

# Self-Serving Bias

Description: The Self-serving bias is people's tendency to attribute positive events to their own character but attribute negative events to external factors. it's a common type of cognitive bias that has been extensively studied in social psychology.

Evidence: Johnson et al (1964)

Aim: To investigate the effect of pupils' learning on teachers self-serving bias.

Method: participants were psychology students, they taught two children how to multiply numbers by 10 and 20. teaching was done via a one-way intercom, after each phase, worksheets were made available to participants to assess children's learning progress.

Pupil A: gave all correct answers on both sheets.  
Pupil B: did poorly, poorly on the first sheet, did better on second sheet.

Results: participants attributed pupil B's improved performance to their abilities as a teacher. Participants attributed pupil B's failure to the pupil's lack of ability.

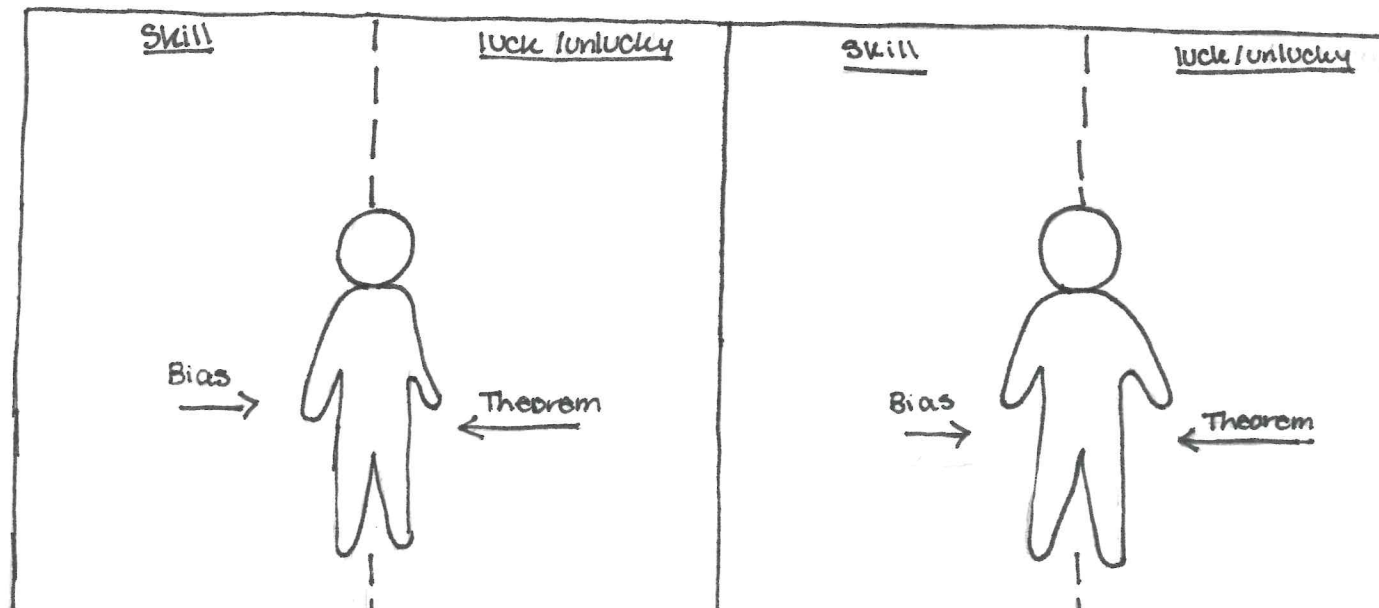
Conclusion: when attributing pupils' learning progress, teachers demonstrated self-serving bias to enhance and protect the image of their own ability.

Example: internal  
 Positive event: you get an A for an essay and you attribute it to your own awesomeness.

Example: external  
 you get a C on an essay and you attribute it to your teacher for not explaining exactly what they want.

