Observation
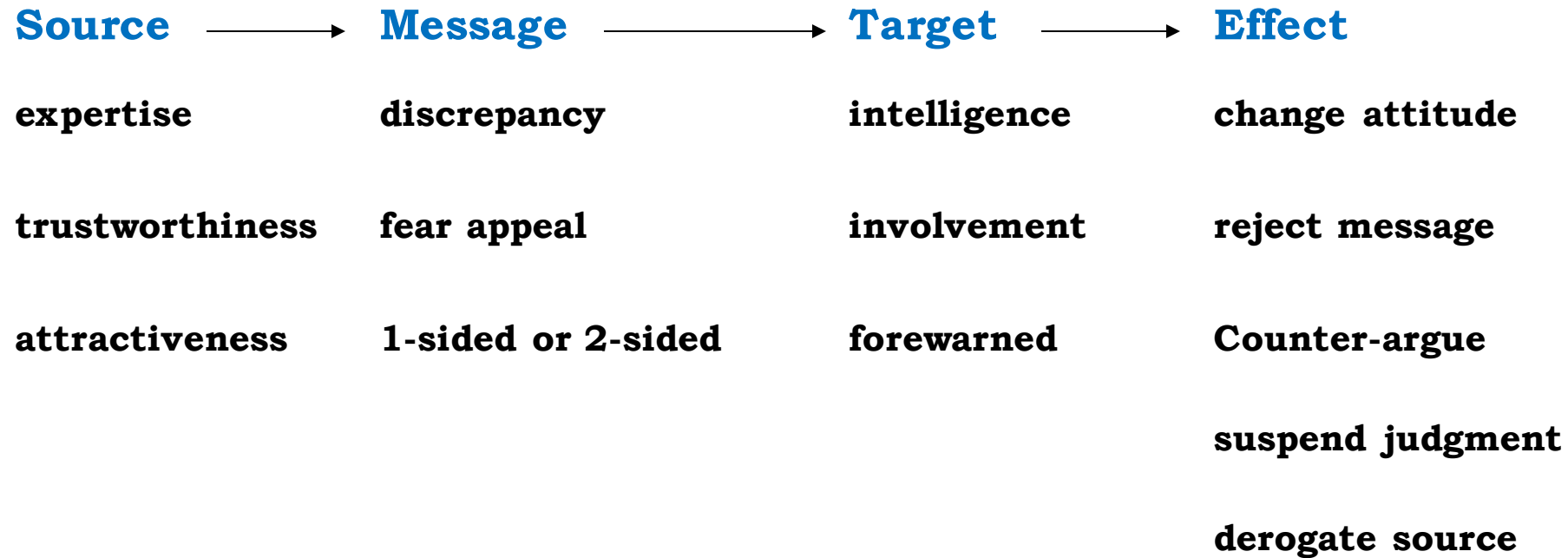
Have you ever:

- Asked a friend what was appropriate to wear to a dinner, party, or wedding?

- Agreed to buy something you didn't want?

- Agreed to attend a social event because someone else asked you to?

- Changed your behavior in response to a direct order from a parent, teacher, or school/ institute official?

Discussion Question

- You read a report about health drinks and health.
- Would you react differently to the message if the report was written by a Nobel prize winning bio-medical scientist than you would if it was written by a acclaimed food critic?
  - If so, why?
  - If not, why not?

The Communication-Persuasion Paradigm

Source → **Message** → **Target** → **Effect**

Source	Message	Target	Effect
expertise	discrepancy	intelligence	change attitude
trustworthiness	fear appeal	involvement	reject message
attractiveness	1-sided or 2-sided	forewarned	Counter-argue
			suspend judgment
			derogate source

Social Influence

Efforts by one or more individuals to change the attitudes, beliefs, perceptions, or behaviors of one or more others

Social Influence

- Social influence occurs when:
  1. one person (the source) engages in some behavior (persuading, threatening, promising, or issuing orders)
  2. that causes another person (the target) to behave differently from how he or she would otherwise behave.

- Influence attempts can be either open or covertly manipulative.
  - In <u>open influence</u>, the attempt is readily apparent to the target.

  - In <u>manipulative influence</u>, the attempt is hidden from the target.

Goals of Social Influence
- Choosing Correctly
- Gaining Social Approval
- Being Consistent with Commitments
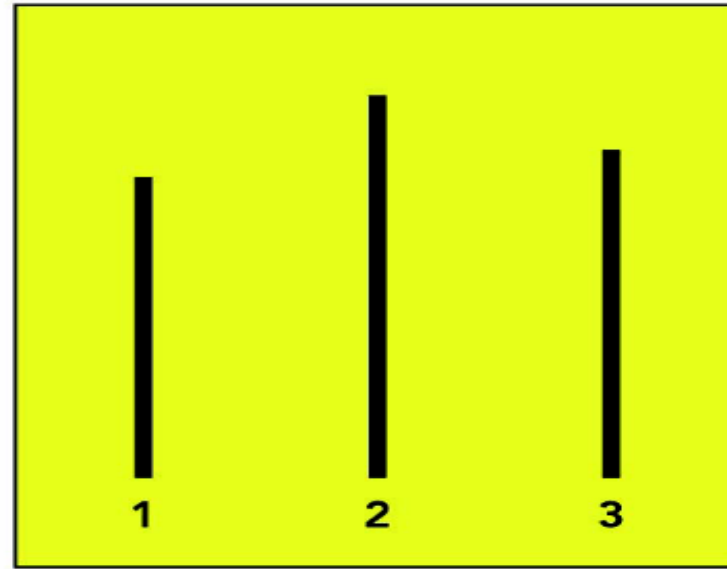
Conformity

- ***Conformity—a type of social influence in which individuals change their attitudes or behavior in order to adhere to social norms:***

