

Aggression & Attraction

Aggression

DEFINITIONS

- What is 'aggressive' is partly shaped by societal and cultural norms.
- behaviour that results in personal injury or destruction of property (Bandura, 1973);
- behaviour intended to harm another of the same species (Scherer, Abeles & Fischer, 1975);
- behaviour directed towards the goal of harming or injuring another living being who is motivated to avoid such treatment (Baron, 1977);
- the intentional infliction of some form of harm on others (Baron & Byrne, 2000);
- behaviour directed towards another individual carried out with the proximate (immediate) intent to cause harm (Anderson & Huesmann, 2003).

Although the problem of definition is not fully resolved, researchers have been ready to operationalise aggression - they have developed an **operational definition**

- punching an inflated plastic doll (Bandura, Ross & Ross, 1963);
- pushing a button that is supposed to deliver an electric shock to someone else (Buss, 1961);
- pencil-and-paper ratings by teachers and classmates of a child's level of aggressiveness (Eron, 1982);
- written self-report by institutionalized teenage boys about their prior aggressive behaviour (Leyens, Camino, Parke & Berkowitz, 1975);
- a verbal expression of willingness to use violence in an experimental laboratory setting (Geen, 1978).

WAYS OF EXPRESSION AGGRESSIVE BEHAVIOUR

- ❑ Physically
- ❑ Verbally
- ❑ Emotional



TYPES OF AGGRESSION

- ❑ **Instrumental aggression** (proactive) is rational and calculated

Aggression is used by the individual in order to maximize personal gains.

“Cold,” premeditated, calculated harmful behavior that is a means to some practical or material



TYPES OF AGGRESSION

- ❑ **Emotional (reactive) aggression** is impulsive (also called hostile aggression) “hot,” angry behavior motivated by a desire to harm someone.

Aggression is driven by feelings (e.g., anger), often in the absence of a



TYPES OF AGGRESSION

- ❑ **SANCTIONED VERSUS NONSANCTIONED AGGRESSION**
- Every society classifies aggression into its own socially acceptable and unacceptable categories.
- Socially sanctioned aggression, depends on culture, and it might include rough play, hunting, police actions, war.
- Socially prohibited aggression in most cultures includes criminal assault, homicide, infanticide, child abuse, domestic violence, civil disturbance, and terrorism.

Where aggression comes from?

Combination of

- biological factors like genetic, neurological, biochemical influences,
- our experiences, and
- environment.

GENETIC FACTOR

- **Twin Studies:** Concordance rates for monozygotic twins is higher than dizygotic as regards aggressive behavior.
- **Chromosomal influence:** More researchers concentrated on XYY syndrome (tall, below average IQ).

NEUROLOGICAL

- ❑ **SEROTONIN:** Low serotonergic function are more common in impulsive aggression.
- These findings have led to simplistic conclusion that serotonin is an aggression damper.
- ❑ **NOREPINEPHRINE AND EPINEPHRINE:** stimulates aggressive behaviour.

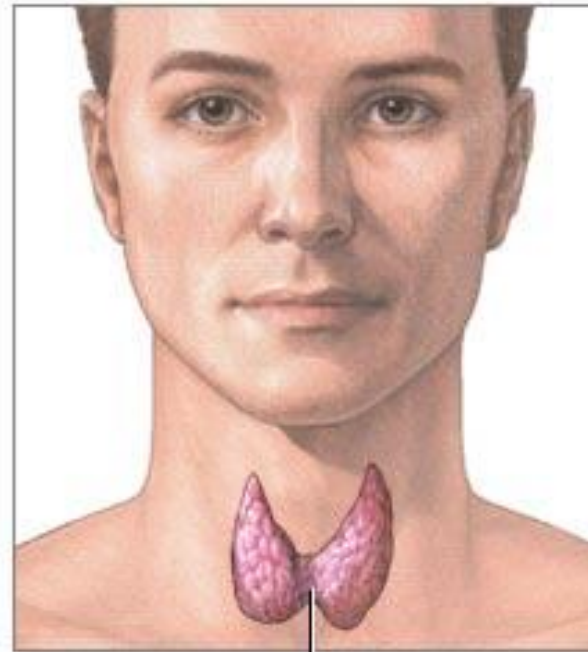
BIOCHEMICAL

- ❑ **TESTOSTERONE:** Rough correlations are found between testosterone levels and aggression, high testosterone is probably more predictive of dominance seeking and dominance winning than of violence.
- Finally, testosterone hardly acts in isolation. We are just beginning to uncover neurochemical interactions that help to explain the role of this hormone in inappropriate aggression.
- ❑ **CORTISOL:** Chronically low salivary cortisol levels are associated with disruptive, aggressive behavior in boys.
- Decreased cortisol levels have also been reported in adolescent girls with conduct disorder.

● Yet not all findings are consistent with this

BIOCHEMICAL

- **Estrogen** decreases aggression.
- **Thyroid hormones (related to thyroid gland):** increase aggression.



Thyroid

ENVIRONMENTAL

- **Air pollution:** noxious odors, fumes, cigarette smoke produce irritability and aggression. Up to a certain limit, when the odor becomes foul the aggression tends to decrease to escape from the unpleasant environment.
- **Noise:** Exposure to loud irritating voice may increase aggression.
- **Crowding:** over crowding may increase aggression.
- **Heat:** increased temperature ($>32^{\circ}\text{C}$) facilitate aggression.

ENVIRONMENTAL



- **Traffic Jam!!!!**

Lack of time, deadline pressing.

Demographics of Aggression

- **Age.** Although most people become less aggressive over time, a small subset of people become *more aggressive over time*.
- *The most dangerous years for this small subset of individuals (and for society) are late adolescence and early adulthood. This is because aggressive acts become more extreme (e.g., weapons are used more frequently).*
- Official records show that violent criminal offending is highest for individuals (especially men) between 15 and 30 years old, and declines significantly after that. For example, the average age of murderers is about 27 years old.
- **Social class.** Aggression rate is three times higher in lower socio-economic class than in the higher s e

Demographics of Aggression

- **Education-** Less education
- **Employment-** Lack of sustained employment (lack of means)
- **Residential instability-** Homeless mentally ill people commit 35 times more crimes than domiciled mentally ill (*Martell et al, 1995*)

Does Gender Play A Role in Aggression?

