

T-scores explained

Raw and T-scores in personality assessment

- When we assess personality, the best practice is to compare results to a **norm group**. This allows us to determine how extraverted someone is **in comparison to other people** who are like them (according to a norm group of females, males, combined gender, etc)

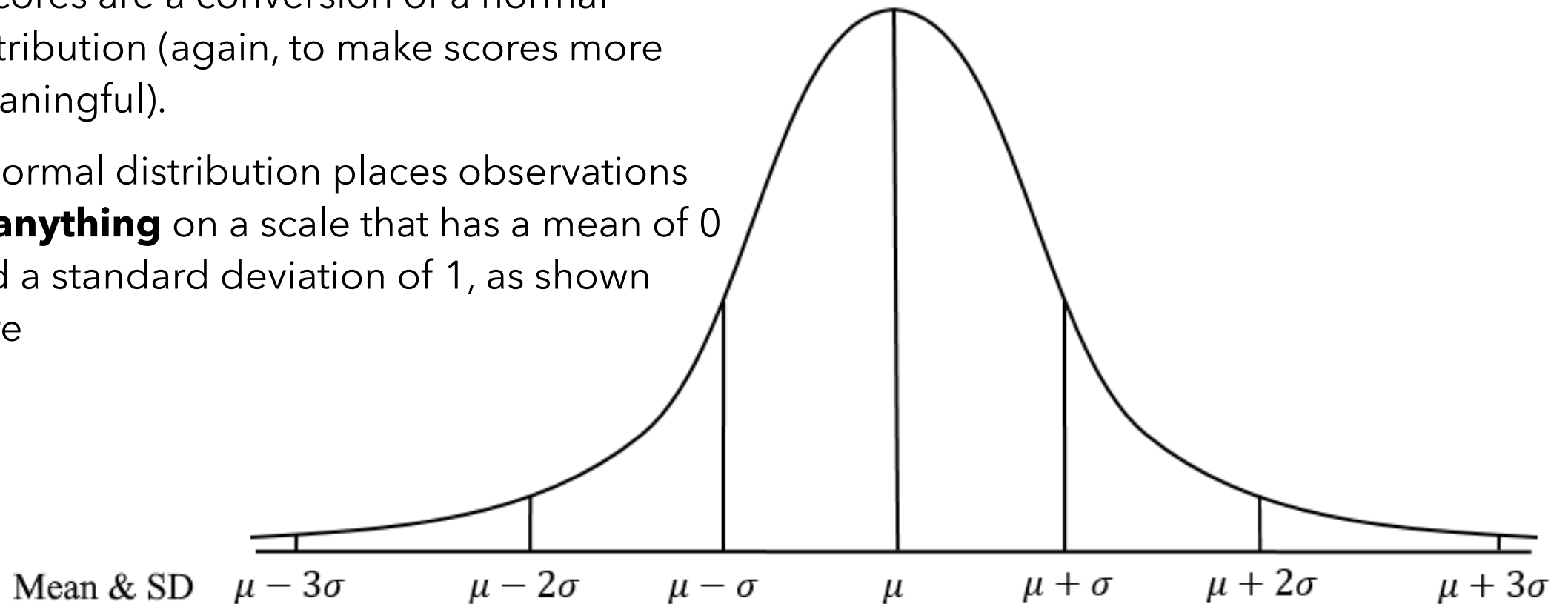
- To be able to make this comparison, the results need to be presented in a meaningful way (psychometrics is often littered with technicalities and complex terminology, so we want to make it simpler!). A t-score is a standardised way that scores can be presented to make them easier to understand.

- With the NEO assessments, for example, you would receive a raw score (the actual score as you reported your responses), and a t-score (the 'transformed', easier to understand score).

T-scores and normal distribution

T-scores are a conversion of a normal distribution (again, to make scores more meaningful).

