
The Science of Sin - by Jack Lewis

A notebook and summary

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1 In the Beginning

1.1 Notes

- 7 deadly sins: pride, gluttony, lust, sloth, greed, envy, wrath
- The sins are not entirely evil, e.g. lust is necessary for the survival of a species.
- Neuroplasticity describes the process by which more or less anything we do regularly and intensively, and sustain over long periods of time, induces physical changes in the very fabric of our brain.
- InGroup: The group of people you identify with and show loyalty, empathy, and trust toward. (max 150 people)
- OutGroup: The group of people perceived as different or outside your social circle, often treated with less empathy or fairness.
- 7 deadly sins = categories of human behavior that leads to dispute and social isolation
- Gods help to enforce codes of conduct (e.g. punish vices)
- The concept of religious coping suggests that blaming god for disasters helps people deal with stress and traumatic events.
- Gods help to organize very large groups of interacting humans under a shared belief system.
- Belief helps us to cooperate with the OutGroup.
- When a belief system places constraint on what other people should and shouldn't think, it goes too far, particularly when used to sanction violence.

1.2 Cues / Questions / Keywords

- What is Neuroplasticity?
- What is InGroup and OutGroup?
- What is the role of god/religion in society?
- In an increasingly post-religious world, where is the incentive to stay on the right side of the seven deadly sins?
- Is science sufficient to inspire us to do the things that keep us happy and healthy?

1.3 Summary

The seven deadly sins (albeit necessary sometimes) are behaviors that lead to conflicts and social isolation. God/religion are concepts that help to maintain order and cooperation between a large group of humans. Religion fostered group membership, but what will fill the gap with the increasing disbelief remains to see.

2 Pride

2.1 Notes

- Pride can be a positive as it helps us conquer our fears and stay motivated in the face of adversaries.
- The problem are the extremes.
- There is a big difference between feeling proud and letting it show to the outside world.
- The self-obsession of pride prevents meaningful relationships with others.
- The sin of pride is formed when a person believes they are superior to all others.
 - =narcissism
- vanity is one of 7 contributing factors
 - it has risen dramatically in recent years (e.g. plastic surgery, social media)
- Narcissists are self-absorbed, belligerently indifferent to other people's opinions or best interests, and fully prepared to manipulate others to get what they want.
- The same brain areas that light up when we feel physical pain also become activated when we feel social pain.
 - Narcissists seem to feel the social pain of rejection more powerfully than other people.
- Neglectful- & Helicopter parents prevent the child from forming a healthy independent sense of self.
 - There is also trouble when feedback is framed in absolute terms that sound much more permanent: "You are such a naughty child"

2.2 Cues / Questions / Keywords

- Why do we need pride?
- What are the consequences of the sin of pride?
- When is pride a sin?
- How to foster narcissism through parenting?
- How does the internet nurture narcissism?

2.3 Summary

Pride in moderate amounts is a virtue otherwise it is a vice. Narcissism prevents meaningful relationships with others through a superiority belief. Parenting has a big impact on the development of narcissism.

3 Gluttony

3.1 Notes

- It's not easy to find concrete boundaries that define where moderation ends and gluttony begins.
- Common psychological motivations for overeating are varied but usually reflect a set-piece response to negative emotions, often generated by body image problems in the first place.
- While greed is probably best thought of as the desire to take more than your fair share of any given commodity, gluttony refers specifically to gulping down food and/or drink in extremely large quantities.
- Gluttony is different from the other deadly sins in that the toll it takes on the body, when practised daily, is usually impossible to conceal from the outside world
- The feeling of satiety arrives only after about 20 - 30min.
- We feel lethargic after a large meal partly because our stomachs are hogging all the blood and partly because hormones are released into the bloodstream.
- The stress hormone cortisol does two things to our brain to facilitate the total demolition of self-control.
 1. it ramps up sensitivity of the reward pathway to the delicious-looking and appetizing aroma of high-calorie foods.
 2. it weakens lines of communication between the reward pathway and brain areas responsible for reining in the urge to consume those scrumptious temptations.
- The quality of the previous night's sleep has a powerful impact on appetite regulation.
- Avoid eating something a few hours before going to bed to improve sleep quality.
- obesity accelerates the rate at which the brain ages
- Obesity gradually alters the hypothalamus, which regulates appetite, increasing the drive to seek out food. This change is irreversible, regardless of exercise or diet.
- The environment plays a significant role for obese families.