- Universally, men are more violent than women
- Among people with mental disorders males and females don't significantly differ in their base rates of aggression
- Females feel the same amount of anger as males, however they are much less likely to act upon that anger
- Important to note that most of these gender-related studies have been done only on PHYSICAL aggression
- Boys are OVERTLY aggressive, while girls are indirectly, or relationally aggressive
- *“Boys may use their fists to fight, but at least it's over quickly; girls use their tongues, and it goes*

Theories of aggression

Explanations of aggression

- Explanations of aggression fall into two broad classes, **the biological and the social**, although this distinction is not entirely rigid.
- A debate over which of the two explanations is superior is an example of the **nature-nurture controversy: is human action determined by our biological inheritance or by our social environment?**



Freud



LORENZ

- Freud (1930) argued that human aggressions stems from a **'Death Instinct'**:
 - This destructive energy builds up inside us and eventually spills out in the form of violence against others or against the self.
- Lorenz (1966) adapted Darwin's theory of evolution and the principle of survival of the fittest:
 - He argued that the **'Fighting Instinct'** is inherent and necessary for survival

Psychological Theories of aggression

Social learning Theory (Bandura, 1973);

- Albert Bandura and his colleagues were able to demonstrate one of the ways in which children learn aggression. Bandura's theory proposes that learning occurs through observation and interaction with other people.
- **The experiment involved exposing children to two different adult models, an aggressive model and a non-aggressive one.** After witnessing the adult's behavior, the children would then be placed in a room without the model and were observed to see if they would imitate the behavior they had witnessed earlier. He predicted that children who observed an adult acting aggressively would be likely to act aggressively.

Psychological Theories of aggression

Social learning Theory



- Aggression is initially learned from social behavior and maintained by reward, which encourages the further display of aggression.

The case of social learning: **Media Effects**

- A meta-analytic review of 431 studies involving more than 68,000 participants found that violent media exposure increases aggressive behavior, angry feelings, aggressive thoughts, and physiological arousal (e.g., heart rate), and it also decreases prosocial behavior. Laboratory experiments have shown that exposure to violent media *causes people to behave more aggressively immediately afterwards.*

(Bushman, B. J., & Huesmann, L. R. (2006). Shortterm and long-term effects of violent media on aggression in children and adults. *Archives of Pediatrics and Adolescent Medicine*, 160, 348–352.)

The case of social learning: **Media Effects**

A recent meta-analysis of more than 130 research reports involving over 130,000 participants “nails the coffin shut on doubts that violent video games stimulate aggression.”

This meta-analysis showed that violent games increase aggressive thoughts, angry feelings, and aggressive behaviors and decrease empathic feelings and prosocial behaviors. Similar effects were obtained for male and female gamers, regardless of their age, and regardless of whether they lived in Western or Eastern countries.

(Anderson, C. A., Shibuya, A., Ihori, N., Swing, E. L., Bushman, B.J., Sakamoto, A., Rothstein, H. R., & Saleem, M. (2010). Violent video game effects on aggression, empathy, and prosocial behavior in Eastern and Western

FRUSTRATION-AGGRESSION HYPOTHESIS

the idea that people **become aggressive** when they're **blocked from reaching a goal**.

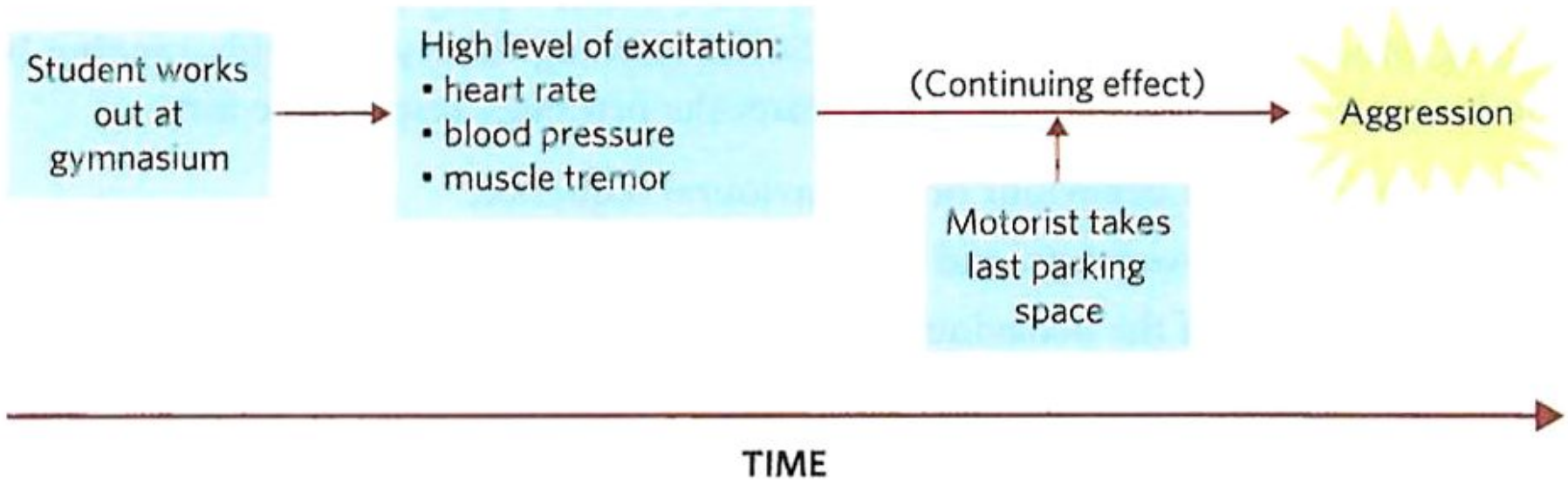
Frustration and aggression

- In its original form, the frustration-aggression hypothesis linked aggression to an antecedent condition of frustration
- Berkowitz (1993) has proposed that **aversive events** such as frustrations, provocations, loud noises, uncomfortable temperatures, and unpleasant **events produce negative affect**.
- **Negative affect automatically stimulates** various thoughts, memories, expressive motor reactions, and physiological responses **associated with fight tendencies**
- The **fight associations** give rise to rudimentary feelings of **anger**.

Excitation-transfer model

- **Zillmann's (1988) excitation-transfer model.**
The expression of aggression is a function of:
 - arousal or excitation from another source;
 - the person's interpretation of the arousal state, such that an aggressive response seems appropriate.

