Ice Breaker

- Do you think you could guarantee success in doing something by putting in a lot of effort?
- Do you think you could earn salvation?

Uncertainty

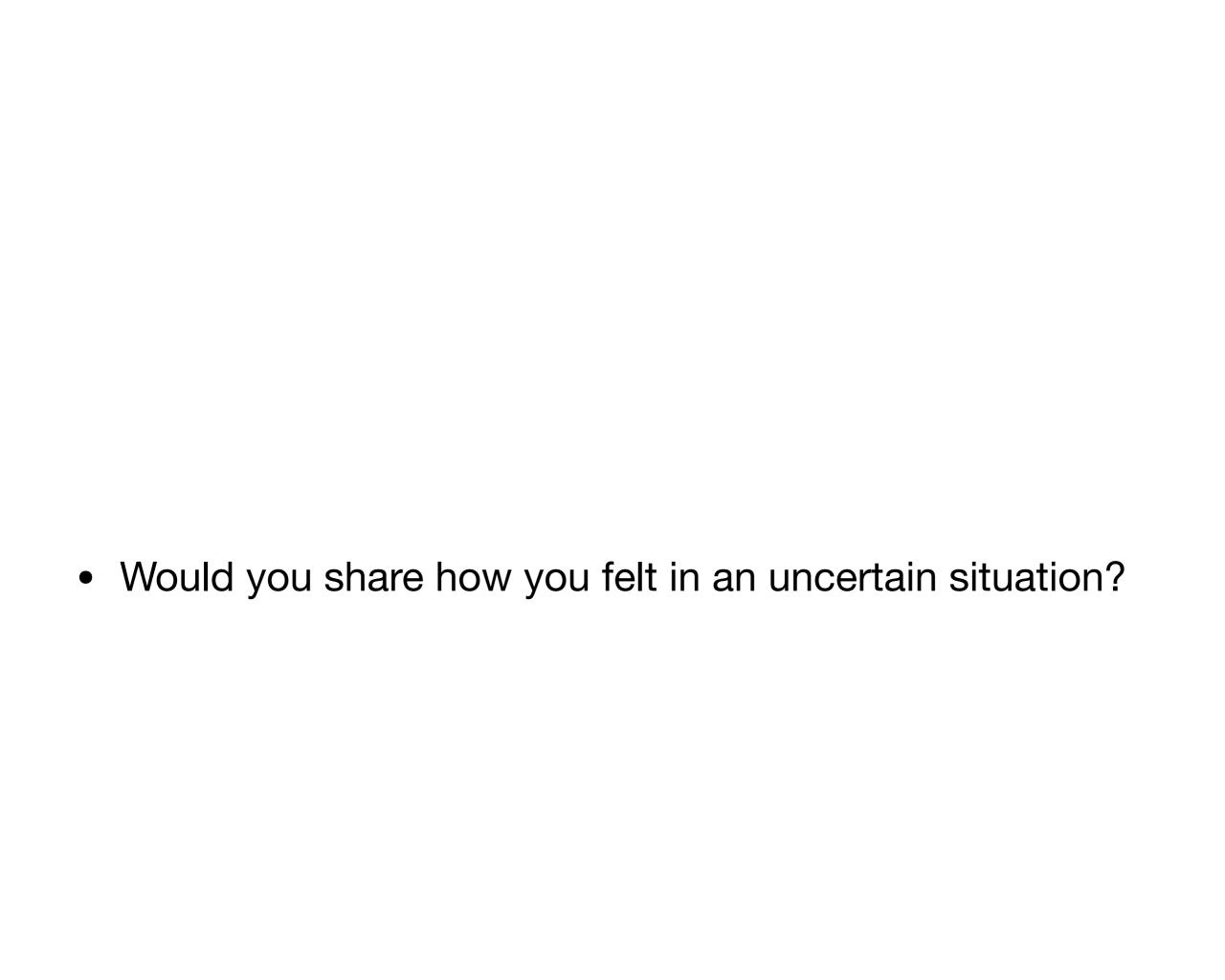
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What is uncertainty?

- It is there when you are not sure about what it is going to happen?
- For example, stuck in traffic on your way to school, you feel that you may not arrive in class on time.
- For example, in a contest, when your opponent is very competitive, you feel uncertain about the outcome.
- For example, in a test, when the questions are hard, you feel uncertain about how you would score.

Uncertainty and emotions

- Uncertainty could arose positive emotions such as motivation to put in more efforts and rely on God more.
- Uncertainty could also cause negative emotions such as causing excessive anxiety.
- Some people are more rational. They learned to reduce emotional reactions by relying on God and decision sciences.