  - Rules regarding how people are expected to behave in specific situations

Conformity

- Asch's (1950s) Research on Conformity
  - Participants were asked to indicate which of three lines matched a standard line in length.
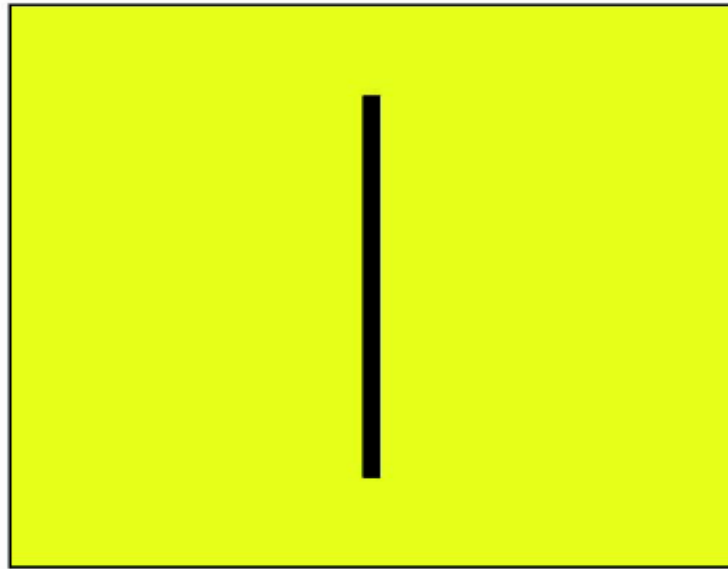
Standard Line   Comparison Lines

Conformity

- During the critical trials, participants had to give their answers after a unanimous group gave the wrong answer.
  - 76% conformed at least once to the group's false judgment
  - Overall, they agreed with the errors 37% of the time
- Later research found that an ally (someone who disagreed with the group) and the ability to make responses privately both reduced conformity.

Factors that Affect Conformity

- ***Cohesiveness—the degree of attraction felt by an individual toward an influencing group***
  - As cohesiveness increases, conformity increases
- Group size
  - As group size increases, conformity increases to an extent

- ***Descriptive Norms (what most people do in a given situation)* and *Injunctive Norms (specify what ought to be done)***

- **Why People Conform**

  - ***Normative Social Influence—based on the desire to be liked or accepted by others***

  - ***Informational Social Influence—based on the desire to possess accurate social perceptions***
    - This is an especially strong source of conformity when the task is important and difficulty and uncertainty are high.

Why People Do Not Conform

- ***Individuation—people's need to be distinguishable from others in some respects***

- People's need to maintain control over their lives

- Some people cannot conform
  - Due to physical, legal, or psychological reasons

Minority Influence

- Minorities can influence majorities when:
  - They are consistent, flexible, and congruent with social trends

- Minorities can provoke majorities to engage in systematic processing of the issues.

- Minorities often must form strong arguments to defend their positions and may overestimate the support for their views.
  - Can increase their perseverance and result in large-scale social change

Compliance

Six Principles of Compliance: (Cialdini,1990s)

