

Downloadable Science

Comparing Data from Internet and Lab-based Psychology Experiments



Test My Brain

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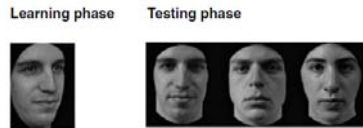
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Can we trust the web as a source of data for psychology experiments?

(1) Cambridge Face Memory Test
(Duchaine & Nakayama, 2006)



(2) Abstract Art Memory Test
(Wilmer et al., 2010)



(3) Verbal Paired Associates Memory Test
(Wilmer et al., 2010)

CHANCE - IMPULSE CHANCE - ?
1 - essence
2 - intellect
3 - distinction
4 - impulse

(4) Reading the Mind in the Eyes Test
(Baron-Cohen et al., 2001)



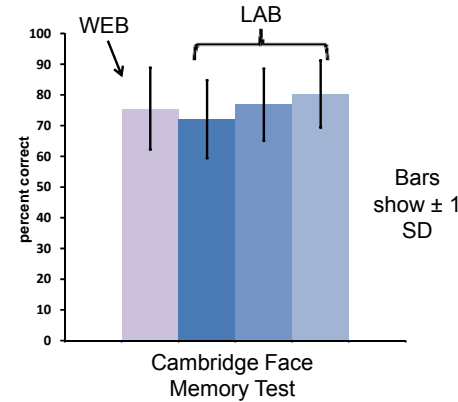
(5) Forward Digit Span
(Adapted from WAIS-IV)

Recalling visually presented sequences of digits

4 9 1 2 5

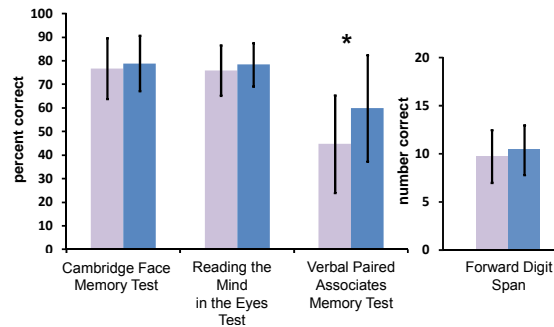
Comparing Lab and Web Data : Variability Across Multiple Samples

- Web-based Sample (n= 3004; α reliability = 0.9)
- Lab-based: Herzmann et al., 2006 (n= 153; α reliability = 0.86)
- Lab-based: Bowles et al., 2009 (n= 124; α reliability = 0.88)
- Lab-based: Duchaine & Nakayama 2006 (n=50; α reliability = 0.86)



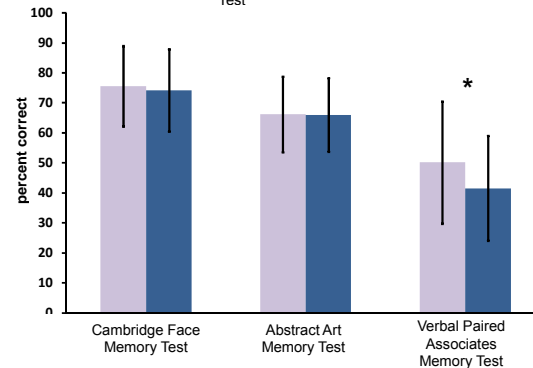
Comparing Lab and Web Data : Matched Samples

- Web-based Sample (female aged 17-22; left: n= 215; right: n = 796)
- Lab-based Sample (Wellesley students; female, college age; left: n = 45; right: n = 58)



Comparing Traditional and Web-based Recruitment (all web-tested)

- Web-based Sample (unselected; n = 3004)
- Australian Twin Registry (traditional recruitment; n=578)



PARTICIPANTS

> Top traffic sources:

Stumbleupon.com
Google.com
i-am-bored.com
Faceblind.org

> Where in the world? (based on last year):

56% US
15% UK
6% Canada
3% Australia
20% Other

> Demographics

Based on last 56,000 participants
29 years \pm 14
60% female
88% right-handed (vs. left or ambidextrous)
83% english as first language

Based on 10,000 questionnaire participants
12-16 years education
Ethnicity: 79% caucasian, 7% asian descent, 5% mixed descent, 2% african descent

