Background

- Many important **social statistics** (e.g., the distribution of health risks) can be inferred by **social sampling**—recalling samples from one's social network[1,2]
- There are increasing concerns that social media **distorts** people's view of social frequencies[3]

How is social sampling swayed by online social information?

Methods

|	Part 1	Part 2
Study 1 N = 138	"Which of the two countries is visited more frequently in the UK?" [Thailand] [USA]	"Please write down everyone you know who has traveled to [the USA]." "What is your usual contact with [this person]?" (face-to-face, social media, mixed)
Study 2 N = 132	"Which of the two health issues is more prevalent in the UK?" [Eating disorders] [Depressive disorders]	"Please write down everyone you know who has been affected by [an eating disorder]." "What is your usual contact with [this person]?" (face-to-face, social media, mixed)

Participants: UK residents aged 18-50 years; Comparisons included 13 countries and 15 health issues

To measure the relative weight that people place on online contacts, we adapted a **computational framework of social sampling**[4]:
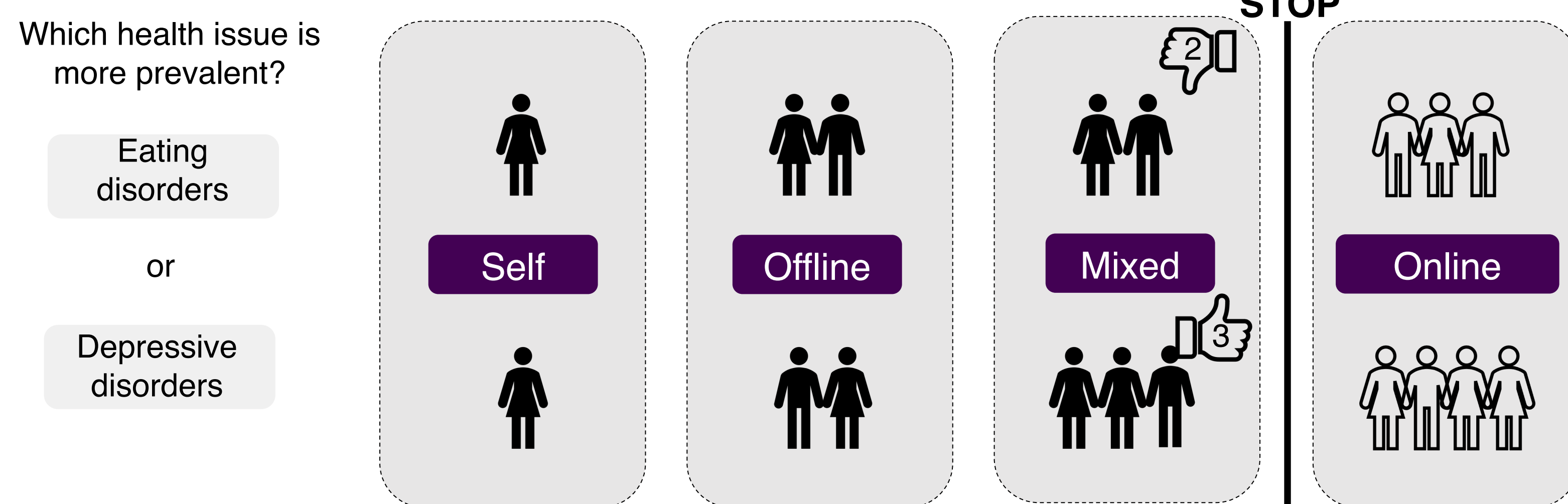

In the sampling process, people sample information sequentially from separate social circles. Sampling terminates once a circle discriminates between the two options and once the information exceeds a person's difference threshold. The order in which circles are consulted is assumed to be probabilistic and defined by weight parameters for each circle. These weight parameters allow us to quantify the weight that people assign to online contacts when forming judgments.

