



**Preferences of
men who have sex with men
towards the
distribution of HIV self-test kits
through social networks:
A discrete choice experiment**

Professor Doctor Jason Ong
On behalf of Ying Zhang



Acknowledgement of Country

We would like to acknowledge the traditional custodian of the land that we gather, the Kaurna People, and pay our respect to the Elders, past and present.

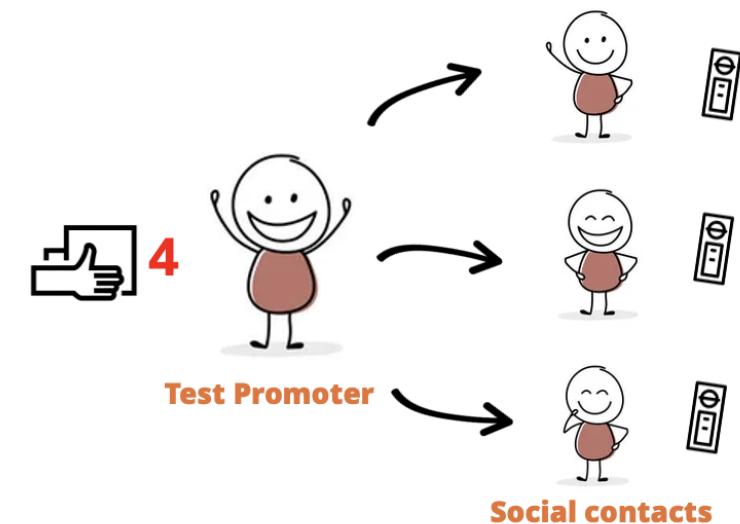
We acknowledge the on-going cultural and spiritual connections to the land and waterways that have spanned for more than 60,000 years as the oldest continuing culture in the world.

BACKGROUND

- **HIV self-testing (HIVST)** helps increase testing among men who have sex with men (MSM)¹
- **Social network distribution** can allow MSM to share kits with peers²

1 WHO Consolidated guidelines on differentiated HIV testing services

2 JIAS 2024;27(9):e26353



REVIEW

Social network-based approaches to HIV testing: a systematic review and meta-analysis

Annabelle Choong^{1,2,†}, Yi Ming Lyu^{1,2,†}, Cheryl C. Johnson³, Rachel Baggaley³, Magdalena Barr-DiChiara³, Muhammad S. Jamil⁴ , Nandi L. Siegfried⁵, Christopher K. Fairley^{1,2}, Eric P. F. Chow^{1,2,6} , Virginia Macdonald³  and Jason J. Ong^{1,2,7,§} 



Consolidated guidelines
on differentiated
HIV testing services

NEW recommendation: Social network testing services may be offered as an additional HIV testing approach as part of a comprehensive package of care and prevention (conditional recommendation, low-certainty evidence).



BACKGROUND

- Systematic review
 - 47 studies
 - Social network-based testing approaches (SNA) compared to non-SNA
 - Increased uptake of HIV testing
 - Higher proportion of first-time testers
 - Higher proportion of people testing positive
 - Cheaper per person tested and per person diagnosed



BACKGROUND

- **Aim:** identify factors influencing MSM's willingness and decision-making in HIVST kit distribution in Australia



METHODS

METHODS

- **Online DCE** survey conducted among MSM in Australia (Dec 2023-May 2024)
- **Recruited** from social media, university groups, community organisations, MSHC
- **Eligibility:** aged 18+, residing in Australia, identifying as gay, bisexual, or other MSM, including transgender MSM



MONASH UNIVERSITY MSHC MELBOURNE SEXUAL HEALTH CENTRE

HIV self-testing SURVEY

+ **for gay, bisexual, and other men who have sex with men**

HELP US WITH RESEARCH & IMPACT YOUR COMMUNITY

10 MINS SURVEY 

Stand a chance to participate in a lucky draw and win \$100 e-voucher



METHODS

Discrete choice experiment

- Method to understand users' preferences by asking them to choose between options



If these were your only options, which of the following laptops would you choose to purchase?