RECIPROCITY

SCARCITY

AUTHORITY

INFLUENCE

LIKING

SOCIAL PROOF

COMMITMENT & CONSISTENCY
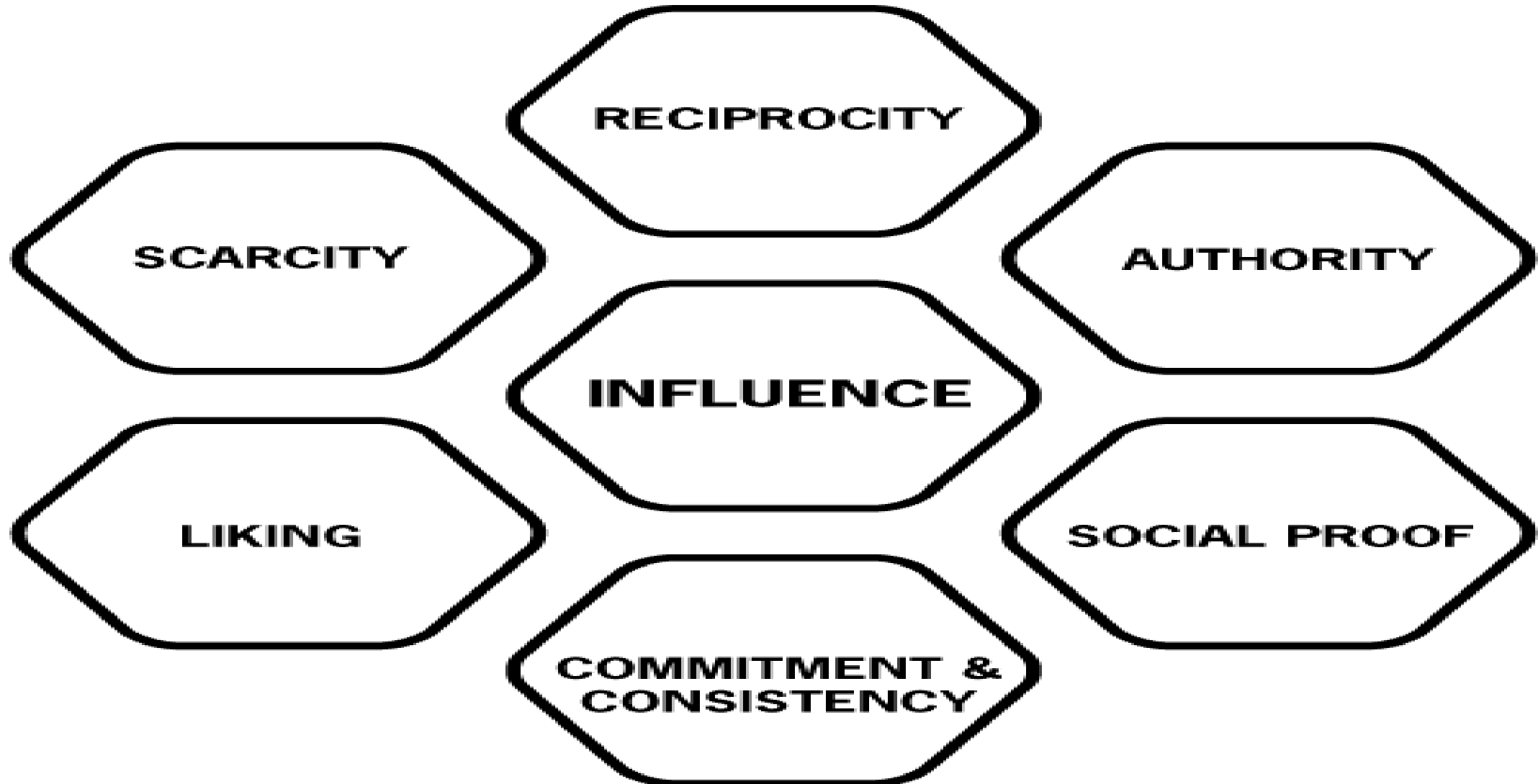
Compliance

- Tactics based on **friendship or liking**
  - ***Ingratiation—requesters first induce target to like them***
    - Use flattery, improve one's appearance, emit positive nonverbal cues, do small favors for target person

- Tactics based on **commitment or consistency**
  - ***Foot-in-the-door Technique—requesters begin with a small request and then, when it is granted, escalate to a larger one***
  - ***Lowball Procedure—an offer or deal is changed to make it less attractive to the target person after this person has accepted it***
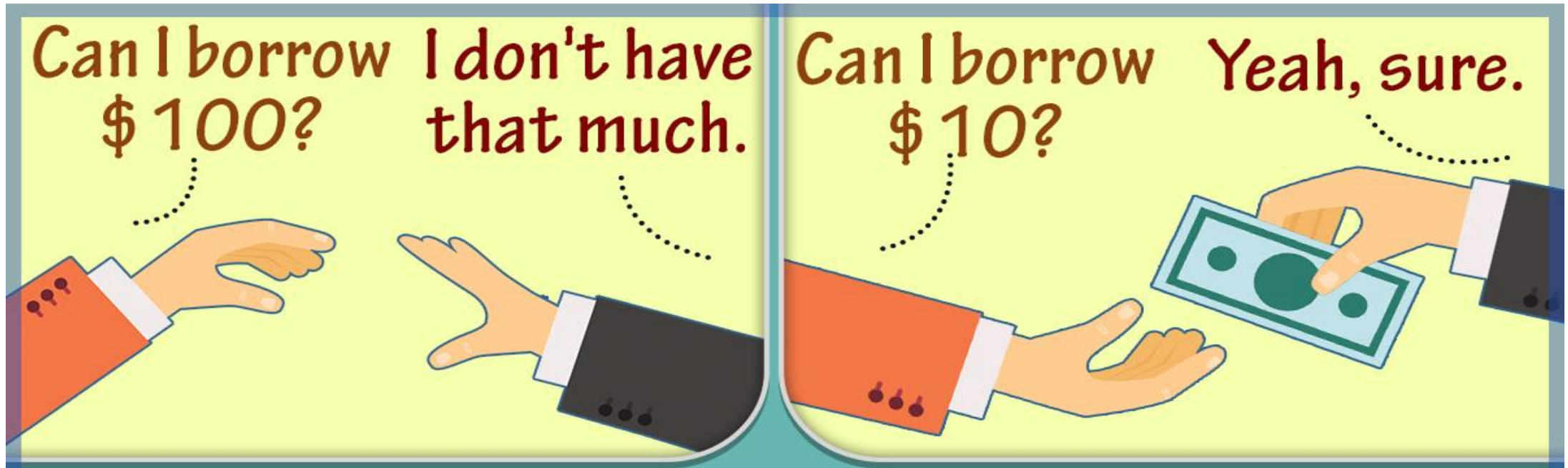
Compliance

- **Tactics based on reciprocity**
    - **Door-in-the-face Technique**—requesters begin with a large request and then, when this is refused, retreat to a smaller one
    - **That's Not All Technique**—requesters offer additional benefits to target persons before they have decided whether to comply with or reject specific requests
- **Tactics based on scarcity**
    - **Playing Hard to Get**—suggesting that a person or object is scarce and hard to obtain
    - **Deadline Technique**—target persons are told that they have only limited time to take advantage of some offer or to obtain some item

Will you help me shop for cake ingredients?

Sure.

(10 minutes later

Will you help me bake the cake?

Yeah, Okay.

Foot-in-the-door Technique:

Following up a smaller request with an even bigger one such that the subject complies on the grounds of the bond created.

Obedience to Authority

- ***Obedience—form of social influence in which one person simply orders one or more others to perform some action(s)***
  - Obedience in the laboratory: Milgram's Obedience Studies (1963, 1965a, 1974)
    - Participants told to deliver increasing levels of shock to a "learner" each time he made an error on a learning task
      - 65% obeyed to the fullest extent (proceeded to the end of the series, to the final 450-volt level)
        - Similar findings were found in many cultures and with adults and children.