- **EXPERIMENT.** A student has been exercising at the gym and is still physically aroused when driving to the local supermarket. Here, another customer's car sneaks forward into the parking space that the student is trying to reverse into.
- Although the event might ordinarily be mildly annoying, this time the residual excitation from the gym session (now forgotten) triggers verbal abuse from the student.



Applying the excitation-transfer model of aggression
Zillman (1979)

Weapons Effect

- Participants were seated at a table that had a shotgun and a revolver on it—or, in the control condition, badminton racquets and shuttlecocks (Berkowitz and LePage, 1967). The items on the table were described as part of another experiment that the researcher had supposedly forgotten to put away.

- The participant was supposed to decide what level of electric shock to deliver to a confederate, and the electric shocks were used to measure aggression. The experimenter told participants to ignore the items, but apparently they could not.

- Participants who saw the guns were more aggressive than were participants



vsyako.livejournal.com

Weapons Effect

Several other studies have replicated this effect, which has been dubbed the **weapons effect**. A **meta-analysis of 56 published studies confirmed that the mere sight of weapons increases aggression in both angry and non angry individuals.**

Men in one study who interacted with a gun for 15 minutes had higher testosterone levels compared to men who interacted with a toy for 15 minutes, and the higher testosterone levels were associated with the more aggressive behavior.



Weapons Effect

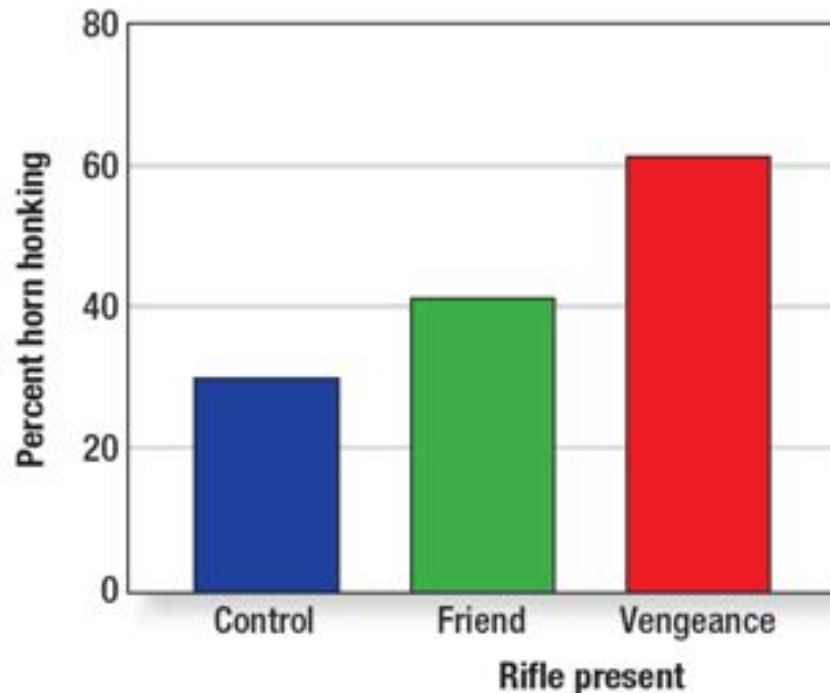
- In one field experiment, a confederate driving a pickup truck purposely remained stalled at a traffic light to see whether the motorists trapped behind him would honk their horns (the measure of aggression). The truck contained either a military rifle in a gun rack and a bumper sticker that said VENGEANCE (two aggressive cues), or a rifle and a bumper sticker that said FRIEND (one aggressive cue), or no rifle and no bumper sticker (no aggressive cues).



Weapons Effect

- The more aggressive cues the trapped motorists saw, the more likely they were to honk their horns (see Figure)

Motorists are more likely to honk at another driver in the presence of aggressive cues, such as a rifle and a VENGEANCE bumper sticker. Source: Turner et al. (1975).



Weapons Effect

- What is amazing about this study is that you would have to be pretty stupid to honk your horn at a driver with a military rifle in his truck and a VENGEANCE sticker on his bumper.
- It is certainly much safer to honk at someone who is not driving around with weapons and violent bumper stickers.
- These findings again bring up the duplex mind. Horn honking was probably not a product of logical, conscious thought. Most likely, it was mediated by the automatic

VARIOUS RISK FACTORS CONTRIBUTE TO DEVELOPMENT OF AGGRESSION IN A PSYCHIATRIC PATIENT:

- ❑ **PSYCHOSIS**
- ❑ Schizophrenia, particularly paranoid schizophrenia patients, may be at risk, especially in the active phases of their illness to commit violent acts.
- ❑ General risk factors for violence in such patients include:
 - Presence of hallucinations, delusions, or bizarre behaviors (paranoid patients with delusions may be at a higher risk to commit a violent act because of their ability to plan and their retention of some reality testing)

❑ Dementia

- Impaired executive functioning
- Increased agitation
- Sometimes hallucinations and/or delusions

❑ Mania

- More likely to be assaultive without prior threat although often respond violently to any limit setting
- 26% of patients with mania attack someone within the first 24 hours of hospitalization

❑ Depression

- Despair, in rare cases could lead to striking out against other people
- Murder-suicide is suicidal within 1 week of a homicide; in couples it is highly associated with jealousy (Felthous et al, 1995)
- The individual can no longer endure a life without what is perceived to be a vital element (e.g., a spouse, family, job, health) but can't bear the thought of the other persons carrying on without him, so he forces the others to joint him in death. Suicidal mother hence, should always be asked about her children.

Substance Abuse or Medication Effects and Aggression

- ❑ Alcohol
- ❑ Cocaine
- ❑ Methamphetamine
- ❑ Anabolic Steroids

Management

- ❑ Non pharmacological
- ❑ Pharmacological

NON-PHARMACOLOGICAL

- Insight-oriented psychotherapy
- Cognitive–behaviour therapy
- Supportive psychotherapy
- Behaviour modification
- Anger management

Pharmacological

- ❑ Medications are often used to manage agitated behavior

- ❑ These include :
 - Antipsychotics (eg Risperidone, olanzapine, clozapine)
 - Benzodiazepines (eg lorazepam)
 - Mood stabilizers(eg lithium, valproate, and carbamazepine)
 - Antidepressants
 - Anxiolytics

Attraction

The Need to Belong

- The need to belong is a basic human motive.
- We care deeply about what others think of us.
- Those with a network of close social ties tend to be happier, healthier, and more satisfied with life than those who are more isolated.