Brand	Microsoft	Apple	Google	
Operating System	Windows 10	OS X	Chrome OS	
Screen Size	13.5"	13"	12"	
Battery Life	12 hours	10 hours	12 hours	
Front Camera	Yes	Yes	No	
Rear Camera	Yes	No	No	
Stylus	Yes	No	No	I would not choose any of these.
Removable Keyboard	Yes	No	No	
Price	\$1,499	\$1,299	\$999	
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

METHODS

- Systematic review¹ + interviews with 10 MSM
- Pilot-tested revised DCE survey with 20 respondents
- 5 attributes, 2 alternatives, 7 choice task per person
- **Data analysis:** mixed logit, latent class models

1 JIAS 2024;27(9):e26353

Attributes	Levels
Out of pocket cost of HIV self-test kit (AUD)	<ul style="list-style-type: none"> • Free (subsidised by government) • \$30 (subsidised by government) • \$60 (subsidised by government) • \$90 (full price)
Location to access HIV self-test kit	<ul style="list-style-type: none"> • Online with kits mailed to your home • Pharmacy • Sexual Health Centre • Hospital • General practice • Community-based organisation (e.g. Thorne Harbour Health, ACON)
Training session for you to attend	<ul style="list-style-type: none"> • None • 30 minutes • 1 hr
Type of pre-test support systems for friends/sexual partners	<ul style="list-style-type: none"> • Instructional video • Written leaflet • Online video chat with sexual health professional • Online video chat with peer navigator • Phone hotline
Self-reporting of HIV self-test results by friends/sexual partners	<ul style="list-style-type: none"> • No self-reporting needed • SMS • Call • Online link

Example of a DCE choice-set

(1/7) Which scenario would you prefer for distributing HIV self-testing kits to your friends or sexual partners?

	Scenario 1	Scenario 2	None
Cost of 3 HIV self-test kits (full market price ~\$90)	Free (government funds full \$90)	You pay \$30 + government co-pay \$60	
Location (i.e. where you get the test kits from)	Hospital	Hospital	
Training session for you to attend (i.e. learn how to use the test kit, how to start a conversation on HIV testing)	None	1 hour	None of these options
Type of support systems for your friends/ sexual partners to use before they do the self-test	Instructional video	Phone hotline chat with a sexual health professional	
Self-reporting of test results by your friends/ sexual partners	Call from nurse to your friends/sexual partners	SMS test results	
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



RESULTS

RESULTS

- 251 completed survey
- Mean age 36.5 yrs (SD=11.9)
- 55.8% (n=140) born overseas
- Median time since arrival in Australia 8 years

	n (N= 251)	%
Born in Australia	111	44.2%
Born overseas	140	55.8%
African	3	2.1%
Americas	46	32.9%
Western Pacific (except Australia)	37	26.4%
South-East Asia	10	7.1%
Eastern Mediterranean	11	7.9%
European	33	23.6%
Sexual identity		
Gay/homosexual	192	76.5%
Bisexual	56	22.3%
Queer	1	0.4%
Other	2	0.8%
Trans	0	0%

RESULTS- MXL

- All attributes except 'type of support system for sexual and social partners', were significant predictors of choice.
- Overall, MSM exhibited a **strong preference for free HIVST kit** ($\beta = 1.76$, $p <0.001$) and preferred accessing the kit from a **pharmacy** ($\beta = 0.19$, $p = 0.05$) or being **mailed to home** ($\beta = 0.08$, $p = 0.05$)
- Preferred **no training requirements** ($\beta = 0.18$, $p <0.001$) and **SMS reporting of HIVST results** ($\beta = 0.15$, $p <0.05$)