## Tips for self-serving bias

- Mindful awareness helps. when you learn about common cognitive biases you can start to notice yourself doing them, and self-correct.
- self-compassion is an extremely useful skill for reducing defensiveness and increasing your self-improvement motivation.



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Conclusion: Students processing feedback in non-native English likely had a greater self-serving bias because they attributed their failure to the language gap, not to their own short comings. This study shows how students defensiveness and demotivation due to criticisms can be minimized when feedback is given in the native language.

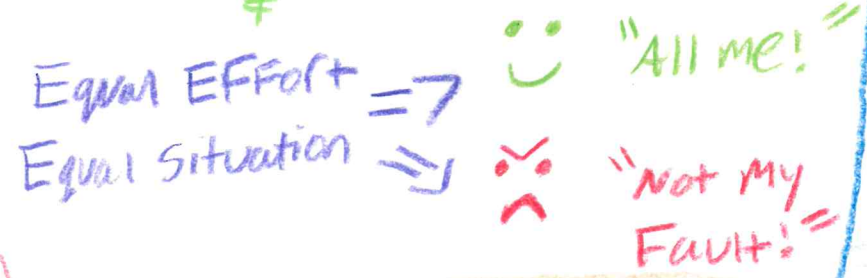
Lachlan Paige

How to avoid it: Understand better and how to recognize self-serving bias, value failure as a learning opportunity and take accountability, Find ways to credit others for their success.

# SELF-SERVING

"The best way to succeed is double your failure rate"  
- Bill Gates

## Bias



Definition: Self-serving bias is people's tendency to attribute positive events to their own character but negative events to external factors.

Examples: a student does well on a test and attributes it to their good work ethic. A student does poorly on a test and attributes it to the teacher failing to educate them.

- Athletes win a game and attribute it to crisp practices and good work ethic, they lose a game and blame it on the refs.

Van Hugten et. al (2018)

Aim: To investigate the best way to communicate feedback to non-native English students in a school activity.

Method: Researchers observed and measured how 120 Dutch students processed feedback in English and processed feedback in their native language.

Findings: Students who process feedback in non-native English have a greater self-serving bias than students who process feedback in their native Dutch.

Conclusion - ✖ ✖ ✖

# Optimism Bias

Anthony Vu P.6

## Definition:

A cognitive bias that causes a person to believe that they are at a lesser risk of experiencing a negative event compared to others.

## Examples:

Some believe they won't get cancer, or other sicknesses & health issues; therefore, they don't get regular health checks, smoke, or don't get flu-shots.

Many people believe that they will never get in a car accident; therefore, some people don't wear seatbelts, or drive recklessly.

## Tips to avoid this bias:

1. Recognize the cognitive bias: we are not objective.
2. Set realistic goals: Fit your reasoning to suit your goals
3. Think about both the positives and negatives: there's always pros and cons to everything.

## Additional Info:

Optimism bias isn't all that bad; it can be helpful too: it can have positive effects on one's future when envisioning the future.