Who Likes Whom?

- Social psychologists have labored long and hard to study the start of possible friendships and other forms of liking. Two people who are just meeting may come to like each other, or they may not. Which way they go depends on a variety of factors.
- Social psychology's task has been to identify those factors.

Who Likes Whom?

- Edward E. Jones found that people seem to have an intuitive knowledge of what fosters attraction, and they use that knowledge to get other people to like them.
- Not much will prove surprising in these research findings. People like good-looking, friendly people who are similar to themselves in important ways, and they like people who are nice to them.

What is Attractive?

- For both sexes, this standard includes large eyes and a big smile.
- For women a small nose and chin, narrow cheeks and high eyebrows are considered attractive;
- For men a large chin is considered attractive.
- Typicality is a source of beauty
 - Average or composite faces are more attractive than individual faces

What is Attractive?

- For men, clothing represent wealth and status
 - High wealth and status men are more attractive
- Standards of beauty change over time.

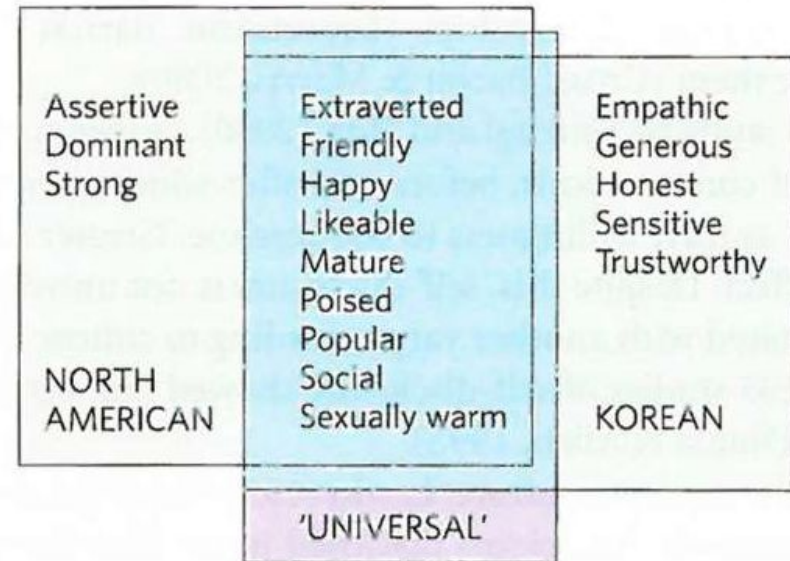
The ideal beauty standard for American women has become thinner over time.
- Body shape influences attractiveness
 - Cultural variation in ideal body weight
 - Cultural stereotypes of attraction

Cultural stereotypes of attraction

Figure Cultural variation and attraction

- Korean participants rated traits for their association with photographs of people who varied in physical beauty.
- Their ratings were compared with previously published American and Canadian data.
- Some traits were 'universal', associated with the three national groups.
- Other traits were specific either to individualistic cultures (North American) or to a collectivist culture (Korean).

Source: based on Wheeler & Kim (1997)



What is Attractive?

1



2



What is Attractive?

- Symmetry is a powerful source of beauty



What influences attraction?

- We do not simply find ourselves attracted to everyone we see or come into contact with. **Rather, there are 4 influential factors in addition to physical attractiveness:**

1) Similarity – liking others who are like us

2) Proximity - liking others who are physically close to us

3) Familiarity – liking those we have frequent contact with

4) Reciprocity – liking others who like us

Major Antecedents of Attraction

Similarity

- People who are similar are attractive because they validate our own self-worth and we assume that people who disagree with us have negative personality traits.
- Shared values, goals

Major Antecedents of Attraction

Similarity

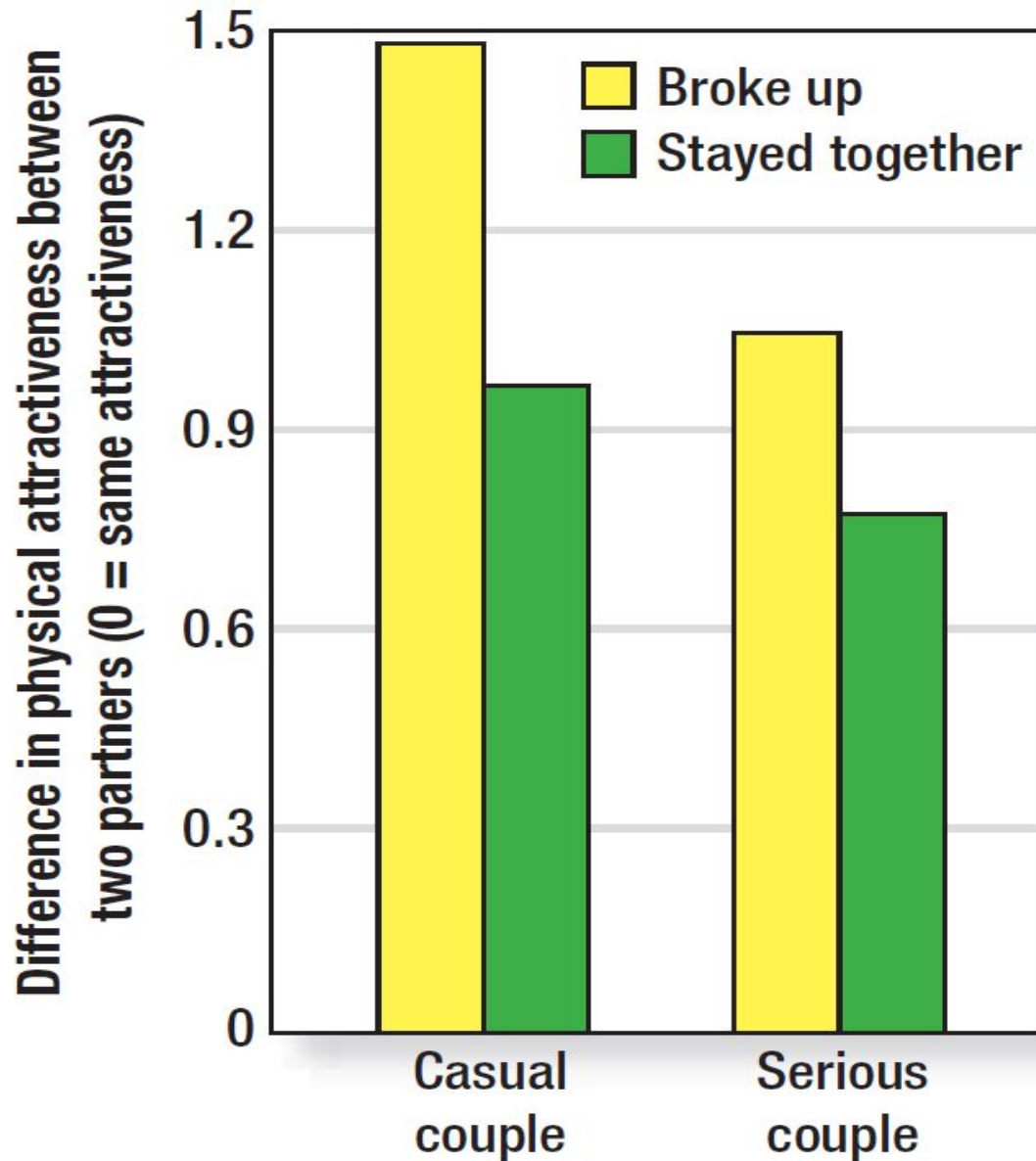
- Spouses are similar in many aspects: IQ (**When you get married, don't call your spouse an idiot, because your spouse's IQ probably is close to your own!**), physical attractiveness, education, SES.

