Outcome Measure	Ambiguous Intentions Hostility Questionnaire (AIHQ)
Population	Adult
Domain	Social Cognition
How to obtain	Available from first author on request
Type of Measure	Self-report:
Time to	5-7 minutes
administer	
Description	The Ambiguous Intentions Questionnaire (AIQ) (Combs, Penn, Wicher, & Waldheter, 2007) was designed to assess differences in attributional style, i.e. the bias that characterises how individuals attribute causes to both positive and negative outcomes and specifically, the extent to which there is a bias to infer hostile intentions underpinning ambiguous events. A bias to perceive hostile intention has been found to characterise a number of populations including those with conduct disorder, social anxiety and aggression.
	teenagers at a mall and you hear them start to laugh") selected to equally represent accidental, ambiguous and intentional events (5 each). The participant is asked to write down the reason for this behaviour and how they would respond. These are both subsequently rated 1-5, as the Hostility and Aggression index respectively. They were also asked to rate the vignette as to 1) whether it was on purpose (1 -6), 2) how angry it would make them feel (1- 5) and 3) how much they would blame the relevant party (1-5). These three ratings are collapsed to yield a "Blame" score. An abbreviated version is often used that comprises only the 5 ambiguous situations. <b>Time to administer: 5-7 minutes</b>
Properties	Inter-rater reliability: Independent ratings of the verbal responses across intentional, ambiguous and accidental scenario types had ICCs of .9199 (Hostility bias) and .9399 (Aggression bias) (Combs et al., 2007).

<ul> <li><u>Internal reliability:</u> The 'Blame' score (an average of the three Likert scales) has alphas of .85 (intentional), .86 (ambiguous) and .84 (accidental) (Combs et al., 2007). An independent study of 104 healthy adults yielded alphas of .85, .47 and .34 for these three measures respectively (Pinkham, Penn, Green, &amp; Harvey, 2016).</li> <li><u>Test-retest reliability:</u> This has been estimated as .57 (Hostility bias), .70 (Aggression bias) and .76 (Blame score) over a 2-4-week period (Pinkham et al., 2016) with a small decrease in scores (effect size 0.16-0.27).</li> </ul>
<u>Construct Validity:</u>
<b>Convergent:</b> Within healthy adults Blame, Hostility and Aggression scores are higher for the Intentional vignettes relative to the ambiguous or accidental vignettes. (Combs et al., 2007). The Blame scores are significantly associated with independent measures of paranoia and hostility, specifically the Paranoia Scale and SCID Paranoia subscale and the Paranoia/Suspiciousness Questionnaire –Hostility subscale. Correlations are strongest for the ambiguous scenarios (r= .2526). (Combs et al., 2007)
<i>Divergent:</i> The AIQ did not correlate with measures of unrelated constructs (Chapman Perceptual Aberration and Magical Ideation Scale).
<u>Discriminant validity:</u> The Hostility and Blame scores of the AIQ discriminate between people with schizophrenia and healthy controls but the Aggression Bias scale does not (Pinkham et al., 2016). People who meditate have lower IAQ scores than those who do not (Campos et al., 2019).
<u>Concurrent Validity</u> : Using high quality informants with mental health experience, the AIQ Blame score was found to be significantly correlated with real world function (the SLOF) in people with schizophrenia. Other scores were not. Nor did any score correlate with financial and communication skills (the UPS A-B) or social skills (the SSPA). (Pinkham et al., 2016).
<u>Normative data</u> : The original paper (Combs et al., 2007) was based on 322 undergraduate students and provides means and standard deviations for all scores for this sample. Pinkham (Pinkham et al., 2016) provides further normative data for 104 healthy adults from the community. Norms for another 60 (30 meditators vs non-meditators) is also available (Campos et

	al., 2019). Based on Pinkham et al (2016), <i>Healthy M (SD)</i> : HB: 1.99 (0.60); AB: 1.83 (0.26); BS: 7.02 (2.31).
Advantages	Discriminates people with schizophrenia from healthy comparison groups and is associated with other measures of paranoia
Disadvantages	Does not predict functional outcomes in people with schizophrenia (not recommended by Pinkham et al 2016 for this reason).

## References

- Campos, D., Modrego-Alarcón, M., López-Del-Hoyo, Y., González-Panzano, M., Van Gordon, W., Shonin, E., . . . García-Campayo, J. (2019). Exploring the Role of Meditation and Dispositional Mindfulness on Social Cognition Domains: A Controlled Study. *Frontiers in Psychology, 10*, 809-809. doi:10.3389/fpsyg.2019.00809
- Combs, D. R., Penn, D. L., Wicher, M., & Waldheter, E. (2007). The Ambiguous Intentions Hostility Questionnaire (AIHQ): a new measure for evaluating hostile social-cognitive biases in paranoia. *Cogn Neuropsychiatry*, *12*(2), 128-143. doi:10.1080/13546800600787854
- Pinkham, A. E., Penn, D. L., Green, M. F., & Harvey, P. D. (2016). Social cognition psychometric evaluation: Results of the initial psychometric study. *Schizophrenia Bulletin*, *42*(2), 494-504.