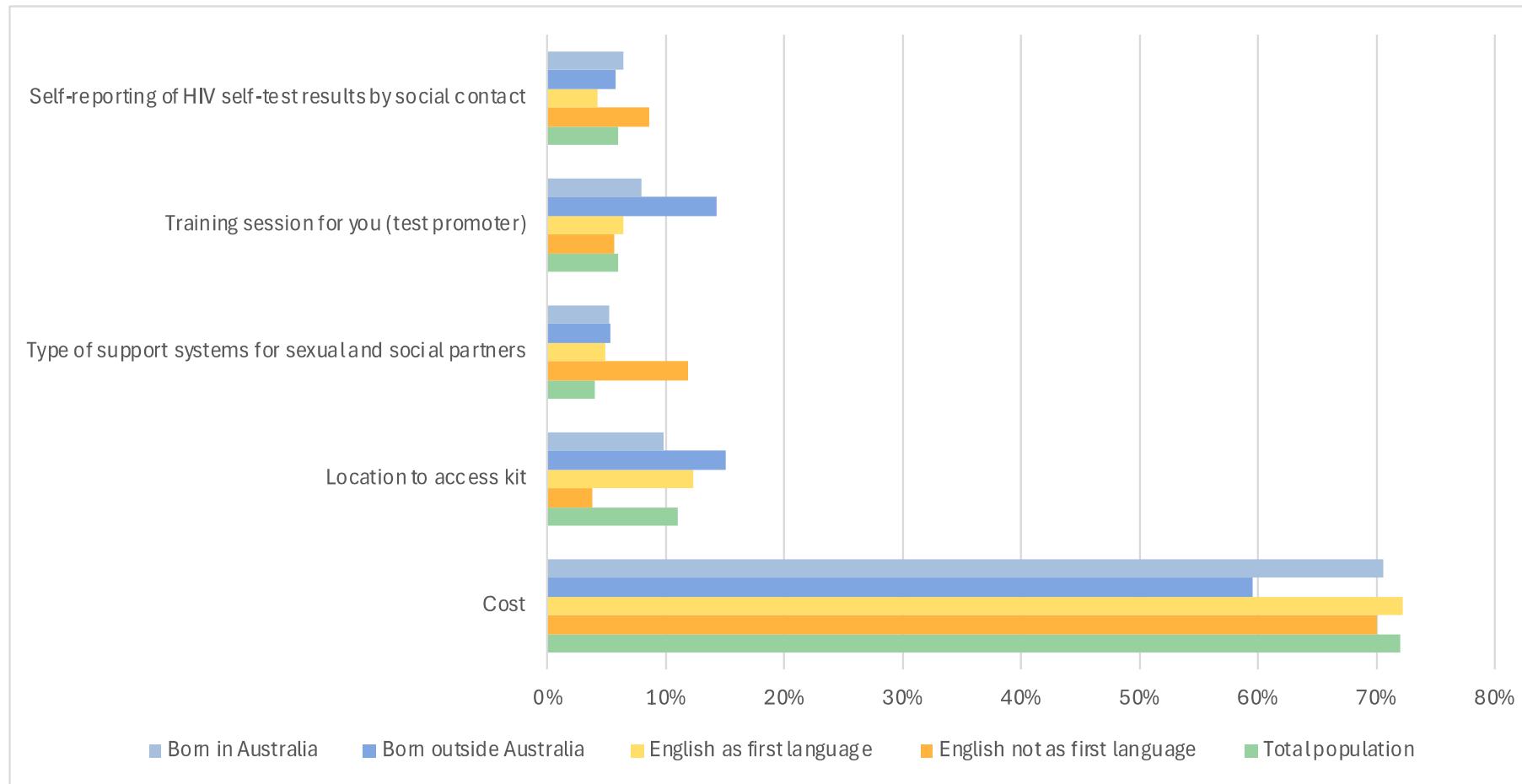
RESULTS- MXL subgroup analysis

- MSM who did not speak English as their first language showed a stronger preference for free HIVST kits ($\beta = 2.28$, $p < 0.001$) and greater dislike for online video chats with sexual health professionals ($\beta = -0.57$, $p < 0.05$).
- Overseas-born MSM were more likely to prefer free HIVST kits ($\beta = 2.04$, $p < 0.001$) and no training requirements ($\beta = 0.70$, $p < 0.001$). They were also less likely to collect HIVST from hospitals ($\beta = -0.59$, $p < 0.001$).



RESULTS- Attribute importance

‘Out-of-pocket cost of the HIV self-test kit’ was the most influential factor in the DCE choice tasks at 72%



RESULTS- LCA

- 2 classes
- Class 1: Cost-conscious and minimal support seekers 61.7%

	Class 1 (61.7%) 'Cost-conscious and minimal support seekers'	Standard error
Cost (AUD)		
Free	1.33***	0.10
\$30 out-of-pocket	0.48 ***	0.08
\$60 out-of-pocket	-0.36***	0.08
\$90 out-of-pocket	-1.45***	0.10
Location to access kit		
Online with kits mailed to your home	0.14	0.11
Pharmacy	0.18	0.11
Sexual health centre	0.09	0.11
Hospital	-0.40***	0.12
General practice	-0.07	0.12
Community-based organisation	0.06	0.11
Training session for you (test promoter)		
None	0.22*	0.13
30 minutes	-0.03	0.07
1 hr	-0.19***	0.07
Type of support systems for sexual and social partners		
Instructional video	-0.06	0.14
Written leaflet	-0.01	0.10
Online video chat with sexual health professional	-0.01	0.10
Online video chat with peer navigator	0.04	0.10
Phone hotline	0.04	0.10
Self-reporting of HIV self-test results by social contact		
No self-reporting needed	-0.21**	0.09
SMS	0.15*	0.09
Call	-0.10	0.09
Online link	0.17*	0.09