Group Assignments

Case Study

Rohan and Sameer are two newly joined teachers. Their colleagues decided to go on a one day strike due to pay and conditions. When Rohan was asked why he went on strike, he said "after sitting in the staff room and hearing the arguments from my colleagues, I realized they were right and conditions are really getting worse for teachers. When Sameer was asked he said "I just fancied a day off and did not want one to be sitting in the office alone. So I deicide to join everyone else.
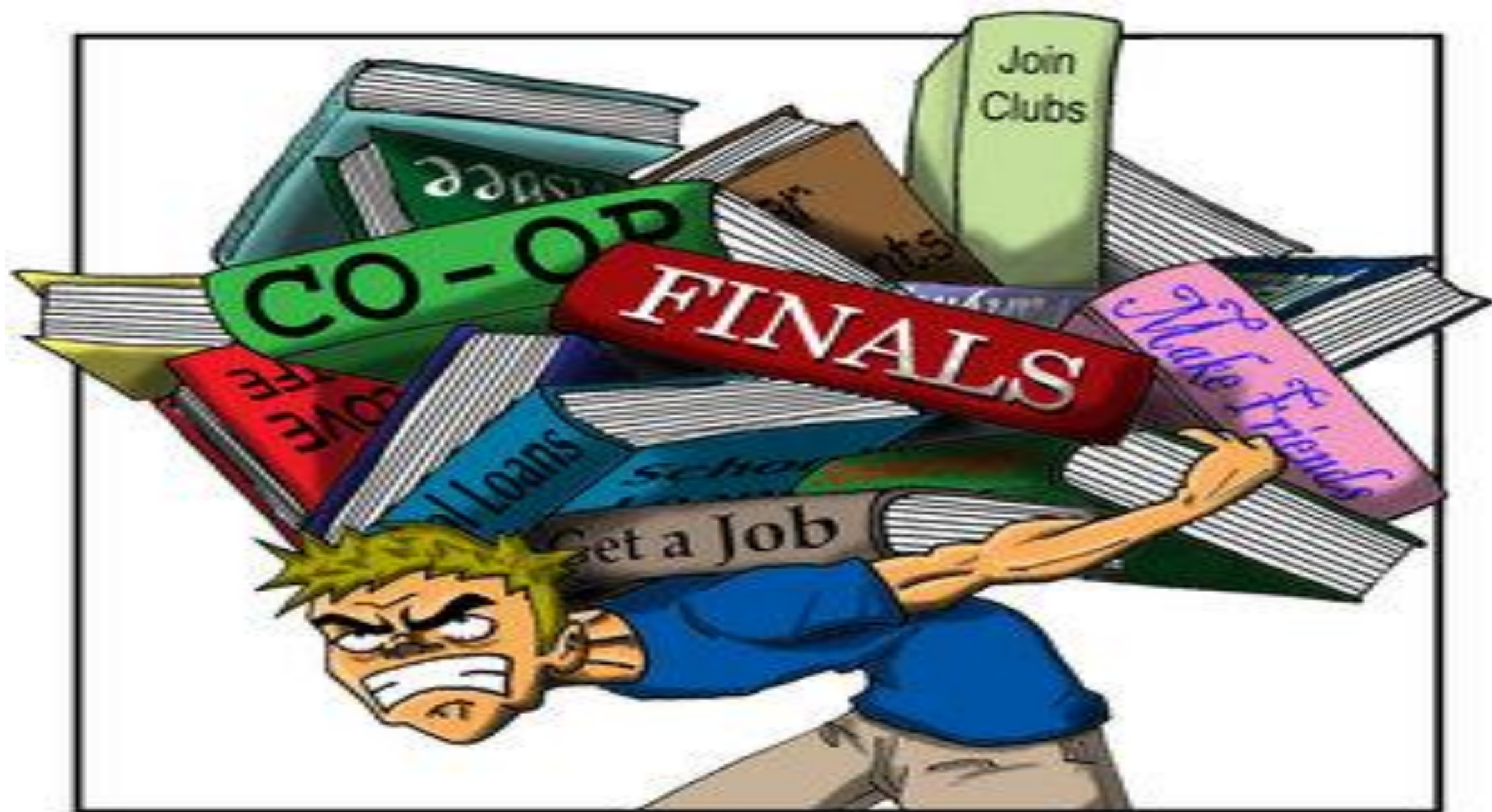
Q. Identify the type of social influence. Provide explanation for Sameer and Rohan's behavior with reference to social influence identified.

Stress

Adjustment

Adjustment

Refers to the psychological processes through which people manage or cope with the demands and challenges of everyday life

Witen & Lloyd, 2005

❑Adjustment and Adaptation

❑Adjustment: Internal and External Demands

THE PROCESS OF ADJUSTMENT

HOME COUNTRY

Leaving Home

Arrival In Australia

Culture Shock

Feeling Unhappy

Adjusting

Completion Of Studies

Leaving Australia

Arrival In Home Country

Reverse Culture Shock

Re-Adjusting

Adaption To Life In Home Country

The "W" Curve

Stress could be

- ✓ an individual's response to any challenging, frightening, or difficult situation

- ✓ an individual's response or reaction to a real or imagined threat, event or change

- ✓ a stimulus , response or an interaction between an organism and its environment

- ✓ be embedded in the environment

- ✓ be self created or self imposed

Stress

It is a condition or feeling experienced when a person perceives that "demands exceed the personal and social resources the individual is able to mobilize."

✓ Subjective Perception: Stress Lies in the eyes of beholder

❑ Lazarus and Folkman (1984: Appraisal of Stress)

▪ Primary Appraisal: Refers to evaluation whether an event is irrelevant, relevant but not stressful or stressful

▪ Secondary Appraisal: When an event is perceived as stressful it forces an individual to evaluate his/ her available coping resources to deal with the stress

Individual's Perception of the Event

Stimulus Event

Primary Appraisal
The individual determines the threat to his or her well-being; for example, the individual may use denial to reduce the reality of the event

The situation is perceived as harmless

The situation is perceived as threatening

No Stress

Secondary Appraisal
The individual determines the coping resources that are available and the likelihood that they can be employed successfully

