Relative Risk

Relative risk is how much more likely an event is to happen for one group than for another.

$$\textit{Relative risk for a group} = \frac{\textit{Risk for those in the group}}{\textit{Risk for those not in the group}}$$

Risk

- is the probability of a *negative* event or outcome occurring.
- may be **absolute** or **relative**.

Relative risk

- may be called **relative probability** if the outcome is *not* negative.
- compares two groups but does not say how likely an event is to happen.

Khatia organises two different training courses, Course A and Course B, to help people to learn to type. She wants to compare the two different courses to see which is better. At the end of each course the people are given a skills test.

The table shows the number of participants who passed and failed the skills test for each of the two courses.

	Passed	Failed	Total
Course A	35	15	50
Course B	48	32	80

a) Find the relative risk of failing the skills test having taken Course A compared to Course B

Risk of failing for those in Course A = 15 ÷ 50 = 0.3

Risk of failing for those in Course B = 32 ÷ 80 = 0.4

$$\textit{Risk of failing skills test having taken Course A} = \frac{0.3}{0.4} = 0.75$$

Be careful which way round the figures go for the relative risk formula.

.....0.75.....

(3 marks)

b) Give an interpretation of your answer to part (a)

People who took Course B are 25% more likely to fail than those who took Course A.

Alternatively, you could have said the risk of failing was lower for those taking Course A than Course B.

(3 marks)

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