



# Measuring Happiness in the Workplace Mathematics lesson 5

Learning aim: To determine theoretical probabilities based upon experimental data.



Speaking step 7 – I speak engagingly by using facts and examples to support my points.



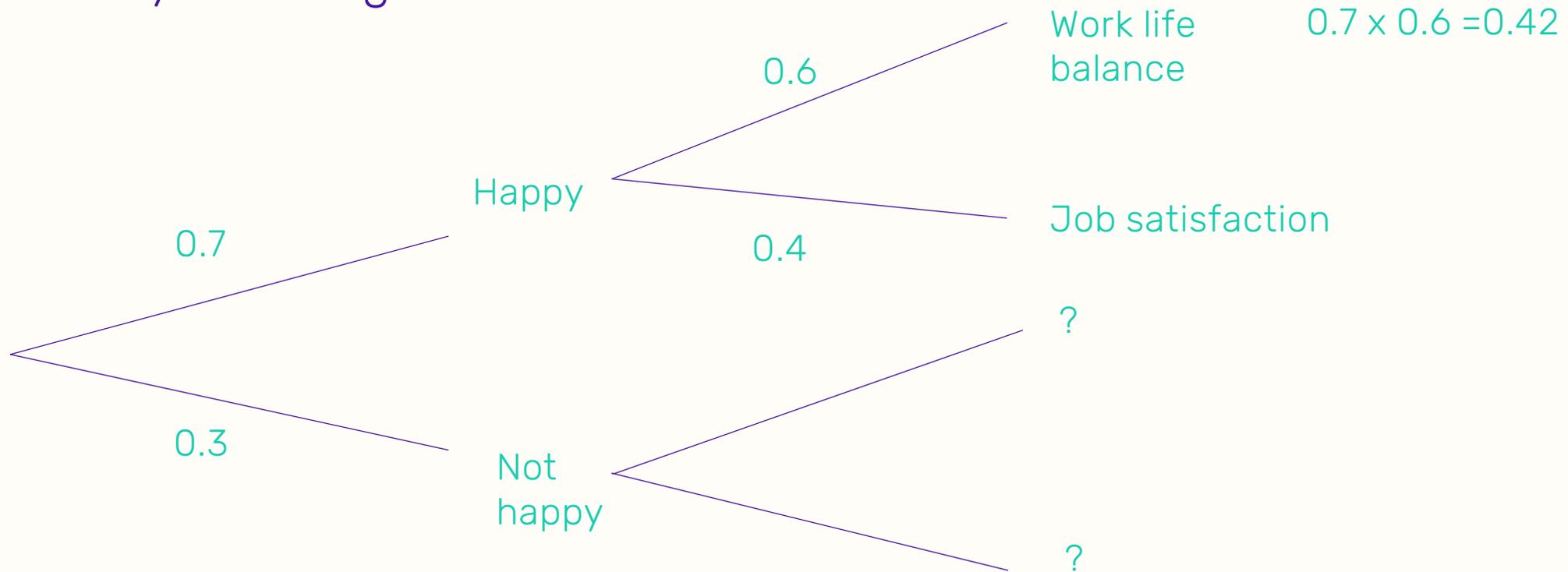
Teamwork step 8 – I contribute to group decision making, encouraging others to contribute.

## Scenario

For the modern business, staff retention is crucial to ensure the continued success of a company. Fatima is the Human Resources Manager at a national bank. She is analysing some of the offices' staff satisfaction and wellbeing data, in preparation for a presentation she will be delivering to bank executives.



# Probability tree diagrams



Example: In the Bristol branch, 70% of employees are happy at work, and 30% are unhappy. Among the happy employees, 60% attribute their happiness to a good work-life balance, while the remaining 40% attribute it to job satisfaction. What is the probability that an employee feels happy, and that this happiness is due to a good work-life balance?

Each branch (Happy/Not Happy) will add to 1. Working along the arm we multiply so 'Happy' and 'work life balance' is  $0.7 \times 0.6$ . Also note there is not enough information to complete the final branch of the tree diagram, but this was not needed to find the solution.

## Discussion

1. What makes a person stay at their current job?
2. If you went into a full-time, paid role now, which of the following would help you to stay in that role - a pay rise, promotion opportunities, job satisfaction, a good work-life balance, opportunities to learn and develop, team morale and/or prioritised wellbeing and care at work?

# Presentation to the bank executives

In the presentation, you will need to include:

- What the purpose of this research was.
- Key data from the probability tree that you think is most impactful.
- Key comparisons of the offices in the UK.
- Conclusions you can draw from the data.
- What you think the company should do next based on the data (for example, conduct another round of research to find out what makes people unhappy at work).

When you deliver the presentation, each member of the group should participate. This could mean each team member presenting back one of the above bullet points.

## Reflection part 1

1 – Write down three things you would like to find out more about from today's lesson. Be ready to share these.

## Reflection part 2

2 – How well did you listen and respond to your peers' contributions today? Rate yourself 1-5.

*1 (I didn't contribute to my teamwork) - 5 (I contributed to teamwork by listening and responding to my peers' contributions)*

3 – Write three statements of encouragement for your peers that you can use when you next work in a team.