Coping mechanisms are thought to be adequate

Coping mechanisms are thought to be inadequate
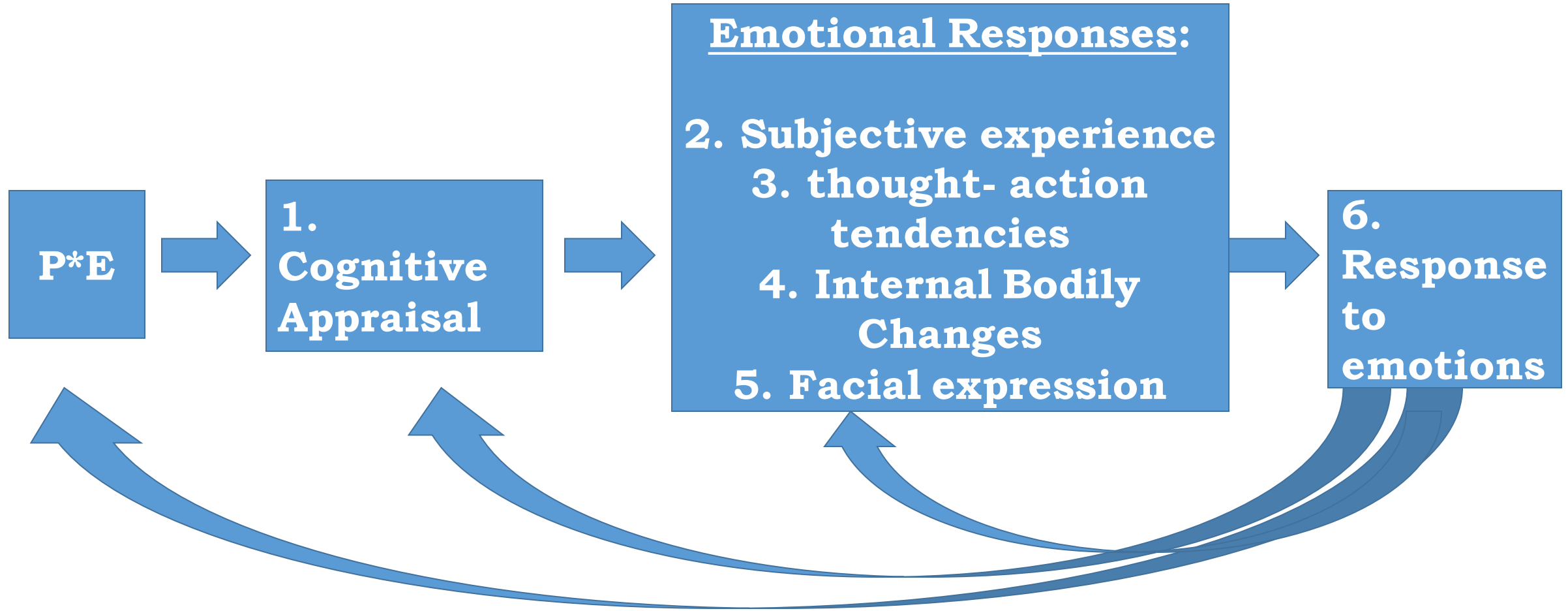
No Stress

Stress

- Secondary appraisals (SA) involve those feelings related to dealing with the stressor.
- Examples of Positive SA:
  - *"I can do it if I do my best",*
  - *"I will try whether my chances of success are high or not"*
  - *"If this way fails, I can always try another method"*
- Examples of Negative SA:
  - *"I can't do it; I know I will fail"*
  - *"I will not do it because no one believes I can"*
  - *"I won't try because my chances are low"*

- "In the stage of primary appraisal, an individual tends to ask questions: *"What does this stressor and/ or situation mean?"*, and, *"How can it influence me?"* The three typical answers to these questions are:
  - *"this is not important"*
  - *"this is good"*
  - *"this is stressful*

- At this stage one tends to classify whether the stressor or the situation is a threat, a challenge or a harm-loss..

Process of Emotions

If people could be induced to be in a general state of autonomic arousal, the quality of their Emotion would be determined solely by their appraisal of the situation

✓Stressors: Any threat, event or change
- ❑Stressors can be internal (thoughts, beliefs, attitudes or external (loss, tragedy, change)

✓Hans Selye (1956)
- ✓"Stress is not necessarily something bad – it all depends on how you take it."

Stress: Two Aspects

➢Positive Aspect: Eustress

▪Outcome of Eustress
- ▪Enables concentration
- ▪Increases performance
- ▪Energizes you into motion

➢Negative Aspect: Distress

▪Outcome of distress
- ▪Causes anxiety or concern
- ▪Loss of motivation
- ▪Reduces effectiveness
- ▪Physical, mental, and behavioral problems
- ▪Can lead to mental and physical problems

distress

stress

eustress (euphoric stress)

Top stressors among college students

- Relationships
- Time Management
- Finals and Midterms
- Roommates
- Finances
- Addictions
- Family Needs
- Lack of Resources
- Difficulty Prioritizing
- Illness
- Social pressures and expectations
- Environmental and cultural changes
- Loss: Literal loss & Loss of comfort