## Study:

Am J Health Behav. 2016

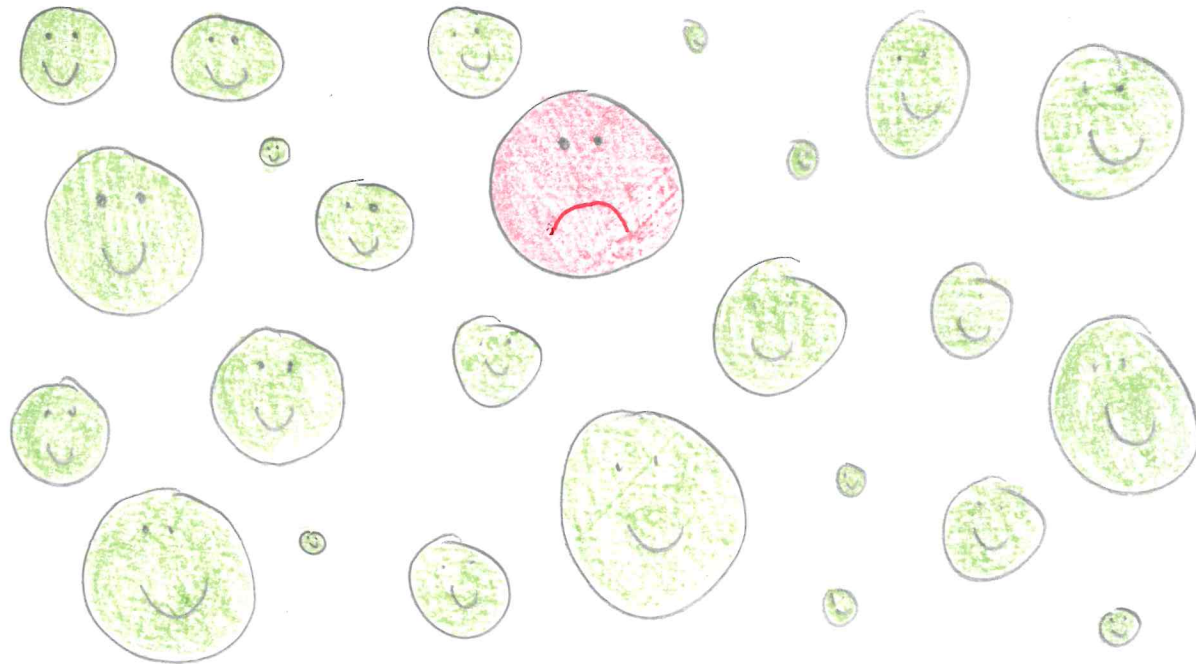
**Aim:** Explain why adolescents smoke cigarettes despite knowing all of its risks.

**Methods:** 6 measurements over 3 years of 395 adolescents (avg. age of 14) who rated their chances of occurrence of 19 short & long-term health risks, social risks, addiction and benefits related to cigarette smoking for self and comparable others.

**Findings:** The bias was consistently found for "addiction" or being addicted, but not the others.

**Conclusions:** Optimism Bias for addiction is prevalent in adolescents that smoke.

## Symbol:



# COGNITIVE DISSONANCE

The mental conflict that occurs when beliefs are contradicted by new info. The tension it causes leads the person to use a defense including rejecting, explaining away, or avoiding the new info

## Study

Festinger et al (1956)

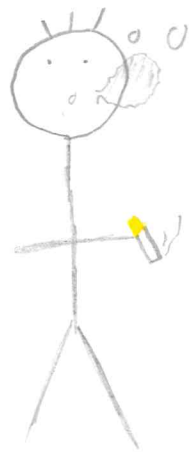
Aim: Investigate what will happen when an individual who is committed to a belief is introduced to contradictory evidence

Method: Studied a cult that believed the world would end on Dec 20, 1954 and what happened when they were wrong

Findings + Conclusion: Deeply committed members doubled-down and re-interpreted the evidence to show they were right the whole time. When people find evidence that contradicts their beliefs they tend to reinterpret the evidence...

## Example

A smoker who knows smoking causes cancer is in a state of dissonance. They may make excuses to avoid giving it up.



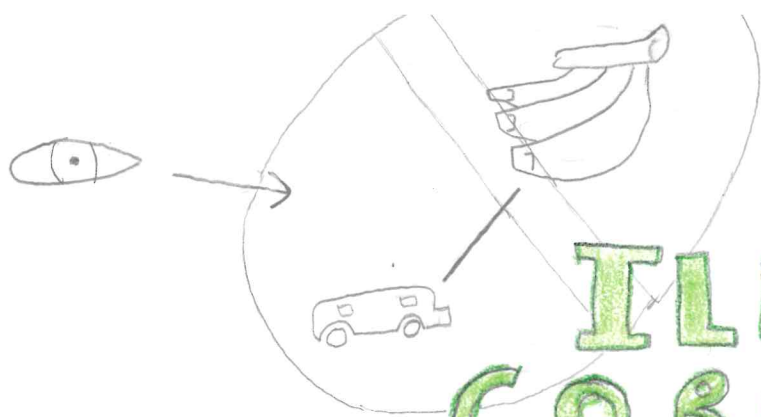
Only super heavy smokers get cancer. I don't smoke that much, I'll be fine

