey modes (Jabkowski & Cichocki, 2024; Luiten et al., 2020),
- Economic pressure due to rising costs per complete and shrinking research budgets (Luiten et al., 2020; Olson et al., 2021),
- Lack of complete sampling frames for many populations (Wagner & Lee, 2014),
- Growing demand for rapid data collection in dynamic research contexts (Dillman, 2016).



We need to expand our recruitment toolkit to meet new challenges!

Motivation

Social media is a worldwide phenomenon



- **18h 36m** weekly time spent using social platforms
- Ubiquitous access across devices, usage contexts, and global regions
- Platforms as communication, identity, and behavioral ecosystems

Social media recruitment

Recruitment approaches on social media

Unpaid strategies

- Posts in groups or communities (e.g., Zimmer & Imhoff, 2020)
- Posts on profile pages (e.g., Al-Shaqsi et al., 2020)
- Private messaging (e.g., Pagoto et al., 2014)
- Viral content generation (e.g., Barratt et al., 2015)

Paid strategies

- Boosted posts (e.g., Barnes et al., 2021)
- **Targeted ads** (e.g., Kühne & Zindel, 2020)



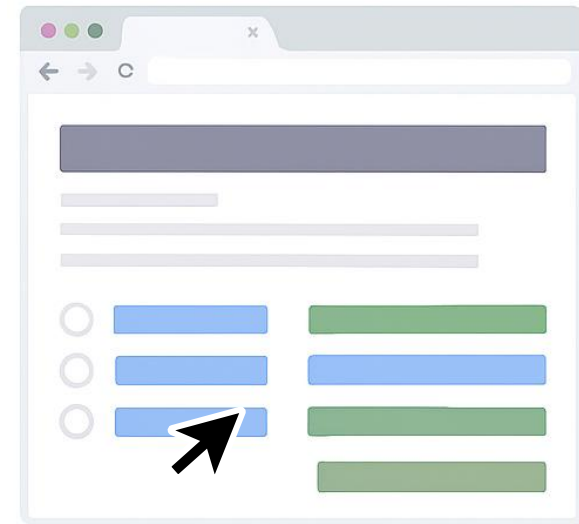
Social media recruitment

Recruitment pipeline via targeted ads

Social media platform



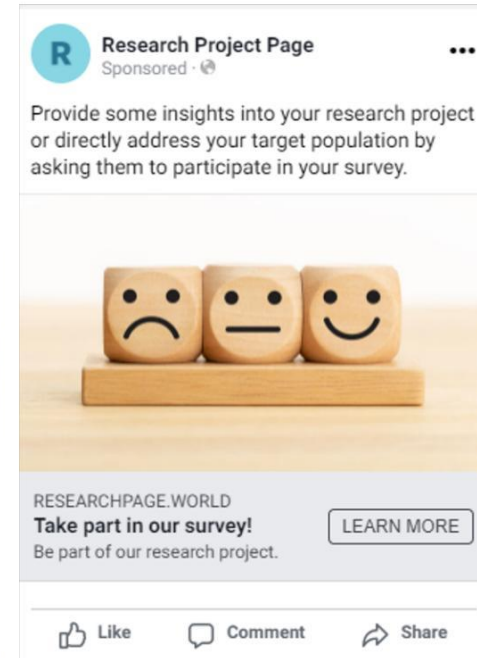
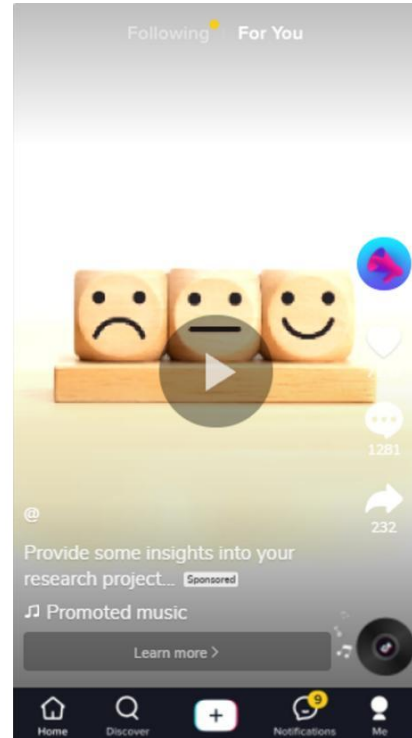
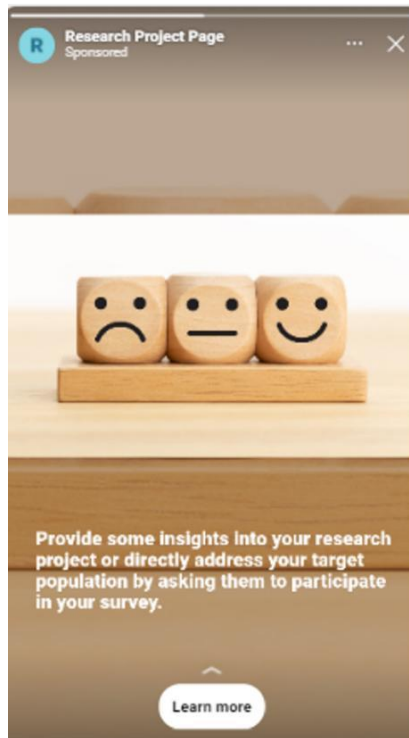
Survey platform