Stress and Performance
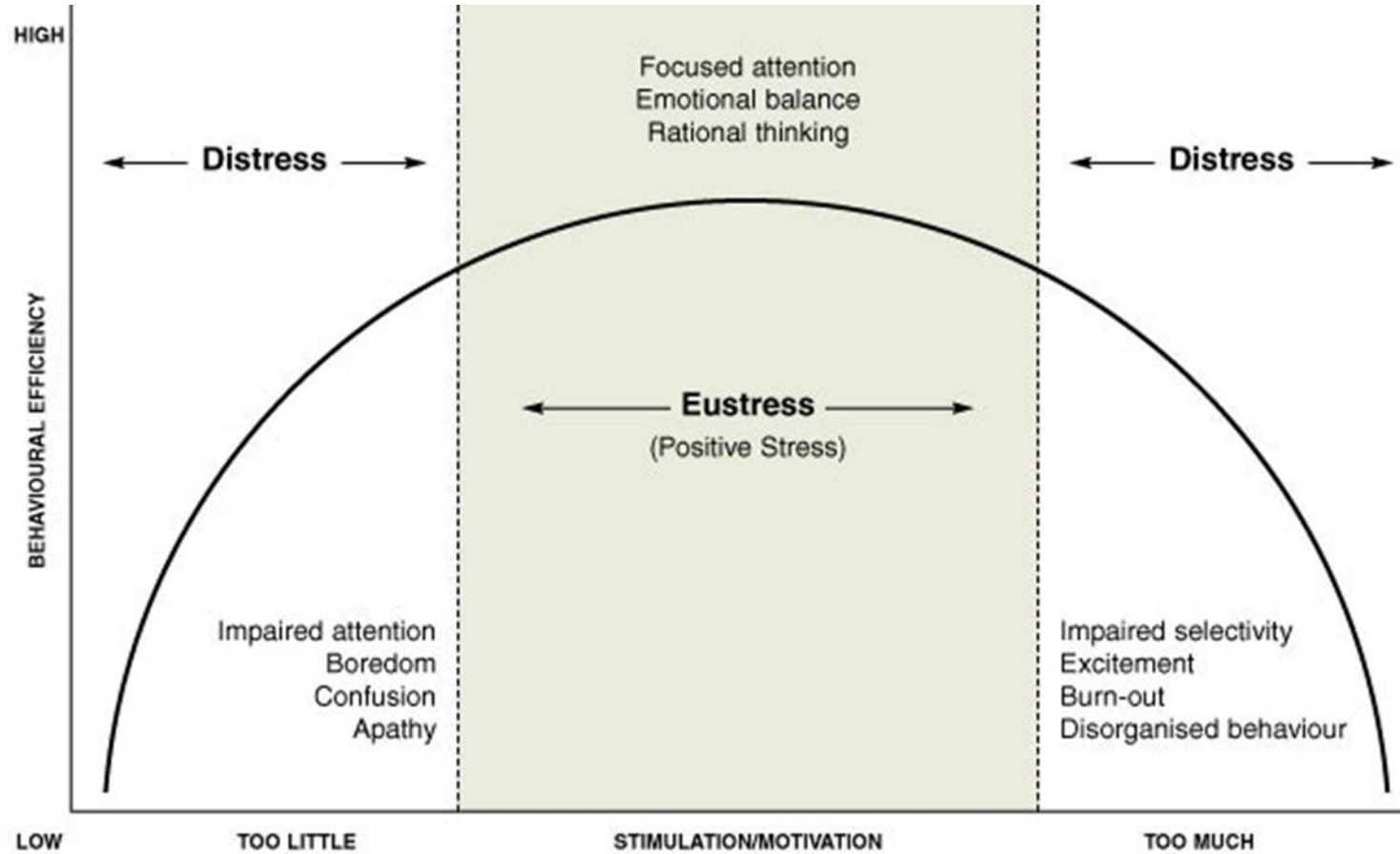
Culture and Stress

Culture:

"the set of ideas, beliefs, expectations and behaviours that are shared by a particular group of people."

An individual's culture could affect the experience of stress in a number of ways including:

• The types of stressor to which they are likely to be exposed

• The way these stressors are perceived and understood

• The extent of the physiological stress response produced

• The coping mechanisms available to deal with the stressor

- Different cultural groups inhabit different geographical, economic and political areas. For this reason, they are likely to be exposed to different types of stressful event.

  - UK defines stress in terms of the workplace (e.g. job overload), the social environment (e.g. family relationships) and economic factors (e.g. debt).
  - In some parts of the world natural disasters such as earthquakes, floods and tornadoes are more common, making exposure to extreme stressors. Other parts of the world may be affected by war or famine that make daily survival very difficult and render the types of concerns that

- Different sources of stress are experienced by members of a minority culture living within a majority culture
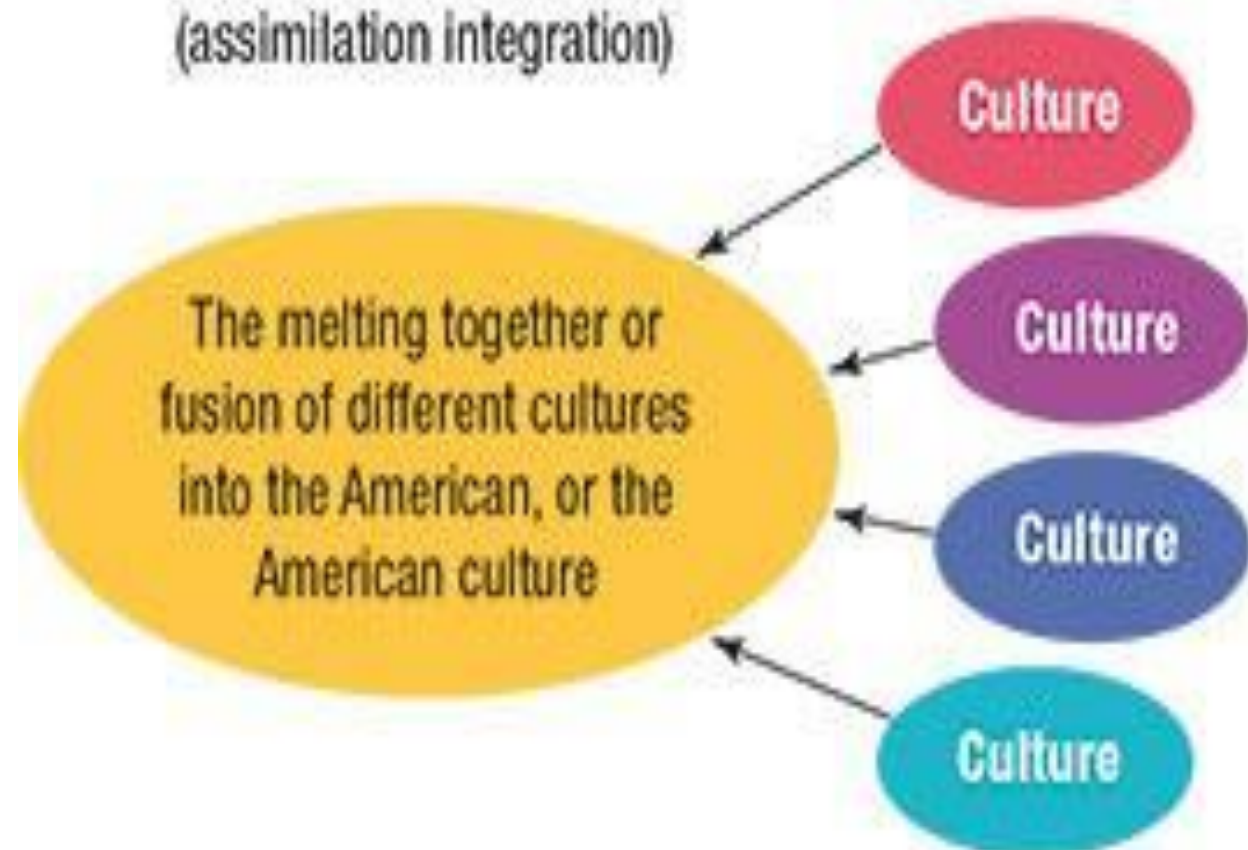
Adjustment to a New Culture