Blue is Bad



## Tips

- Recognize feelings of dissonance and remind yourself to view the situation impartially
- Recognize usual justifications and rationalizations so you can avoid them in the future



# ILLUSORY CORRELATION

The phenomenon of perceiving a relationship between variables even when no such relationship exists

## How To Avoid:

- don't judge based on looks/appearance
- treat every experience with a person/thing as its own and separate from past experiences.

## Study: Sherif (1935)

Aim: To determine the affect of stereotypes on a persons judgement.

## Method:

- a mimeographed sheet with the names of 16 authors in alphabetical order was shown to subjects who were asked to place a figure by each to show their order of preference.
- one month later, the subjects were shown 16 mimeograph slips with short passages, under each was placed one of the names of the 16 authors, even though they were all written by one author.

## Findings:

- the original order of preference greatly impacted the merit given to each author by each subject.
- average correlation for the Harvard group was .45 in the first experiment
- in the second experiment the correlation for men was .45, and for women it was .50

## Conclusion:

Prestige-suggestion plays a considerable role in people's judgement.

## Examples:

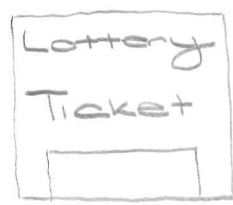
- stereotypes
- Blind trust in authority
- superstitions
- Invalid Conclusions

# Examples:

- not wearing a seat belt (believe they're less likely to be in an accident)
- skipping yearly physical / flu (believe they're less likely to get sick)
- miss adding \$ to emergency savings (believe they won't need extra \$)

- More examples...
- buying lots of lottery tickets
  - not putting on sunscreen on a sunny day

Taylor Lockrell H. 7



# OPTIMISM BIAS

a cognitive bias that causes a person to believe that they're at a lesser risk of experiencing a negative event compared to others

# Added Info:

- can lead to poor decision making & disastrous results
- Factors that make the optimism bias more likely to occur:
  - infrequent events
- Factors that make the optimism bias less likely to occur:
  - being depressed or anxious
  - having already experienced certain events

AIM = to study the affect of optimistic bias on birds

Study: Metheesen et. al (2008)

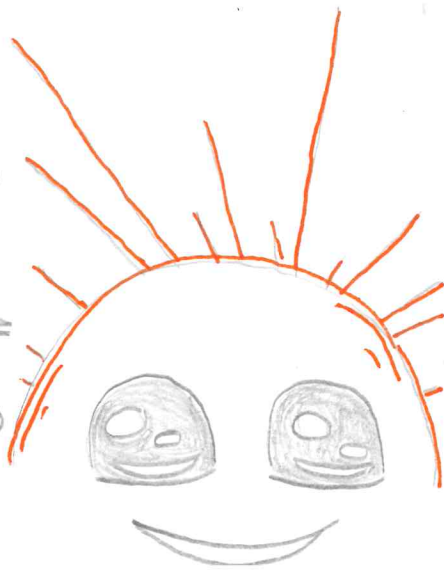
# FINDINGS:

- a large percentage of birds pressed the lever for immediate reward
- birds in small cages without water baths and toys did not demonstrate optimistic tendencies

METHOD: European starlings were taught to press a red lever when they heard a 2 sec. tone to receive a reward & a green lever when they heard a 10 sec. tone for a delayed reward. Then, they heard a medium tone and the birds were motivated to press correct levers (during 2 sec. & 10 sec. tones) or they wouldn't get a reward at all

# CONCLUSIONS:

- birds showed bias to immediate reward showing they expected a positive outcome without reason to do so



# Illusory Correlation

The assumption that there is a correlation between two variables when there actually is not.