Results

RQ1: How **much weight** did people put on online versus offline contacts?
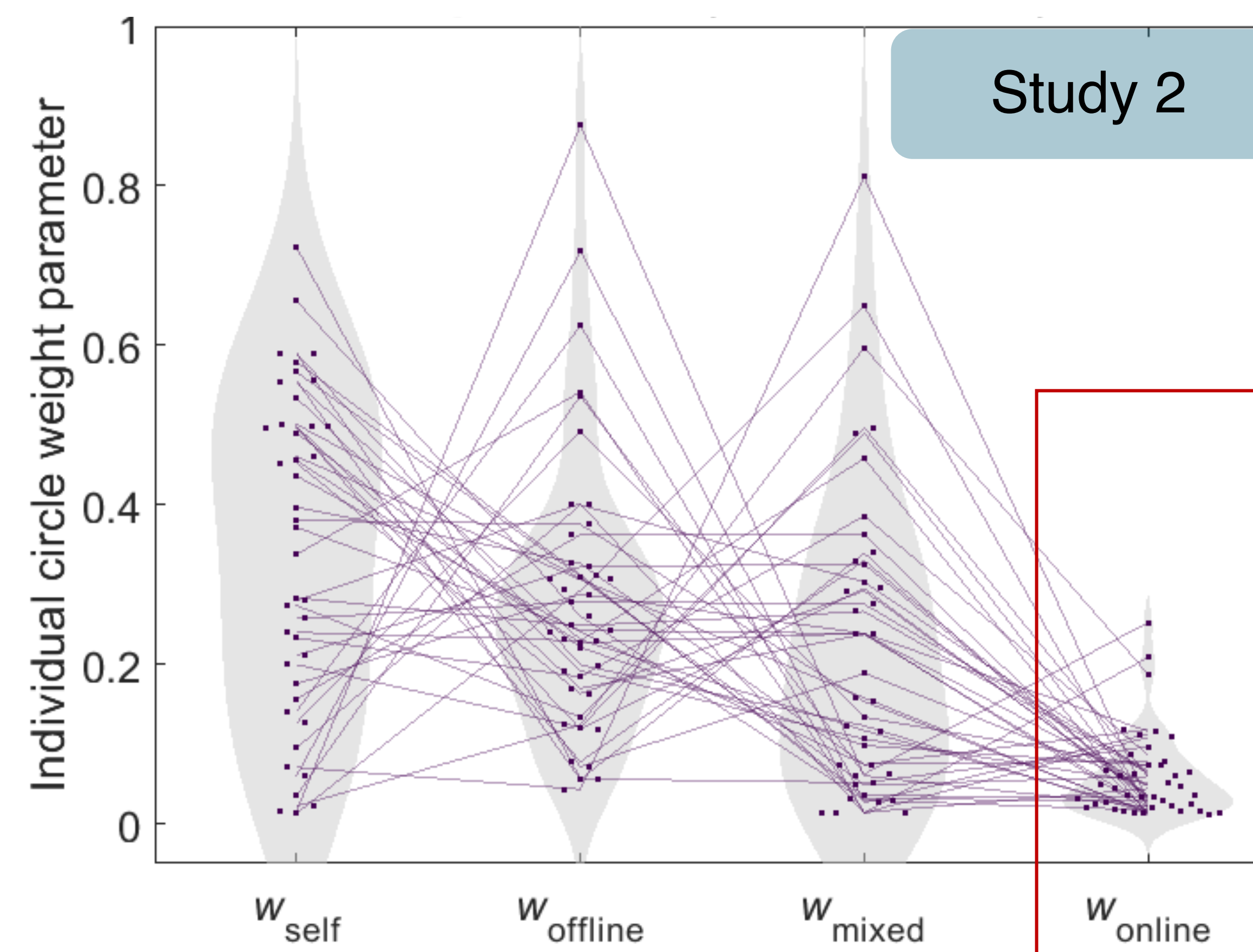