Salad Bowl vs. Melting Pot

Melting Pot
(assimilation integration)

Culture

Culture

The melting together or fusion of different cultures into the American, or the American culture

Culture

Culture

Salad Bowl
(pluralistic integration)

Culture

Culture

Mutual cultural adaptation between the American majority culture and the various cultures introduced by the immigrants

Culture

Culture

❑Assimilation: The process of two different things coming together to blend and, in some cases, create a new thing all together.

- Assimilation is a process whereby people of a culture learn to adapt to the ways of the majority culture.

- Threat to loss of one's own culture

❑Acculturation: The process of becoming communicatively competent in a culture we have not been raised in.

- A process in which an individual absorbs the culture of the host country, while retaining the traditions of their original heritage.

Both models of multicultural societies have contradictory aspects:
- in a melting pot there is no cultural diversity and sometimes differences are not respected;
- in a salad bowl cultures do not mix at all.

So which model is better?

The ideal situation would be a society where all citizens have equal rights and opportunities, but can also maintain their own individuality.

It is not easy to put this ideal into practice, but multiracial society is now a reality and we must learn to live together in the best possible way.
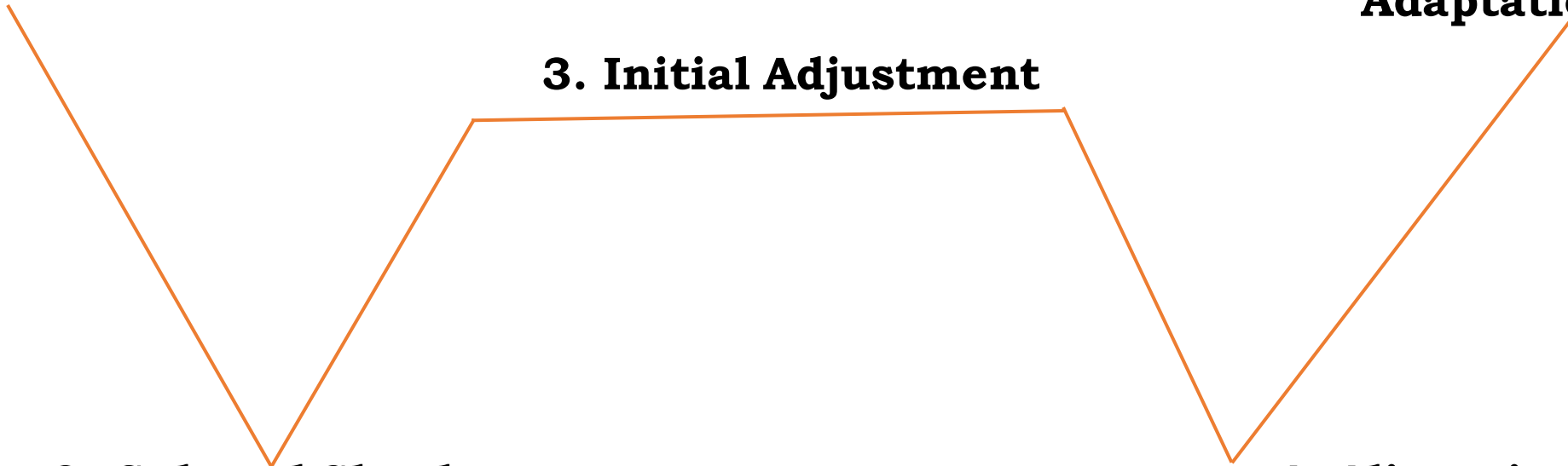
Acculturation process

1. Euphoria
2. Cultural Shock
3. Initial Adjustment
4. Alienation
5. Acceptance & Adaptation

Major Types of Stress

- **Frustration: Blocked Goals**

- **Conflict: Incompatible motivations**

- **Pressure: Perform/ Conform**

- **Change: Having to adapt**

- **Conflict** occurs when two or more incompatible motivations or behavioral impulses compete for expressions.

-**Approach-approach** conflict occurs when a choice must be made between to attractive choices.

-**Avoidance-avoidance** conflict occurs when a choice must be made between two unattractive goals.

-**Approach-avoidance** occurs when a choice must made about whether to pursue a single goal that has both attractive and unattractive aspects.

Impact of Stress

- Health

- Burnout

- PTSD

STRESS OR BURN OUT?

Stress	Burnout
• Over-engagement	Disengagement
• Emotions are over-reactive	Emotions are blunted
• Urgency and hyperactivity	Helplessness and hopelessness
• Loss of energy	Loss of motivation, ideals, and hope
• Leads to anxiety disorders	Leads to detachment and depression
• Primary damage is physical	Primary damage is emotional
• May kill you prematurely	May make life seem not worth living

Factors Influencing Stress Tolerance

- **Predictability:** being able to predict the occurrence of a stressful event- even if the individual cannot control it usually reduces the severity of stress.

- **Control over Duration:** Having control over the duration of a stressful event reduces the severity of the stress.

