SMS

 a methodological boon for all the ages?

> Erin Walsh & Dr. Jay Brinker (Swinburne)





- - $\overline{\mathbf{N}}$ - a methodological **boon for all the ages?** _
 - One of the most widely used data services worldwide (Kuntsche & Robert, 2009)
 - 36.3 billion Short
 Message Service
 (SMS) were sent in
 2011 in Australia
 (ACMA, 2011)
 - Ideal for repeated measures and ecological momentary assessment studies
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 Age-based differences in technology use and engagement (Vershinskaya, 2002)

- a methodological

boon for all the ages?

 Differences between ages and their mobile usage – frequency and purpose (Devitt, 2009; Ling, 2002)

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BACKGROUND

- Mobile phones are a part of children's lives globally (Klimsa, 2006)
- 23% of children (aged 6-13) owned a mobile in Australia in 2007 (Downie, 2007), with the figure set to rise
- SMS has been used for research with children successfully before (i.e. Shapiro, 2008; Revelle, 2007; Dunton, 2011; Alfven, 2010)

- Mobile telephones are ubiquitous among adults (Anhoj & Moldrup, 2009)
- SMS capabilities are used daily by the majority of adults (Mackay & Weidlich, 2009)

- SMS is being increasingly adopted by the elderly (Ling, 2008) – in one study more than 75% of people aged over 45 use SMS (Lobetmaris, 2002)

 Only really exploited in telecare settings (Barlow,2007)







CAPACITY

CHILDREN ADULTS







5-17: Do you think psychology researchers should use SMS to talk with their participants?

18-79: Is using SMS for research is a good or bad idea?

Younger people are significantly more likely to think it is a good idea. **Does this attitude translate** into behaviour?



" Would you be willing to spend some time completing some follow-up questions, via SMS? There is no incentive for answering these follow-up questions. If you're willing, please write your mobile number here, and you will receive the questions via SMS within a week."







16-item Acceptance and Action questionnaire

(Hayes et al, 2004)

Data format: A7 B1 C1 D7 E7 F4 G1 H1 I7 J7 K1 L7 M7 N7 O1 P7

- Data only had 10% missingness
- No range violations
- Decent internal consistency:
 - SMS data α = 0.68
 - Paper data $\alpha = 0.63$



Why did some adults respond, whilst others didn't?

Some relationship between attitude and giving mobile (B =0.52, p<0.000***)

Age isn't directly associated with behavioural intention (B=-0.021, p=0.17)





Age

Why did some adults respond, whilst others didn't?

- There isn't a significant difference in age between those who did and didn't give their mobile number (p=0.208) or those who did and didn't respond (p=0.07)



- Social factors surrounding SMS change with age (Ling, 2008)

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Behavioural

Intention

Use

Behaviour

- The older you get, the physically more difficult it becomes to use a mobile (Mallenius, 2007, Ling, 2008)









STEPWISE REGRESSION First hurdle, adult sample



Significant relationships as the UTAUT predicts, No sign of age moderating those relationships.



A PROPOSITION





A PROPOSITION

Modified unified theory of acceptance and use of technology







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Yes (sort of) – participant age is not a deal-breaker Kuntsche, E., & Robert, B. (2009). Short Message Service (SMS) Technology in Alcohol Research - A Feasibility Study. Alcohol and Alcoholism, 44(4), 423-428.

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