3.2 Cues / Questions / Keywords

- psychological motivations
- What is gluttony?
- Why should one eat food slowly?
- What 2 things does the stress hormone cortisol do to facilitate a loss of self-control?
- What has sleep to do with gluttony?
- What does obesity change in the brain?

3.3 Summary

Gluttony brings destruction onto one's body and causes life threatening health conditions. Key players are stress (cortisol) and sleep (quality). Obesity makes irreversible changes to the brain.

4 Lust

4.1 Notes

- We know statistically that a proportion of people in any given community will, find themselves more sexually attracted to children than adults.
- There are significant differences in the white matter tracts of paedophile brains compared to non-paedophile ones.
- white brain matter = information superhighways (150 m/s instead of normal 10 m/s)
- The 'sexual response network' brain areas that govern healthy sexual responses in the rest of us seem to be hyperactive in the paedophile, even at rest.
- The physiological component of female sexual arousal may be a reflex designed to protect the vaginal canal from damage.
- During the fertile phase of the cycle, the attractiveness ratings the women gave for more masculine-looking faces, bodies and deeper-sounding voices increased slightly.
- On the other hand, during the non-fertile weeks of the menstrual cycle, the attractiveness ratings for the more feminine male faces, bodies and voices increased slightly.
- Despite being tightly interwoven, the three systems of lust, romantic love and long-term commitment can nonetheless operate relatively independently.
 - durations: lust:minutes, romantic love: 8-18 months, long-term commitment: years
- The sexual arousal one feels may be involuntary and beyond ones control. Choosing to act on that sexual arousal is another matter entirely.
- it is suspected that a higher level of dopamin increases the sex drive
- Excessive use of pornography is impacting on healthy sexual behaviours.
- Once loyalty is betrayed and trust is broken, it can never really, truly, be fully recovered.

4.2 Cues / Questions / Keywords

- What is white brain matter?
- How does the brain of a paedophile differ from a normal one?
- How does the attractiveness ratings of men change in the different menstrual cycles?
- lust, romantic love and long-term commitment

4.3 Summary

Lust can be influenced to a large degree by the body but choosing to act on these impulses is another matter entirely. Lust is temporary and one should strive for long term relationships. Pornography can destroy relationships and encourage bad sexual behavior.

5 Sloth

5.1 Notes

- The seemingly pragmatic approach of conserving energy wherever possible is not only less satisfying but, can even be dire news for our health
- If we don't take regular exercise, our health rapidly declines.
- People who don't rest are prone to run themselves ragged, leaving their bodies no alternative than to force a complete shutdown to make the necessary repairs.
- Sloth can even be virtuous when the promise of future sloth incentivises us to work harder right now
- long-term unemployment can actually have a negative impact on a personality trait (conscientiousness)
- Brain circuitry that is used infrequently, or not particularly intensively, falls into relative disrepair.
- Sloth: the opportunity to do something productive must have been shirked willingly, under circumstances where not bothering was a choice freely made.
- It may not be the most destructive form of antisocial behaviour, but sloth is a sure-fire way to fall out of favour with the InGroup and find yourself left out in the cold.
- While there's nothing wrong with using the digital tools of entertainment in moderation, there are serious potential negative impacts of having so much spare time used up in these sedentary pursuits.

5.2 Cues / Questions / Keywords

- When can sloth be virtuous?
- How does long-term unemployment impact our personality?

5.3 Summary