Social media platforms have no access to survey data.

Social media recruitment

Example: targeted ads on Instagram, TikTok & Facebook



Social media recruitment



The diagram illustrates the components of a social media ad. It features a central ad layout with several callout boxes pointing to specific elements:

- Sender:** Points to the profile information at the top, which includes a circular profile picture with the letter 'R', the name 'Research Project Page', '16 followers', and 'Promoted'.
- Primary Text:** Points to the main body of text: 'Take part in our exciting survey on social cohesion and share your unique perspectives in an innovative research project.'
- Visual:** Points to a large image of many hands stacked together in a circle, symbolizing unity or teamwork.
- Headline:** Points to the text 'Your Voice Shapes Tomorrow'.
- URL:** Points to the text 'survey-website.com'.
- CTA-Button:** Points to a blue button with the text 'Learn more'.

Anatomy of a social media ad

- **Sender:** Public page presenting the research project or institution
- **Primary Text:** The main message that explains the survey and its relevance
- **Visual:** Image or video designed to catch attention and convey topic
- **Headline:** Bold line highlighting the survey's purpose or urgency
- **URL:** Web address displayed to enhance credibility and brand recognition
- **Call-to-Action (CTA)-Button:** Clickable button to refer to survey website

Opportunities

What targeted ads can offer survey-based research



Costs: Comparatively inexpensive compared to other recruitment strategies (Ali et al., 2020; Webler et al., 2020)



Targeted outreach: Vast amount of auxiliary information available, allowing for targeted recruiting (Kühne & Zindel, 2020; Pötzschke & Braun, 2017)



Fast turnaround: Launch and scale recruitment within less than 48 hours (Zhang et al., 2020; Reuter et al., 2019)



Real-time optimization: Adjustable recruitment performance during fieldwork

Opportunities

Example: LGBielefeld study

- **Aim:** Online survey on discrimination experience and well-being among LGBTQ+ individuals, especially same-sex parented families in Germany
- **Target group:** LGBTQ+ individuals, aged 18+ years, living in Germany
- **Recruitment:** Ads on Facebook and Instagram (03.07.-03.08.2019)
- **Targeting parameter:** gender, location, age

Example of a Facebook ad:



Opportunities

Example: LGBielefeld study

Campaign results:

- 2,710 € spent on ads
- 335,461 unique user entities reached
- 43,063 link-clicks on the CTA-Button
- 12,263 started interviews
- 7,129 completed interviews
 - Only 1.7 % reported heterosexual orientation
 - 28.4 % living with children in household
- 0.38 € per complete interview



Conclusion:

Efficient recruitment of a rare target group – at low cost and large scale

Opportunities

Example: LGBielefeld study

- **Sexual minorities** made up a **larger share** in the LGBielefeld sample (97.9 %) than in the probability sample (81.3%)
- **Trans* respondents** had identical proportions, but LGBielefeld sample yielded much **higher total number** (133 vs. 9 observation)

Variable	LGBielefeld		SOEP-Q	
	n	%	n	%
Sexual Orientation				
<i>Heterosexual</i>	121	1.7	85	17.8
<i>Homosexual</i>	4,294	60.3	198	41.8
<i>Bisexual</i>	1,867	26.2	171	35.9
<i>Other Orientation</i>	811	11.4	17	3.6
Gender				
<i>Male</i>	2,748	39.4	245	51.6
<i>Female</i>	3,778	54.1	203	42.6
<i>Trans*</i>	133	1.9	9	1.9
<i>Other Gender</i>	324	4.6	15	3.1
Total n	7,129		477	