Couples who are more similar in attractiveness are more likely to progress to commit relationship.

Similarity

- According to the **matching hypothesis**, during an interaction, people tend to be attracted to people that are equivalent in their physical attractiveness (Feingold, 1988).

Dissimilarity in physical attractiveness increases the risk of breaking up. *Source: White (1980).*



Similarity

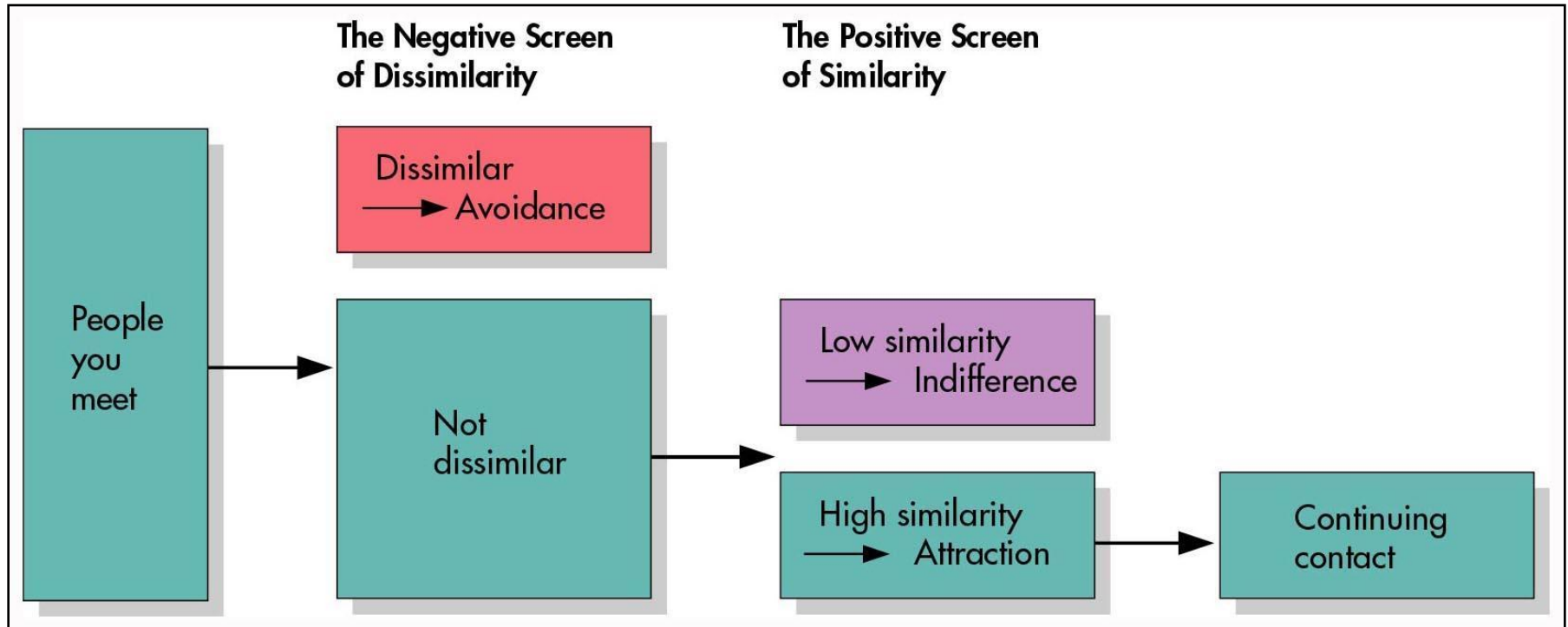
- Byrne et al. (1970) found that couples on blind dates who held similar political attitudes liked each other more than those who held dissimilar views.
- Miller and Perlman (2009): dissimilar views do not matter as long as neither partner perceive them as significant.

Attraction Process

Attraction Process

- The first screen is the negative screen of dissimilarity. The model states that people avoid associating with people who are not similar.
- The second screen is the positive screen of similarity where people are attracted to other people who are highly similar while being indifferent towards people with low similarity (Byrne et al., 1986).

