

Mental wellbeing: the Positive Mindset Index

(Barry, Folkard & Ayliff, 2014)

The Positive Mindset Index (PMI; Barry, Folkard & Ayliff, 2014) uses six items to measure mental positivity: happiness, confidence, being in control, emotional stability, motivation and optimism. These are rated on a 5-point Likert scale, with a neutral midpoint.

The scale is designed for ease of use, both for participant and researcher. For example, there are only six items, all using simple language, which is useful for people in a hurry, with limited reading skills, or impaired ability. Also, the neutral midpoint removes any pressure on participants to commit to either the higher or lower end of an opinion.

This scale shows good internal reliability (Cronbach's alpha = 0.926) and good concurrent validity with the **mental health subscale of the SF-12** (r = .678). Seager et al (2014) found good concurrent validity between the PMI and Paykel's (1974) **Suicidal Ladder** (r = -.539). Phillips et al (2018) found good concurrent validity with PsyCap (an **appealing personality**) (r = .687) and the **Subjective Happiness Scale** (r = .689). Barry et al (2020) found good concurrent validity between the PMI and Rosenberg's (1965) **self-esteem** scale (r = .766).

The PMI has been so far used in 15 peer-reviewed published studies, with a total of around 15,000 participants:

- Male and female patients with uveitis (an eye condition) (N = 200) (Barry, Folkard & Ayliff, 2014)
- Men and women from general population (*N* = 348 women & 170 men) (<u>Seager</u>, <u>Sullivan & Barry</u>, 2014).
- Men and women from general population (N = 217) (Barry, Seager & Brown, 2015)
- Black men & women (*N*=53) and White men & women (*N*=149) (Roper & Barry, 2016)
- Men and women from general population (*N* = 115 men & 232 women) (<u>Liddon</u>, Kingerlee & Barry, 2017).
- Men in the British Isles (N = 2000) (Barry & Daubney, 2017)
- Audit of mentoring scheme (conference presentation) (N = 16) (Doyle & Harney, 2018)
- Men and women, \sim 4% of whom were colour blind (N = 128 men & 291 women) (Barry, Mollan, Burdon, Jenkins and Denniston, 2017)
- Men in the US (N = 5000) (Barry, 2018)
- Disabled men and women in the US (N = 330) (Phillips et al, 2018).



- Men and women in the UK aged over 50 years old (N = 394) (Hadley, Newby & Barry, 2019)
- Men and women from general population (N = 203 men & 52 women)(Barry, Walker, Liddon and Seager, 2020)
- Men and women with disabilities in the US (N = 292) (Fry et al, 2020)
- Male and female teachers in the Philippines (N = 63 men and 135 women) (Fabella, 2023)
- Men in Germany (N = 2002) and men in the UK (N = 2023) (Barry, 2023).

These populations vary by age, race, and ability, though are mostly from either the US or UK so are culturally relatively homogenous.

Structure of the PMI

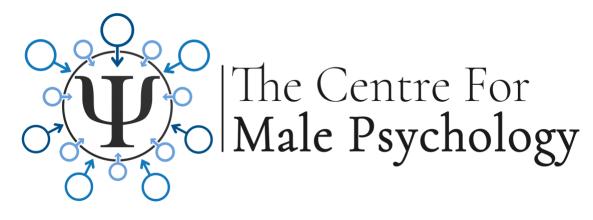
The stimulus question for participants is:

Please select one of the options (e.g. "happy" or "unhappy") for the words in each row, indicating how you are feeling at this moment.

Item 1	Very unhappy	Unhappy	Moderately happy	Нарру	Very happy
Item 2	Very unconfident	Unconfident	Moderately confident	Confident	Very confident
Item 3	Very out of control	Unit of control	Moderately in control	In control	Very in control
Item 4	Very unstable	Unstable	Moderately stable	Stable	Very stable
Item 5	Very unmotivated	II Inmotivated	Moderately motivated	Motivated	Very motivated
Item 6	Very pessimistic	Pessimistic	Moderately optimistic	Optimistic	Very optimistic

Scoring the PMI

The 6 items of the PMI are scored from 1 to 5, thus a maximum total score of 30. Higher scores indicate a more positive mindset. The mean of the 6 scores is the PMI score.