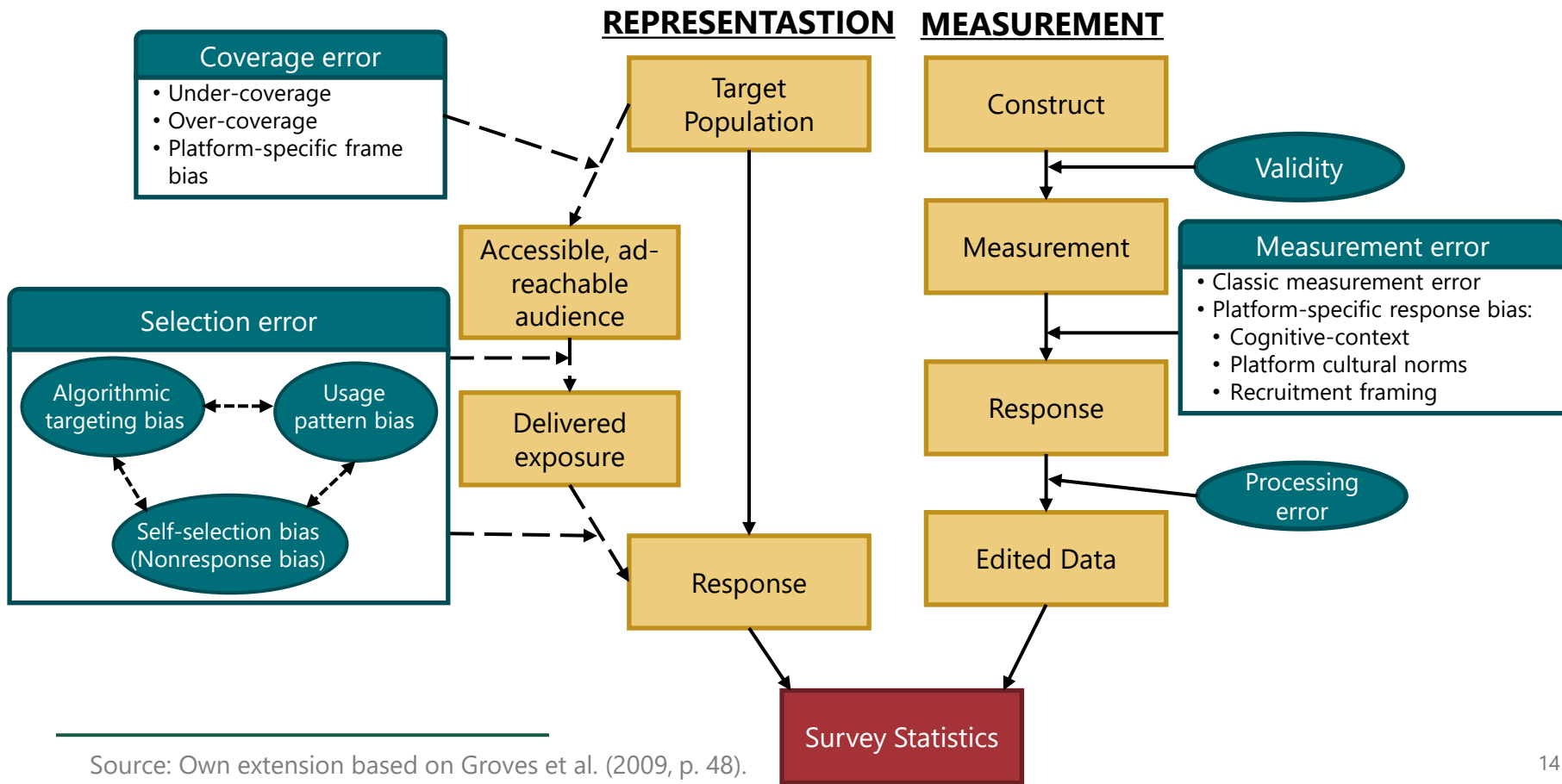
Note: Missings not displayed but included in percentages. For information about SOEP-Q, see Fischer et al., 2022.