A Two-Stage Model of the Attraction Process

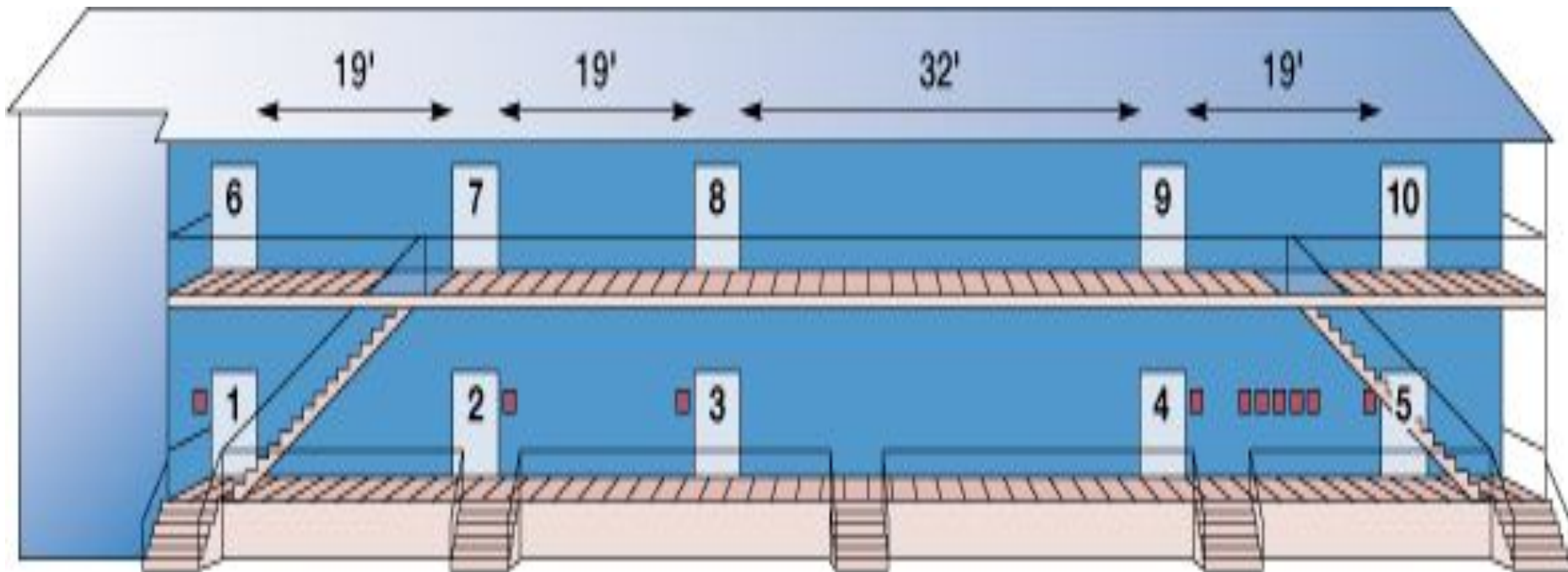


A Two-Stage Model of the Attraction Process

Proposed by Byrne and his colleagues (1986), the two-stage model of attraction holds that first we avoid dissimilar others, and then we approach similar others.

Proximity: Liking People who are Near

The place where we live, influences the friends we make.



Westgate West: Housing at MIT ~1949

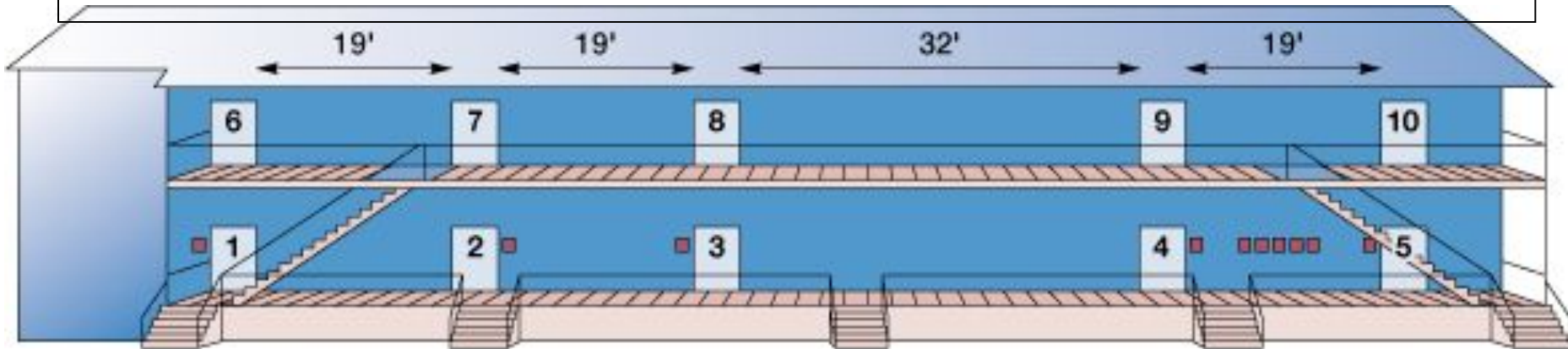
(Festinger, 1950)

Proximity: Liking People who are Nearby

- Classic study by Festinger, Schachter and Back (1950) found that students who lived closer together on campus were more likely to become friends than those living apart.
- This indicates the significance of proximity in the initial stages of a relationship/friendship.

Proximity: Liking People who are Nearby

Students, who lived far from each other are less to become close friends



- Close friends:
 - Next door neighbors: 41%
 - Two doors down: 22%
 - Opposite ends of hallway: 10%
- *“Contrary to popular belief, I do not believe that friends are necessarily the people you like best; they are merely the people who got there first.” (Ustinov, 1977)*

Proximity

- Why does it work?
 - Availability
 - Mere exposure

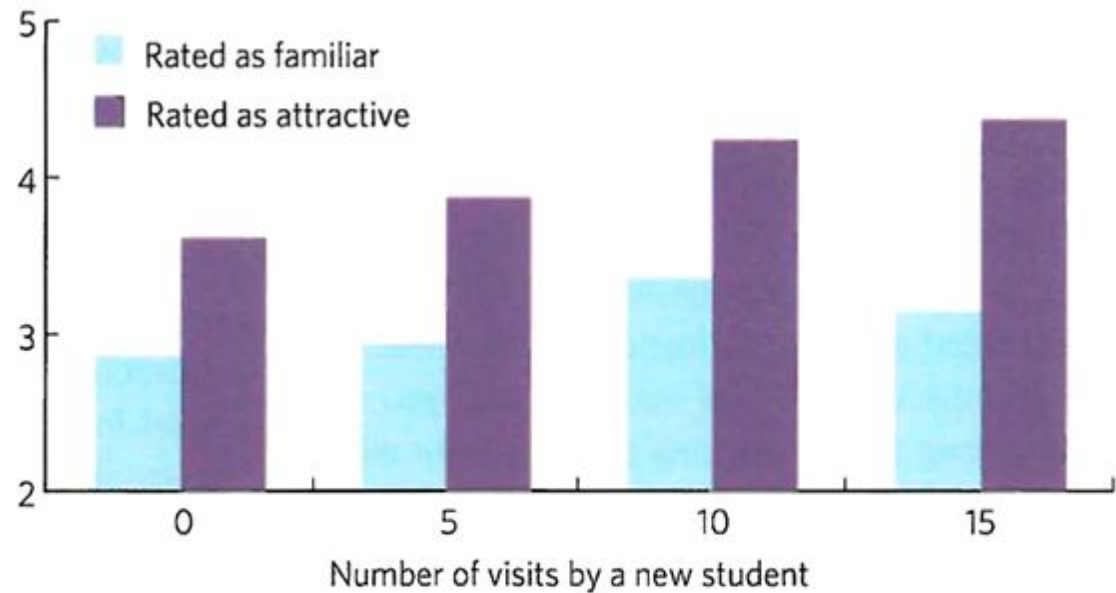
Mere Exposure Example (Moreland & Beach, 1992)