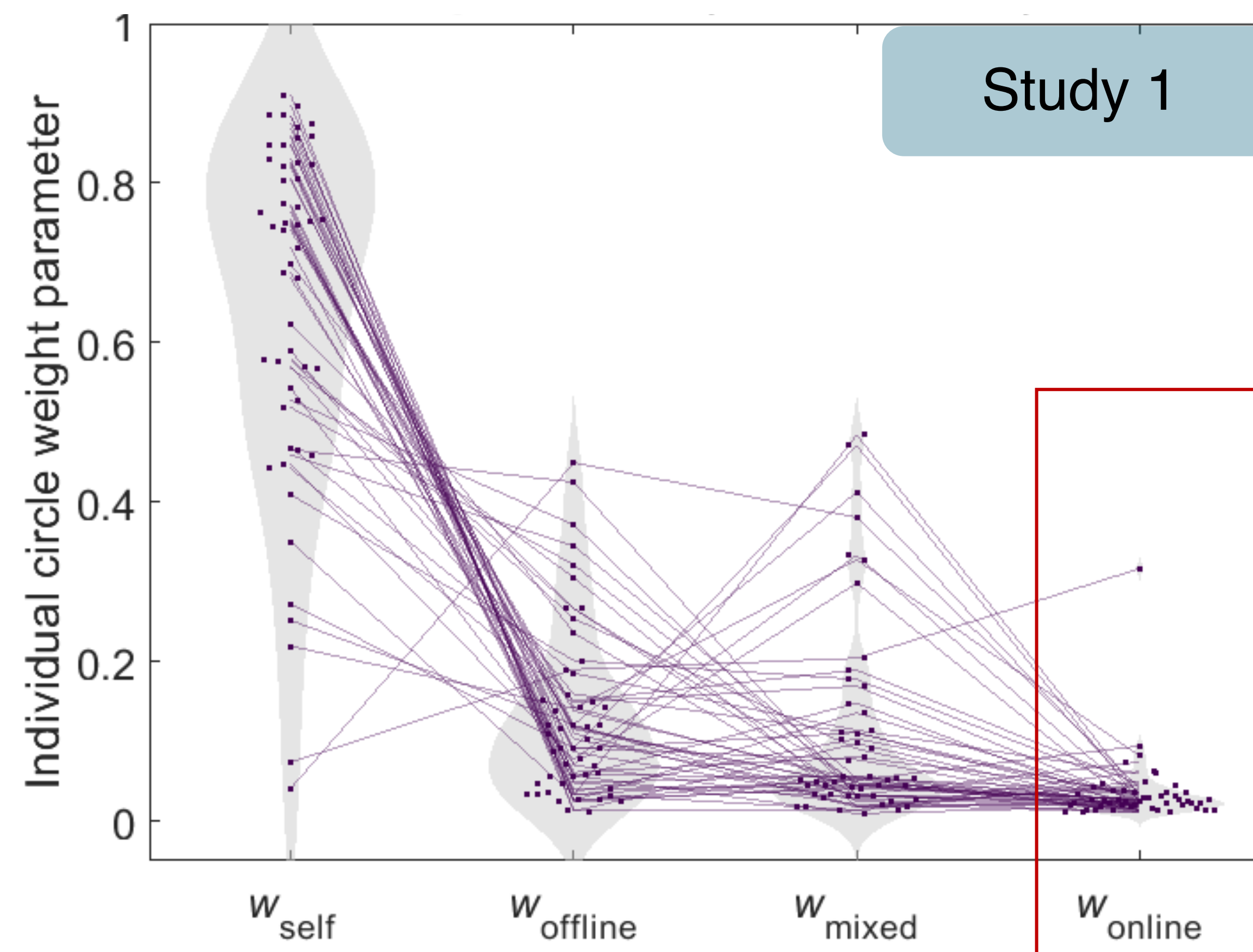
RQ2: How **valid** is social information from online versus offline contacts?