This bias is extremely relevant to the issue of minority groups and crime. If one member of a minority group commits a crime, it might lead to correlating that minority group to that act, even if this is technically incorrect. This would severely affect that people would interact with this minority group.

Hamilton et al

Aim: To observe illusory correlation made by individuals processing information.

Method: Gave participants 18 good statements and 8 bad statements about some group A, and 9 good statements and 4 bad statements about Group B

Results: Group A was rated more favorably than Group B. People overestimated the amount of bad statements about Group B, despite the ratio of statements being the same.

Conclusion: Despite Ratios of statements being the exact same, Group B was perceived more negatively due to illusory correlation.

# Optimism Bias

## Definition:

The bias makes people believe that they are less likely to suffer from misfortune and more likely to attain success than reality would suggest.

## Evidence:

Love et al (2015)

Aim: Evaluate extent of bias on population

Method: ASKED NFL fans to predict how many games teams they liked and disliked would win in 2015 season.

Findings: Fans like ESPN reporters assigned to cover a team were overly optimistic about their teams prospects. Opposite for teams they disliked.

Conclusion: Optimism may flourish because year-to-year team results are marked by auto correlation and regression to the graph mean.  
(ie: good teams stay good, bad teams improve)

## Examples:

- sportsfans
- crazy stunts/parcours

## Tips to avoid the bias:

- Facts
- Stats

"positivity may be contagious even in situations where there are only 50 many winners!"



# OVERCONFIDENCE BIAS

The tendency people have to be more confident in their own abilities.

Auditions

Sports

Studying

Campaigning



Arun + Sinha

**Aim:** Explore the existence of overconfidence bias among investors while taking investment decisions.

**Method:** Gave a questionnaire to 100 investors, 84% male and 16% female, about their knowledge about market, past performances, ability, skills and view about future investment plans and stock markets.

**Findings:** The investors were overconfident about their knowledge, ability to pick stocks, holding of stocks, optimism, control over portfolio, and other factors. They take credit for their successes, assume to have full control over their portfolio, and are quite optimistic about stock market.

# Jones & Harris (1967)

Aim: To conclude a perceiver's inferences on one's actions and if they are influenced situationally.

Method: Subjects read pro and anti essays revolving around Fidel Castro and were asked to make the pro-Castro tones of each writer

Findings: Subjects were unable to properly see the influence of the situational constraints placed on the writers.

conclusions: Test subjects provided more internal attributions towards the writers.

## Quote:

"When we do things, we always have a good reason. It's other people we see as defective" (Psychology Today).

# Fundamental Attribution ERROR



The concept that people have a tendency to overemphasize personal characteristics rather than situational characteristics when analyzing one's behavior. It has been summarized as "the tendency to believe that what people do reflects who they are".

## Examples:

This bias can impact perspective in the sense that one may be less empathetic in blaming one's internal characteristics when analyzing the circumstances of a situation.

This also may affect one's patience when dealing with external situations, but thinking of one's internal characteristics upon reflection.

## Symbol



Explanation: Fundamental Attribution causes those to view the situation in an emotionally magnified lens.

# DEFINITION

The feeling of discomfort that occurs when your beliefs and ideology contradict your behavior or new information presented to you that challenges your view.

# FESTINGER & CARLSMITH (1959)

**Aim:** Explain how individuals evaluate their opinion by searching for outside images in order to compare themselves to others.

**Method:** 71 male students asked to complete monotonous tasks that were boring/nonsensical. Half were given an introduction by a cheerful instructor.

**Findings:** After being interviewed, subjects were given money and ranked their experience. Those that were paid \$1 were forced to rationalize their own judgments, while those paid \$20 gave a much lower ranking.