A normal distribution places observations **of anything** on a scale that has a mean of 0 and a standard deviation of 1, as shown here



T-scores and normal distribution

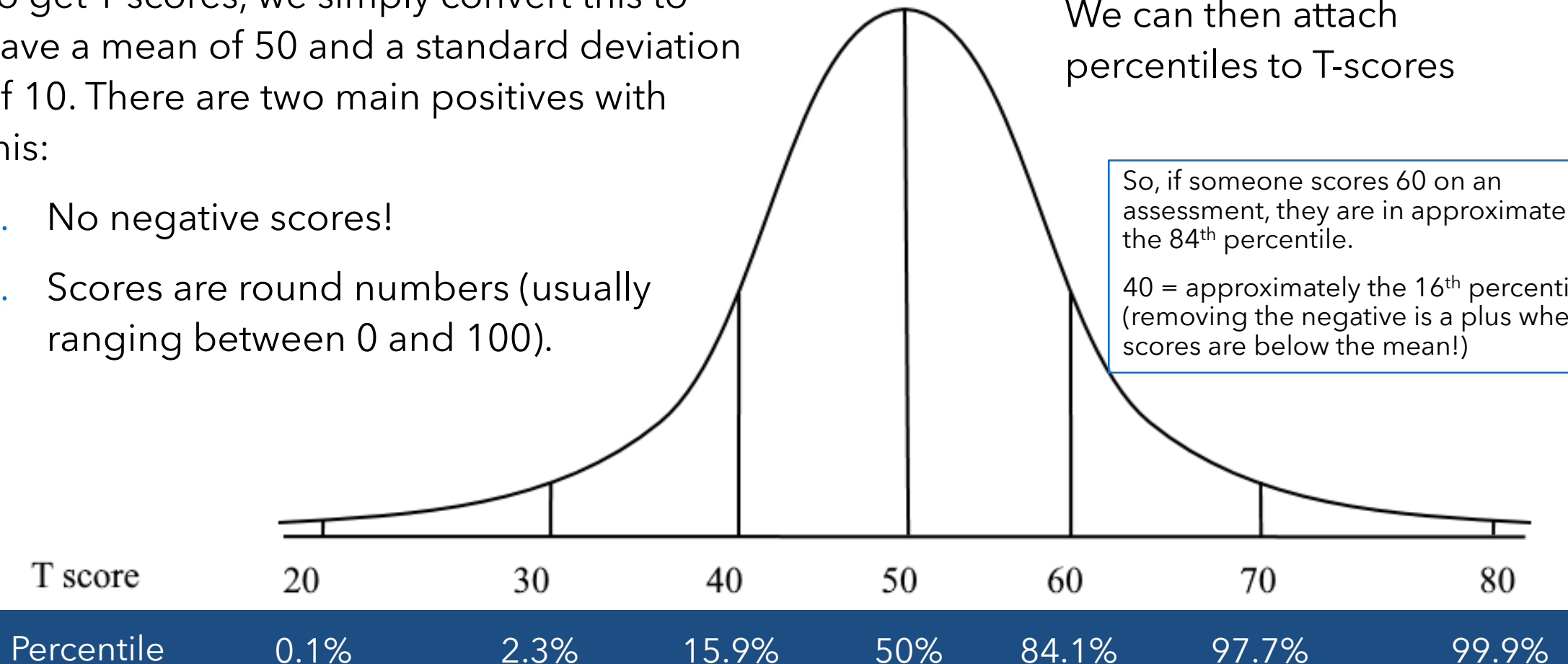
To get T-scores, we simply convert this to have a mean of 50 and a standard deviation of 10. There are two main positives with this:

1. No negative scores!
2. Scores are round numbers (usually ranging between 0 and 100).

We can then attach percentiles to T-scores

So, if someone scores 60 on an assessment, they are in approximately the 84th percentile.

40 = approximately the 16th percentile (removing the negative is a plus when scores are below the mean!)



Raw scores

The scores calculated based on participants responses to each question that makes up each facet

NEO-PI-3 Data Table

Scale	Raw Score	T Score	Range
Factors			
(E) Extraversion	--	44	Low
(C) Conscientiousness	--	68	Very High
(N) Neuroticism	--	47	Average
(O) Openness	--	45	Low
(A) Agreeableness	--	56	High
Extraversion Facets			
(E1) Warmth	18	41	Low
(E2) Gregariousness	12	37	Low
(E3) Assertiveness	20	58	High
(E4) Activity	18	51	Average
(E5) Excitement-Seeking	13	42	Low
(E6) Positive Emotions	19	51	Average

T-scores

Transformation of the raw scores to allow for comparison to a norm group

Range

How t-score relates to the average

There is **no new information** being provided with a t-score – it is simply a conversion or ‘repackaging’ of information that is easier to understand and explain