Risk-Loving People

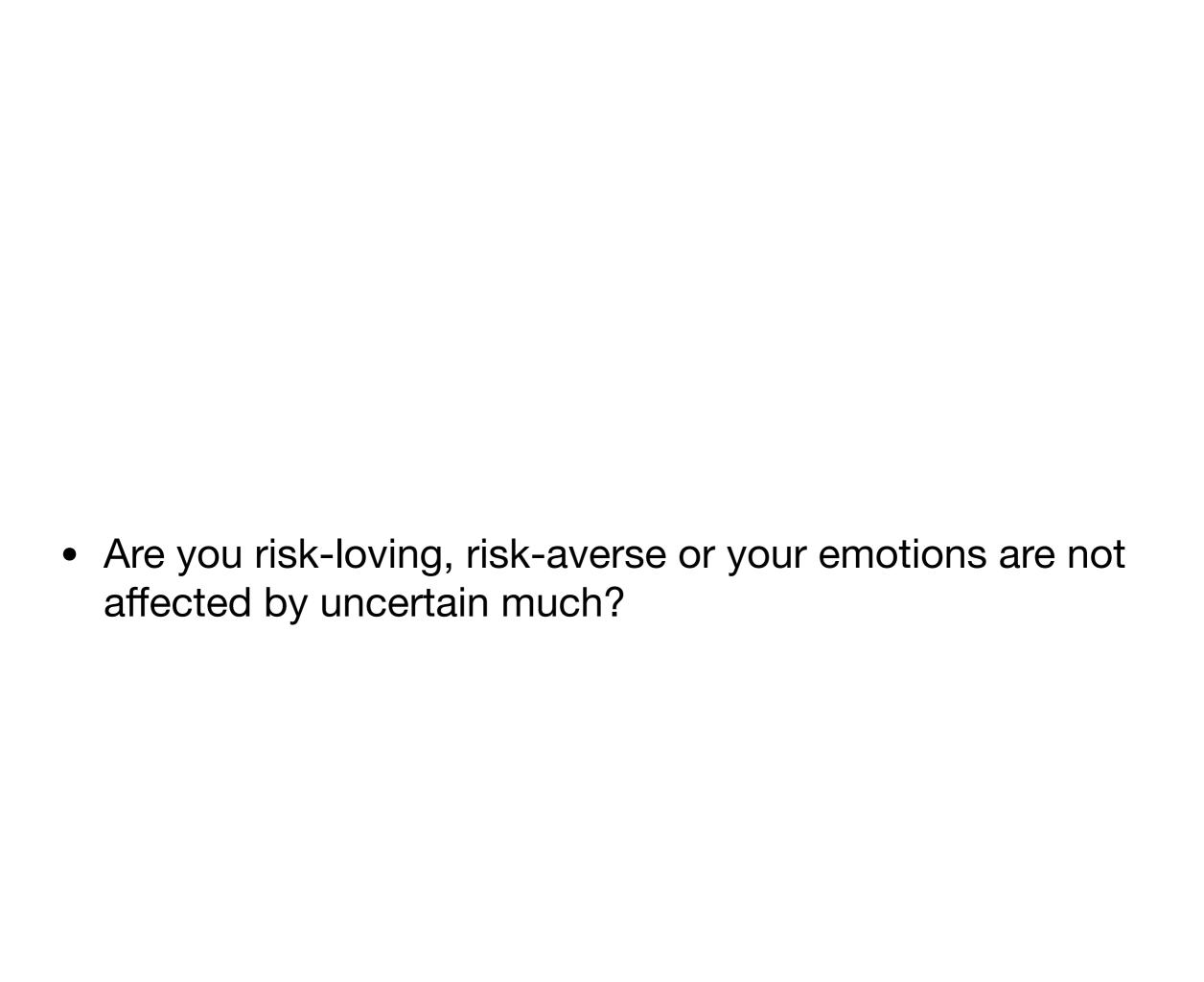
- Some people thrive in uncertainty. For example, entrepreneurs and business men/women etc.
- They are energized by challenges.
- They have a positive attitude.
- They see things as "half full".

Risk Averse People

- Some people prefer things to be more certain. For example, people preferring stable employment.
- They flourish on having a regular schedule and predictive environment.
- They are often more skeptic.
- They tend to see things as "half empty".

Rational People

- Some people try to quantify uncertainty based on what they know.
- They take actions based on a model derived from what they know. A model typically informs me about what is in my control and what is not.
- They take actions based on the model.
- But, they could still get emotional when the confidence of their model is low or when I am not prepared to accept what is not in my control.



Evolution of attitude towards uncertainty

- A person's natural temperament influences how your emotion reacts to uncertainty.
- But, one could try to learn to become more rational.
- However, you need God to root your faith on:
 - God is in control.
 - No matter what happens, God loves me.
 - So that I could rely on God for things I do not have control.

Bible verses about uncertainty

1. Zephaniah 3:17

"The LORD your God in your midst, the Mighty One, will save; He will rejoice over you with gladness, He will quiet you with His love, He will rejoice over you with singing."

