

The Normal Distribution

Learning objectives

Whilst most people have a certain understanding of what is meant by the normal distribution, here we consider both its mathematical background and how it can be applied in a range of contexts. After studying this unit, you should

- understand the derivation and meaning of the standardised and normal distributions (mean 0 and standard deviation 1)
- be able to transform any normal distribution into the standardised normal distribution
- use normal distribution tables to find probabilities and, inversely, given z values, to find probabilities
- be able to use and apply the normal distribution in a range of contexts.