- Procedure
 - Four girls with the same appearance
 - New girls with the same appearance attended a class in a group of students
 - they did not communicate with other students
 - 1 girl 0 times
 - 1 girl 5 classes
 - 1 girl 10 classes
 - 1 girl 15 classes
 - Students rate girls on traits at end of semester

The more classes the girl attended the more attractive she was considered

- This study tested the 'mere exposure' effect in a university class setting.
- Four new women 'students' took part in the class on 0, 5, 10 or 15 occasions.
- At the end of term, students in the class rated slides of the women for several characteristics.
- There was a weak effect for familiarity but a strong and increasing effect across visits for attractiveness.

Source: based on Moreland & Beach (1992)



Reciprocity

- One of the most potent determinants of our liking someone is the belief that the person likes us.
- If we believe somebody else likes us, we will be a more likable person in their presence; this will lead them to actually like us more, which leads to a self-fulfilling prophecy.
- If someone likes you, initially it is very favorable, but if that liking is not returned, it can be a burden.

Reciprocity

- A person's level of self-esteem moderates how we are affected by other people liking us.
- Swann and colleagues (1992) have shown that people with high self-esteem like and interact with those who like them, but people with low self-esteem prefer to interact with somebody who criticized them.

Physical Attractiveness: Getting Drawn In

- We react more favorably to others who are physically attractive than to those who are not.
- Bias for beauty is pervasive.

Physical Attractiveness: Getting Drawn In

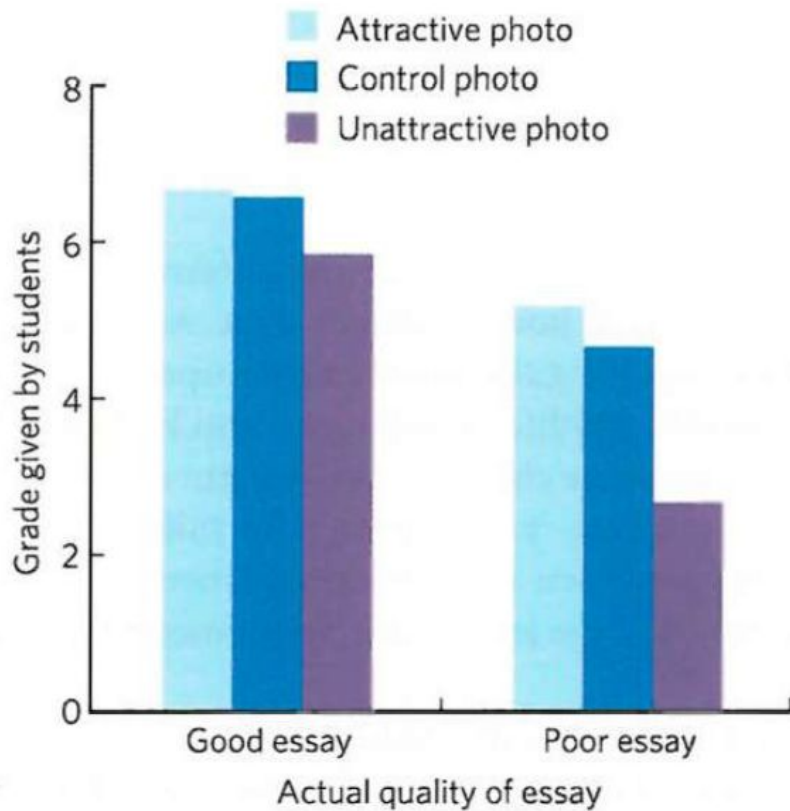


Figure 14.1 Being attractive can lead to better essay grades

Source: based on data from Landy & Sigall (1974)

Physical Attractiveness

- Teachers judge attractive students as more intelligent than unattractive students (Clifford & Walster, 1973)
- Adults, and nurses in pediatric wards, punish unattractive children more harshly than attractive children (Dion, 1974)
- Attractive people make more money (Hamermesh & Biddle, 1994) and get better job ratings from bosses (Hosoda et al., 2003)