Normative scores in different populations

Sex differences

The mean for men and women tends to be similar. For example, in a study of the relationship between PMI and childhood attachment (Barry et al, 2015), the mean \pm SD PMI for men was 3.2 ± 0.8 , and for women 3.4 ± 0.8 .

Health differences

In a study of people with an eyesight condition called uveitis (Barry et al, 2014), those taking 10 mg or more of the medication *prednisolone* daily, known to have troubling side effects, had significantly lower PMI scores (2.91 + 0.69) than those on a lower dose or not taking this medication (3.27 + 0.84).

People who are born colour blind showed no difference to normal-sighted people on the PMI (Barry et al, 2017).

Fry et al (2020) found that men and women with physical disability scored somewhat below what would be expected for people in the US. Their mean \pm SD was 3.3 ± 0.9 , which although this study did not include able-bodied controlled, is lower compared to able-bodied samples (e.g. mean 3.7 for men in Barry, 2018).

Differences by country and ethnicity

As with many measures of mental state, such as depression, PMI varies by country. In a series of studies that included men only, the highest mean \pm SD PMI scores have been found in the US (3.7 \pm 0.8) (Barry, 2018), then Germany (3.6 \pm 0.8) (Barry, 2023), and then the UK (Barry, 2023) (3.3 \pm 0.9) and again the UK (3.4 \pm 0.7) (Barry & Daubney, 2017).



Roper & Barry (2016) found that the mean (SD) PMI for 53 Black men and women scored similarly to 149 White men and women: 3.4 ± 0.7 versus 3.4 ± 0.7 .

Fabella (2023) found the item weighted mean PMI for men and women in the Philippines was 4.1 and 4.0 respectively.

Differences by age

Studies tend to find that older people have a higher PMI (see discussion in Barry, 2023). For example, in the 4025 men in Barry (2023), the age ranges and mean \pm SD PMI scores were:

 $18-29 (3.1 \pm 0.9)$

 $30-41 (3.3 \pm 0.9)$

 $42-53 (3.4 \pm 0.9)$

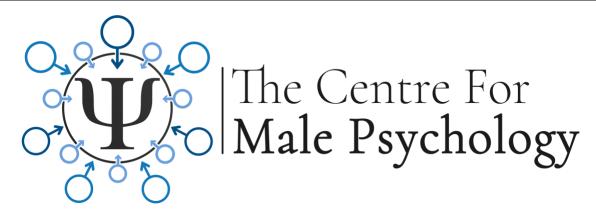
 $54-65 (3.5 \pm 0.8)$

 $66-100 (3.7 \pm 0.7)$

Although the minimum age is 18 in the studies listed above, a rough estimate can be made for younger people based on findings from adults. Using a regression line based on data from Barry (2023), it is estimated that the mean (SD) for adolescent boys would be 3.1 (0.8) (data presented at the BPS Male Psychology Conference, London 2023). This is only an estimate of course, and normative values based on an appropriate sample of adolescents should be used at such time as it becomes available.

Estimates of clinical scoring

As a rough guide, any scores 1 SD below the population mean can be considered potentially in the clinical range. Thus for example, for men in the UK, the latest and largest sample is of 2023 men, with a mean \pm SD PMI of 3.3 ± 0.9 . Based on this, the threshold for clinical scoring for men in the UK is 2.2. Similarly, in the US, based on Barry (2018) where the mean \pm SD PMI was 3.7 ± 0.8 , the threshold for clinical scoring is 2.9. Using the same method, the clinical threshold for women in the UK is 2.6. As stated, these cut-offs are a rough guide.



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