RESULTS- LCA

- Class 2 : Subsidy-dependent and structured support seekers 38.3%

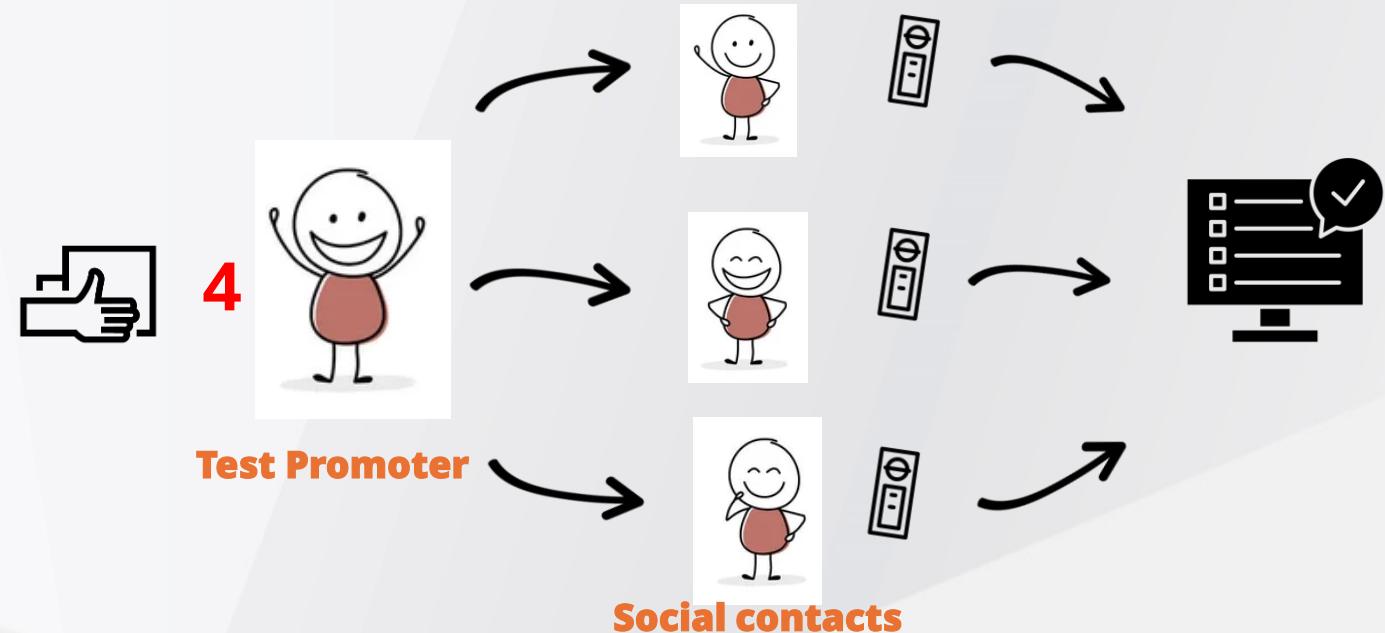
	Class 2 (38.3%) 'Subsidy-dependent and structured support seekers'	Standard error
Cost (AUD)		
Free	2.79***	0.20
\$30 out-of-pocket	-0.08***	0.22
\$60 out-of-pocket	-0.86***	0.29
\$90 out-of-pocket	-1.85***	0.40
Location to access kit		
Online with kits mailed to your home	0.09	0.21
Pharmacy	0.14	0.21
Sexual health centre	0.07	0.21
Hospital	-0.66***	0.24
General practice	0.25	0.21
Community-based organisation	0.11	0.21
Training session for you (test promoter)		
None	0.25	0.23
30 minutes	-0.11	0.14
1 hr	-0.14	0.14
Type of support systems for sexual and social partners		
Instructional video	0.27	0.27
Written leaflet	-0.44**	0.19
Online video chat with sexual health professional	0.00	0.20
Online video chat with peer navigator	0.16	0.18
Phone hotline	0.00	0.19
Self-reporting of HIV self-test results by social contact		
No self-reporting needed	0.23	0.17
SMS	0.17	0.16
Call	-0.42**	0.18
Online link	0.02	0.16



CONCLUSIONS

CONCLUSIONS

- Diverse preferences to distribute HIVST kits to social contacts.
- Must address cost if we are to reach those who would most benefit (overseas born MSM, English is not first language)
- Clinical trial underway



ORIGINAL ARTICLE: TRANSLATIONAL RESEARCH

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JAIDS Journal of Acquired Immune Deficiency Syndromes ()10.1097/QAI.0000000000003696, May 30, 2025. | DOI:
10.1097/QAI.0000000000003696

BUY

PAP



ACKNOWLEDGEMENTS

All study participants

Melbourne Sexual Health Centre

- Ying Zhang
- Dr Tiffany Phillips
- Prof Christopher Fairley
- Dr Eric Chow

Community organisation

- ANTRA

Monash University

- GLEAM Monash

University of Melbourne



Thank you

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