Physical Attractiveness

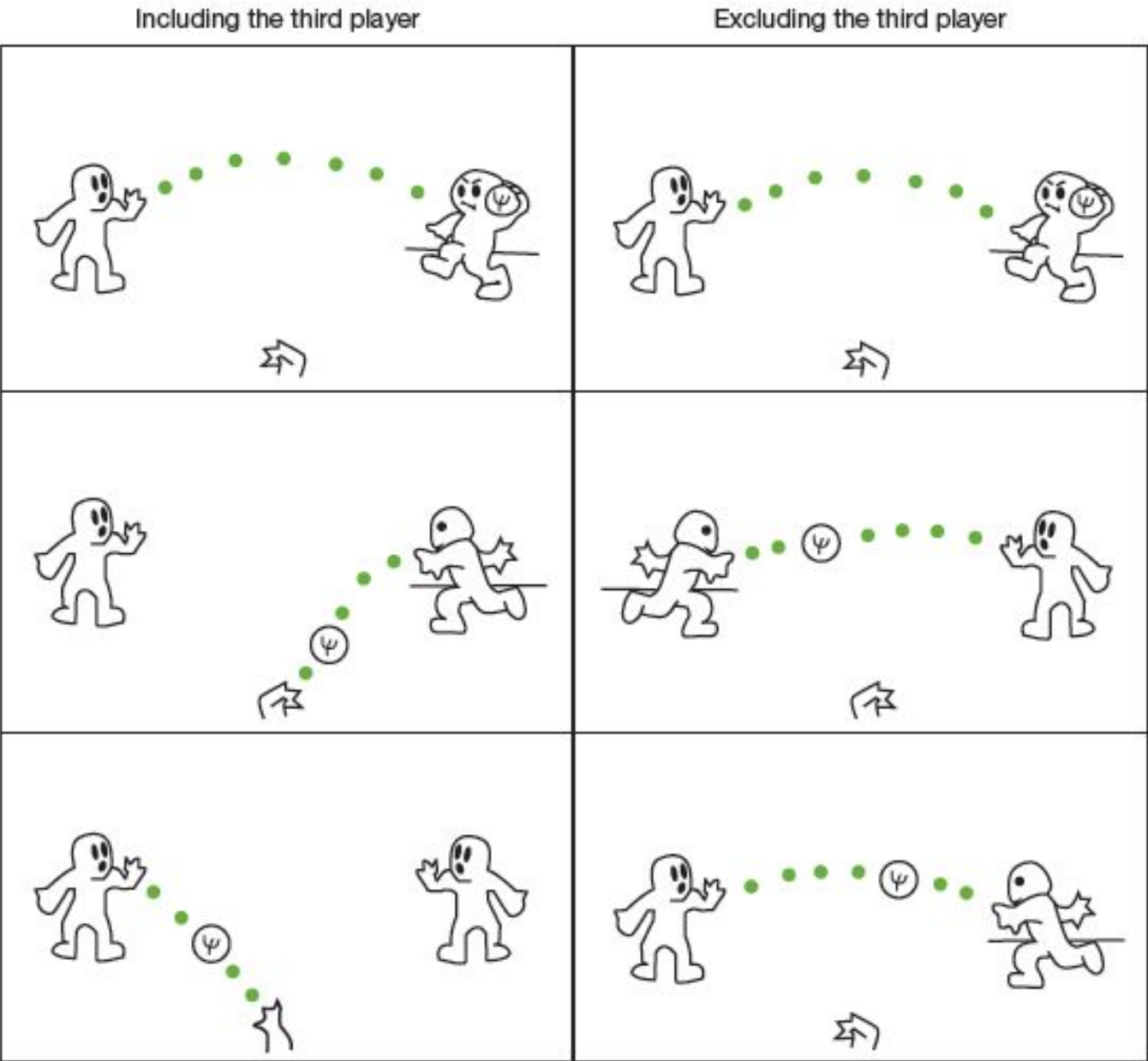
- Good-looking people do have more friends, better social skills.

But beauty is not related to objective measures of intelligence.

Rejection

- Ostracism
 - Being excluded, rejected, and ignored
- Effects of rejection
 - Inner states are almost uniformly negative
- Fears of rejection are linked to eating disorders
- Rejected people are more likely to eat fattening or junk food

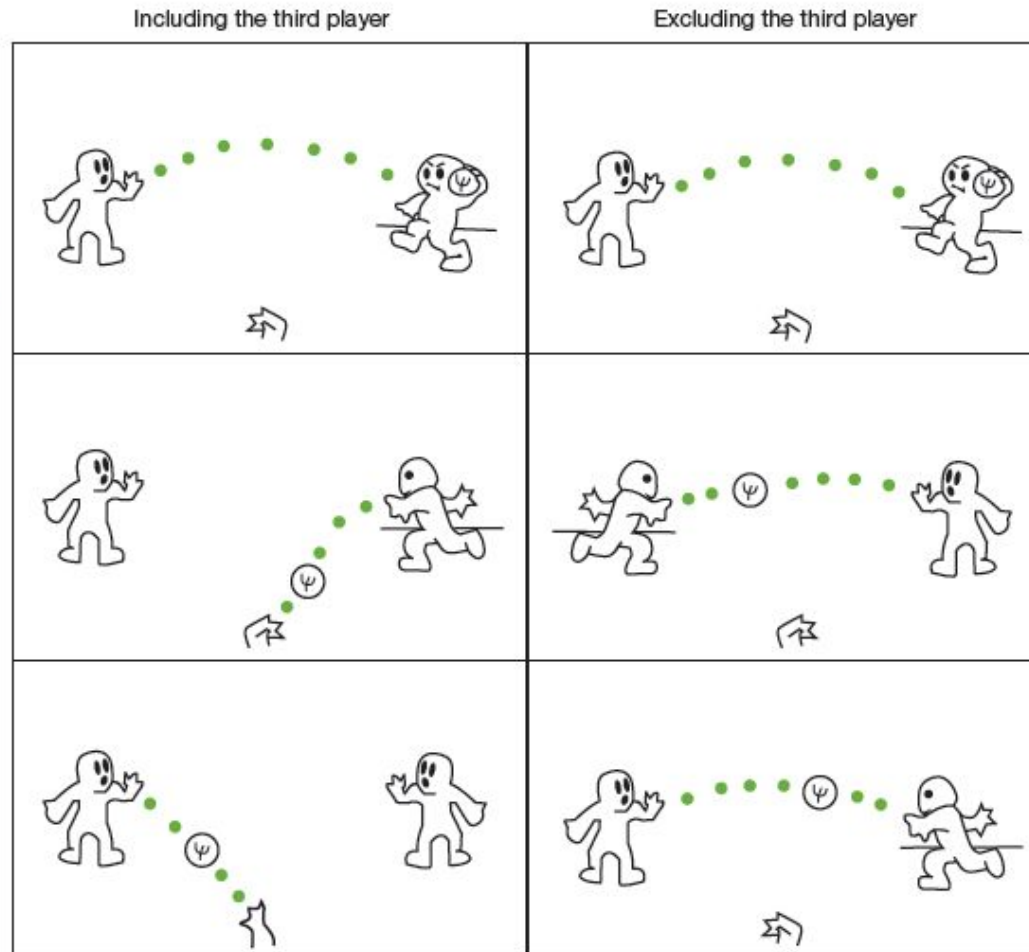
Kip Williams has even designed a virtual game called *Cyberball* that can be used to reproduce the situation of the excluded Frisbee |



- Social Exclusion (video)



Kip Williams has even designed a virtual game called *Cyberball* that can be used to reproduce the situation of the excluded Frisbee player



Behavioral Effects of Rejection

- Repeated rejection can create aggression
- Aggression can lead to rejection
- Common theme in school shootings is social exclusion

- Loneliness is bad for physical health