**Conclusion:** When persuaded to lie without given justification, people will perform a task by convincing themselves of the falsehood, rather than lie.

**COGNITIVE  
DISSONANCE**



# EXAMPLES

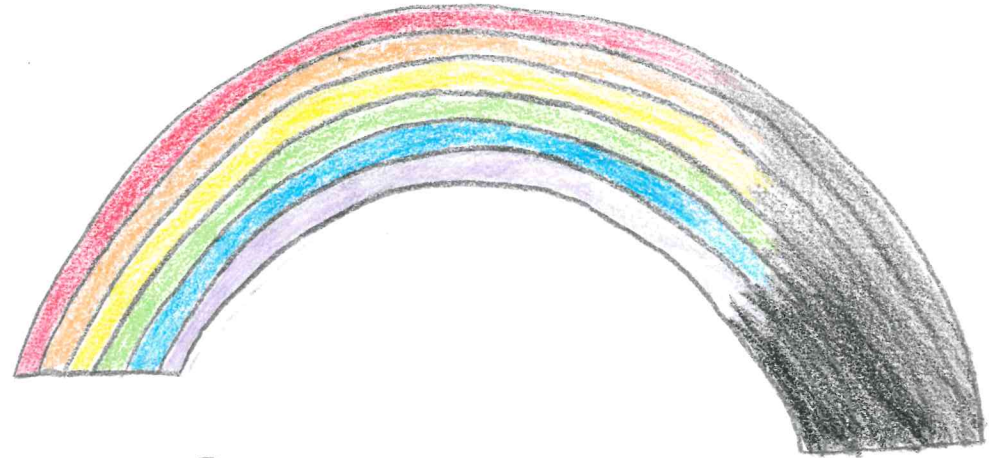
"explain it away"

- Knowing that smoking is harmful  
↳ still electing to smoke
- Liking someone your friends dislike  
↳ still choosing to spend time with them
- Caring for the environment  
↳ driving a gas-guzzling truck
- Cult that was totally convinced aliens were coming to destroy earth  
↳ when it didn't happen, claim aliens changed their mind

# Optimism Bias

Libby Farah

**Definition:** A bias that leads us to believe we are less likely to suffer from misfortune and more likely to obtain success than reality would suggest.



## Examples

- Poor decision making  
ex: not wearing seatbelt, not wearing sunscreen (believe less likely to get burnt/skin cancer)
- People tend to think they're less likely to be influenced by infrequent events. ex: floods, hurricanes, etc.
- Can be a self-fulfilling prophecy  
People who believe they will be successful, are more likely to actually be successful

DeJoy 1989

**Aim:** To investigate if people are unrealistically optimistic when judging their driving competency and accident risk

**Method:** - College age drivers compared risk of being involved in a variety of traffic accidents relative to their peers.

- They rated accidents along a number of dimensions being related to optimism.
- Provided global estimates of their driving safety, skill, and accident likelihood.

**Findings:** - An optimism increase those with more driving experience. The more experienced considered human factors to be more important in the causes of accidents.

- Perceived control was a strong predictor of optimism

**Conclusion:** Optimism arises because people overestimate the degree of control they have over events.

# Overconfidence BIAS

the tendency to have a larger amount of confidence when completing a task

## examples:

Driving  
asking for a raise  
are casting the stock  
market  
under studying for a test