Challenges

New opportunities – but also new risks and trade-offs

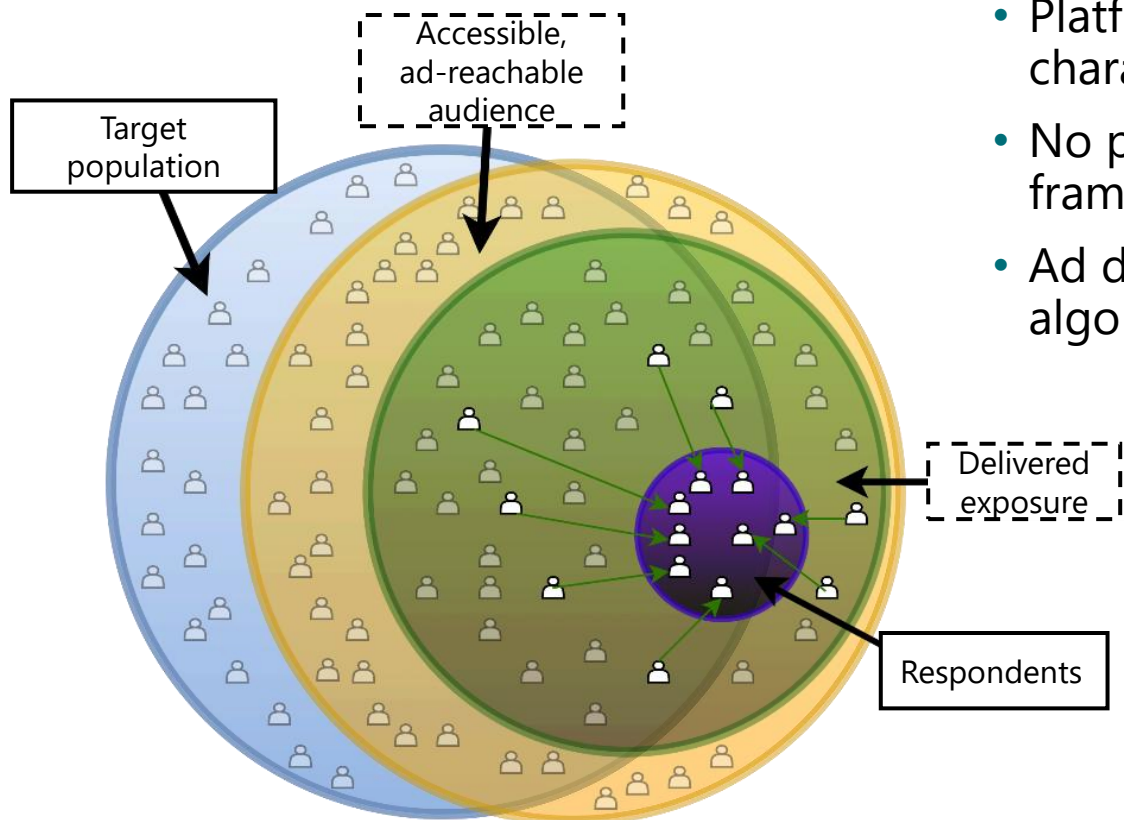
- **Platform logic:** Fundamentally different from scientific sampling paradigms
- **Optimization:** Algorithms aim at engagement, not representativeness (M. Ali et al., 2021)
- **Dependency:** Reliance on third-party systems outside the researcher's control
- **Instability:** Frequent, unpredictable changes in access and policies

Challenges – A Total Survey Error Perspective



Challenges

Representation Error



- Platform coverage varies by characteristics
- No publicly accessible sampling frame available
- Ad delivery is shaped by opaque algorithms



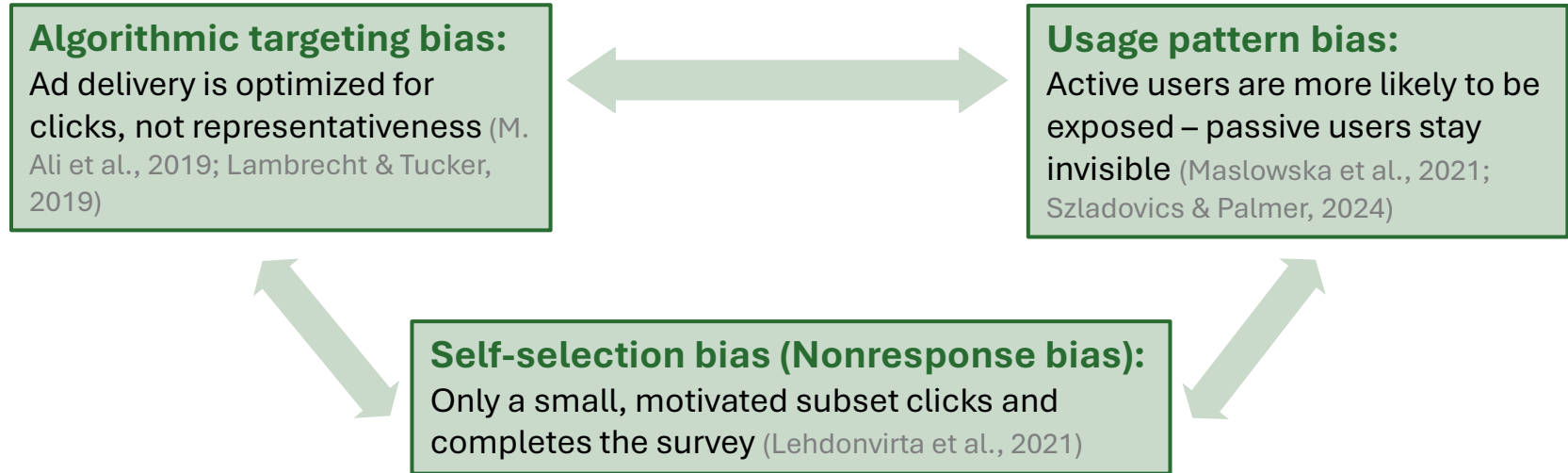
Conclusion:

Researcher can only compare known population margins to actual respondent data.

Challenges

Representation Error

Delivered Exposure / Selection Error



Challenges

Measurement Error

Platform-specific response bias = Survey answers are shaped by platform context



Cognitive context

Distracting environments (multitasking, notifications, fast scrolling) reduce attention and increase satisficing (cf. Stothart et al., 2015; Ward et al., 2017)



Platform cultural norms

Platform norms shape disclosure and social desirability (e.g., anonymity vs. real-name) (cf. Li et al., 2024; Moore et al., 2021)



Recruitment framing

Ad visuals and public comment sections shape sentiment before survey entry (e.g., Donzowa et al., 2025; Neundorf & Öztürk, 2025)

Challenges

Blurring boundaries between representation and measurement

- Individuals self-select into the survey based on perceived leverage transported by an ad → **Selection effect**
- Individuals respond in the survey based on the cues and framing provided by an ad → **Framing effect**



Conclusion: The social media advertisement may shape both **who** responds to a survey and **how** they respond.

Fit-for-Purpose Perspective

SM recruitment \neq replacement for probability sampling

But optimal when:

- Rapidly evolving topic
 - Real-time public opinion and behavioral insights are needed
 - Social Media itself is often the arena of discourse
 - E.g., #MeToo movement (e.g., Bhuptani et al., 2025), BLM movement (e.g., Sledzieski et al., 2023), COVID-19 pandemic (e.g., Perrotta et al., 2021), and the war in Ukraine (e.g., Tjaden et al., 2024)
- Hard-to-reach or niche populations
 - Conventional sampling frames are unavailable
 - Social media platforms frequently host identity-based communities
 - E.g., LGBTQ+ (e.g., Kühne & Zindel, 2020), disabled people, religious minorities
- Exploratory or experimental research
 - Rapid, inexpensive, and iterative recruitment is wanted
 - E.g., pretesting questionnaire items (e.g., Upadhyay & Lipkovich, 2020), running online experiments (e.g., Unan et al., 2024), or conducting feasibility studies (e.g., Staggs & Mills-Finnerty, 2023)

Practical Guidance

1. Pretesting and experimentation are essential

- Compare cost-per-complete, composition, and response quality
- Identify unintended biases early to avoid further disruption

2. Minimizing bias through neutral ad framing

Visual and language that signal ideology, attitudes, or group identity can affect both participation and answers.

- Use a neutral design when addressing attitudinal or political content (Donzowa et al., 2025)
- Avoid emotionally charged imagery unless targeting is intentional and controlled

3. Utilize targeting for specific populations – but with caution

For hard-to-reach populations, specifically targeted ads are particularly useful. However, the targeting strategy should be:

- Closely monitored to identify data quality issues early on
- Explicitly documented to control for effects in later analysis

Practical Guidance

4. Moderating public comments is crucial

Comment sections, platform norms, and user feedback can shape trust and participation (Höhne et al., 2025).

- Monitor and moderate comment sections

5. Transparency in reporting ad performance

To support reproducibility and cumulative research, publications should include minimum:

- Platforms used,
- Targeting settings,
- Ad budgets, and
- Ad design

Future Research Directions

Open questions in social media-based survey recruitment



- **Video and visual framing effects:**
 - What influence do video formats have on sample composition and response style?
- **Comment section effects:**
 - How do reactions, likes, and public discourse shape motivation and bias?
- **Detecting and filtering inauthentic respondents:**
 - What tools and indicators help distinguish genuine from low-effort or malicious participation?
- **Longitudinal designs with ad-recruited samples**
 - Can panel maintenance and follow-up be implemented on social media platforms?

Key Take-Aways

- Social media ads enable fast, scalable, and targeted recruitment, especially useful for niche and hard-to-reach populations
- Recruitment and measurement are deeply intertwined
- Ad design influences both **who** responds and **how** they respond
- Methodological transparency is essential – platform, targeting, design, and moderation should always be reported

Thank you!

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