2. 1 Corinthians 2:9

"Eye has not seen, nor ear heard, nor have entered into the heart of man the things which God has prepared for those who love Him."

3. Matthew 6:26

"Look at the birds of the air; they do not sow or reap or store away in barns, and yet your heavenly Father feeds them. Are you not much more valuable than they?"

Bible verses about uncertainty

4. Philippians 4:6-7

"Be anxious for nothing, but in everything by prayer and supplication, with thanksgiving, let your requests be made known to God; and the peace of God, which surpasses all understanding, will guard your hearts and minds through Christ Jesus."

5. Proverbs 3:5-6

"Trust in the LORD with all your heart and lean not on your own understanding; in all your ways submit to Him, and He will make your paths straight."

6. 1 Peter 5:6-7

"Humble yourselves, therefore, under God's mighty hand, that He may lift you up in due time. Cast all your anxiety on Him because He cares for you."

Bible verses about uncertainty

7. Psalm 56:3

"When I am afraid, I put my trust in You."

8. Proverbs 16:3

"Commit to the LORD whatever you do, and He will establish your plans."

9. Romans 8:28

"And we know that in all things God works for the good of those who love Him, who have been called according to His purpose."

10. Philippians 1:6

"Be confident of this, that He who began a good work in you will carry it on to completion until the day of Christ Jesus."

When I was young

- I had had a tendency of trying new things, confident about myself being able to handle things happening around me.
- But, I was not prudent. Therefore, I eventually ran into situations that I had difficulties with.
- For example, I got into the Math department as my first choice without understanding how hard it was to graduate in 4 years.
- For example, I moved up fast in my career initially; then, I ran into a project that I almost could not complete.

I became risk averse

- I became risk averse as I matured. But, fear would consume me whenever I run into uncertain situations.
- For example, I would feel very stressful when there is uncertainty about inter personal issues at work.
- For example, I would feel very stressful when my financial condition becomes uncertain.
- For example, I would feel very stressful when there is serious health issue in my family.

I sought help from the Bible and the professionals.

- I learned that:
 - I need to collect as much information as possible about the situation.
 - I need to rationalize the situation by building a model of how people interact and situations evolve.
 - I need to embed uncertainties, using probabilities, into the model. I could then plan according to the model.
 - I need to understand that unlikely situations happen and my model could be mis-specified.
 - But, I understand what I could do and what I do not have control. So,
 I try to do what I can and have faith that God will work everything out.

A simplified example: an uncertain situation

- I would like to get into college A or B.
- But, there is tough competition and I only have limited amount of time to study.
- I am feeling pressure from the uncertainty.
- How can I calm myself down.

A simplified example: modelling

- I would like to get into either college A or college B.
- If my GPA is above 3.0 and my SAT is above 2000:
 - I have 0.7 probability of being admitted into either one.
 - I have 0.5 probability of being admitted into both of them.
 - I have 0.3 probability of being rejected by both of them.

A simplified example: modelling

- If my GPA is above 3.5 and my SAT is above 1800:
 - I have 0.75 probability of being admitted into either one.
 - I have 0.4 probability of being admitted into both of them.
 - I have 0.25 probability of being rejected by both of them.

A simplified example: decision making

- I only have time to either improve my GPA or improve my SAT.
- Therefore, I would choose to spend time on my classes if I am conservative.
- I would choose to spend time on SAT if I am aggressive.
- But, in either case, there is a possibility that I could fail.
 Therefore, I may need to be emotionally prepared for that case by trusting that God would lead me to a better life even if I do not get what I want.

What if I can not accept that I could fail

1 Peter 5: 10 And the God of all grace, who called you to his eternal glory in Christ, after you have suffered a little while, will himself restore you and make you strong, firm and steadfast.

Hebrews 11:11 And by faith even Sarah, who was past childbearing age, was enabled to bear children because she considered him faithful who had made the promise.

Isaiah 40:31 but those who hope in the LORD will renew their strength. They will soar on wings like eagles; they will run and not grow weary, they will walk and not be faint.

Prepare for the worst

- It would be easier to accept what God may have for me if I have made preparation for the worst case.
- It would be easier to accept what God may have for me if there is support from family, church and friends.
- In certain extreme situation, I may need to seek professional help.

Journey with uncertainties

- The world is becoming ever more uncertain. For example: uncertainties in one's career, health and relationships, volatility in the financial market, global competition, political risks and wars etc.
- There is normally more uncertainties as one grows older because we have more responsibilities as we mature.
- What I talked about is a introduction to the taxonomy of uncertainties. You will need to talk about it with your parents, pastors, teacher, friends and counselors.

Application

- Do you think there is any connection between:
 - Salvation by faith, and,
 - Law of large numbers: if one repeats the same experiment many times, the average result would approach the mean of the individual experiment.