93% of U.S. students  
estimated to be "Above  
Average" Drivers

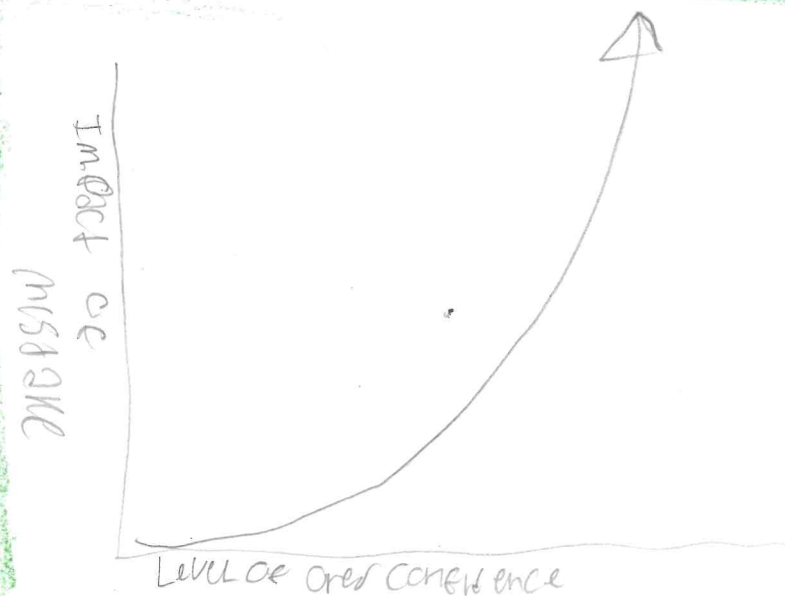
## Davies et Al Port (1979)

Aim: to investigate the effect  
overconfidence can have in  
Humans

Methods: Asks random people to answer  
questions relative to numbers within  
a certain margin

Findings: found that participants' scores  
lower when they had higher  
confidence levels

Conclusion: People who are over confident  
tend to call more than  
people who are more "level  
headed"

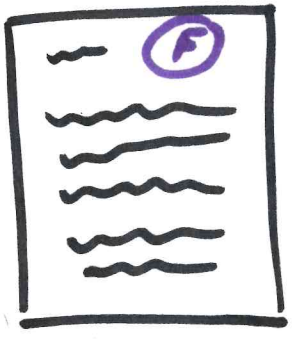


Jennifer B.

# OVERCONFIDENCE *bias* OVERCONFIDENCE

THE TENDENCY PEOPLE HAVE TO BE MORE CONFIDENT IN THEIR OWN ABILITIES SUCH AS DRIVING, TEACHING, OR SPELLING THAN IS OBJECTIVELY REASONABLE. LEADS TO UNETHICAL ACTIONS AND DANGEROUS ASSUMPTIONS

## GENDER OVERCONFIDENCE IN COMMON STOCK INVESTMENT (Brad M Barber + Terrance Odenn)



OXFORD STUDY

**AIM:** to see if overconfidence is more relevant in boys and girls when involving financial situations and to find out what extent people will take actions to.

**METHOD:** - partitioning investors on genders  
- using data for over 35,000 household from a large discount brokerage, analyzed the common stock investments of men + women from 1991-1997.

**FINDINGS:** - men trade more excessively than women  
- men trade 45% more than women  
- trading reduces men's net returns by 2.65 percentage points a year as opposed to 1.72 percentage points for women

**CONCLUSION:** - men are overconfident about their abilities, knowledge, and their future prospects  
- often know that overconfident investors - who believe that their own knowledge is greater than the

"Overconfidence will drown you in the sea of reality."  
- Norain

### TIPS

1. challenge your beliefs
2. reflect on your mistakes
3. manage your time
4. slow down
5. work to be more competent

### EXAMPLES

- a person believing they have a photographic memory
- not studying for a test and failing due to believing they would do well no matter what

# Optimism Bias

A cognitive bias that causes a person to believe that they are at lesser risk of experiencing a negative event compared to others

seatbelts

terminal diseases



sunscreen

Findings: A majority of patients assumed that experimental drugs would control their cancer and would experience benefits rather than complications  
conclusions: Researchers suggested that improving the consent process for oncology studies require more than addressing deficits in understanding

cancer patients

Aim: To study unrealistic optimism when prospective participants are presented with risks and benefits of participating in a clinical trial  
Method: 70 patients enrolled in several early phase cancer trials were surveyed and were asked about their expectations of their respective trials

Jansen et al  
(2011)