actual distribution
offline
mixed
online
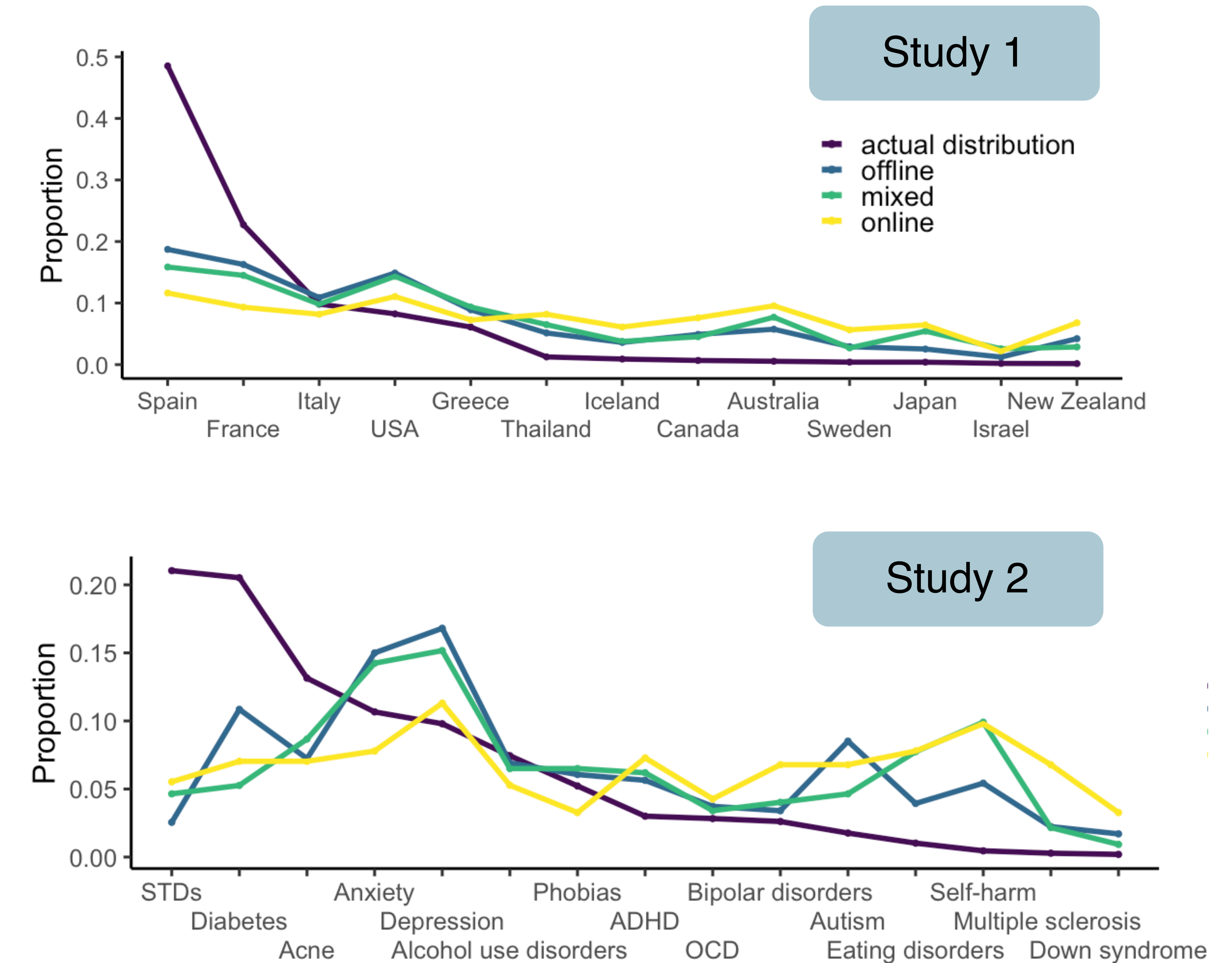
Actual distributions refer to official statistics on the number of travelers[5] and the prevalence of health issues[6,7] in the UK.

Summary and conclusion

Although social media often showcases biased information, people discount information from online contacts (relative to offline contacts) when judging social statistics.

References

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