- **Cognitive Evaluation:** The severity of any stressful event also depends on how person perceives and appraise it.

- **Social Support:** The emotional support and concern of other people can make stress more bearable.

Suggestions for reducing stress levels and enhancing your college Experience

- Keep your space and consequently your mind organized.
- Go to class
- Keep up with course work (the rule of thumb is two hours of study per one hour in class).
- Get involved with campus activities.
- Maintain communication with your family.
- Take advantage of campus resources and choose a career path.
- Form healthy relationships.
- Talk to someone about your problems (family member, friend, college counselor or any trusted person).
- Get to know your professors.

Answer the following questions by using following scale:

1= Rarely, 2= Occasionally, 3= Frequently, 4= Often, 5 = Always

1. ___How often do you find that you stay online longer than you intended?

2. ___How often do you neglect household chores to spend more time online?

3. ___How often do you prefer the excitement of the Internet to intimacy with your partner?

4. ___How often do you form new relationships with fellow online users?

5. ___How often do others in your life complain to you about the amount of time you spend online?

6. How often do your grades or school work suffer because of the amount of time you spend online?

7. How often do you check your e-mail before something else that you need to do?

8. How often does your job performance or productivity suffer because of the Internet?

9. How often do you become defensive or secretive when anyone asks you what you do online?

10. How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?

11. How often do you find yourself anticipating when you will go online again?

12. How often do you fear that life without the Internet would be boring, empty, and joyless?

13. How often do you snap, yell, or act annoyed if someone bothers you while you are online?

14. How often do you lose sleep due to late-night log-ins?

15. How often do you feel preoccupied with the Internet when off-line, or fantasize about being online?

16. How often do you find yourself saying "just a few more minutes" when online?

17. How often do you try to cut down the amount of time you spend online and fail?

18. How often do you try to hide how long you've been online?

19. How often do you choose to spend more time online over going out with others?

20. How often do you feel depressed, moody, or nervous when you are off-line, which goes away once you are back online?

Scoring: Internet Addiction

- **NONE 0 – 30 points**

- **MILD 20- 39 points:** You are an average online user. You may surf the Web a bit too long at times, but you have control over your usage.

- **MODERATE 40 -69 points:** You are experiencing occasional or frequent problems because of the Internet. You should consider their full impact on your life.

- **SEVERE 70 – 100 points:** Your Internet usage is causing significant problems in your life. You should evaluate the impact of the Internet on your life and address the problems directly caused by your Internet usage.

Coping

Cope

- (Of a person) deal effectively with something difficult

Coping

- "Efforts to master, reduce, or tolerate the demands created by stress"

- General points for consideration:
  1. People cope with stress in many ways.
  2. It is most adaptive to use a variety of coping strategies.
  3. Coping strategies vary in their adaptive value.

Common Coping Patterns

Giving up

- People may develop ***learned helplessness*** – "passive behavior produced by exposure to unavoidable aversive events".

  - Sometimes, could then be transferred to situations in which the person is *not* really helpless.

  - This then creates a passive reaction to stressful events, rather than active problem-solving.

A Small Story

- *"The very thought "Nothing I do matters" prevents us from acting."*

- Two fish were put into the same tank. One was big, and one small. The species of the small fish was one of the favorite foods of the big fish. The big fish took off after the little fish, but a pane of glass separated them, so the big fish smashed his face…over and over again. Finally, big fish gave up. Then the experimenters removed the pane of glass, but the big fish never again tried to eat the little fish. Sometimes the two fish would swim right past each other, sometimes they would even brush up against each other, but the big fish never made another attempt.

- Apparently, big fish was convinced he/ she couldn't do it, no matter how hard he tried.

- Morale of the story:

- we can assume our helplessness is permanent, even when it isn't. If we make that assumption, we just give up. We feel hopeless and have no energy, because we believe all our efforts are in vain

Giving up, continued

- **Cognitive interpretation** of aversive events may determine whether we feel helpless or not.

  - People with a **pessimistic explanatory style** view aversive events as "out of their control", feel helpless, and give up.

- In general, it has been found that optimists (people who have general expectancies of good outcomes) seem to be much more stress resistant than pessimists (people who have general expectancies for poor outcome).

- Hardiness is another characteristic that save an individual from harmful effect of stress. Hardy persons show three characteristics
  - Exhibit higher levels of commitment
  - They tend to perceive change as a challenge
  - They have high sense of personal control over events.

2. Acting aggressively

- Frustration caused by stressful events may elicit *aggression*, "behavior intended to hurt someone, either physically or verbally".

- People often act out toward others who had nothing to do with their frustration.

- Using a substitute target in this manner was called *displacement* by Freud.

- Freud believed aggressive acts could release pent-up emotional tension and called the process ***catharsis***.

- However, research finds that acting aggressively produces *more*, not less, anger and aggression.

3. Indulging yourself

- When stressed by events that are going poorly, some people seek out alternative sources of satisfaction:

    - Excessive eating, drinking, and smoking;

    - gambling & drug use; **and**

    - ***Internet addiction*** – "spending an inordinate amount of time on the Internet and inability to control online use"

4. Blaming yourself

- People often become highly critical of themselves when stressed.
- Albert Ellis called this ***catastrophic thinking***, which involves
  - Attributing failures to personal shortcomings;
  - Focusing on negative feedback; **and**
  - Being overly pessimistic about the future.

- This pattern perpetuates negative emotional reactions to stress.

5. Using defensive coping

- ***Defense mechanisms*** are "largely unconscious reactions that protect a person from unpleasant emotions such as anxiety and guilt".

- Defense mechanisms shield us from emotional discomfort caused by stress.

- However, most involve a degree of ***self-deception***, a distortion of reality.

- Defense mechanisms are considered normal, and can operate at various levels of consciousness.
- Can they ever be healthy?
  - Generally, they are not, because
    - They are avoidance strategies;
    - They often involve "wishful thinking"; **and**
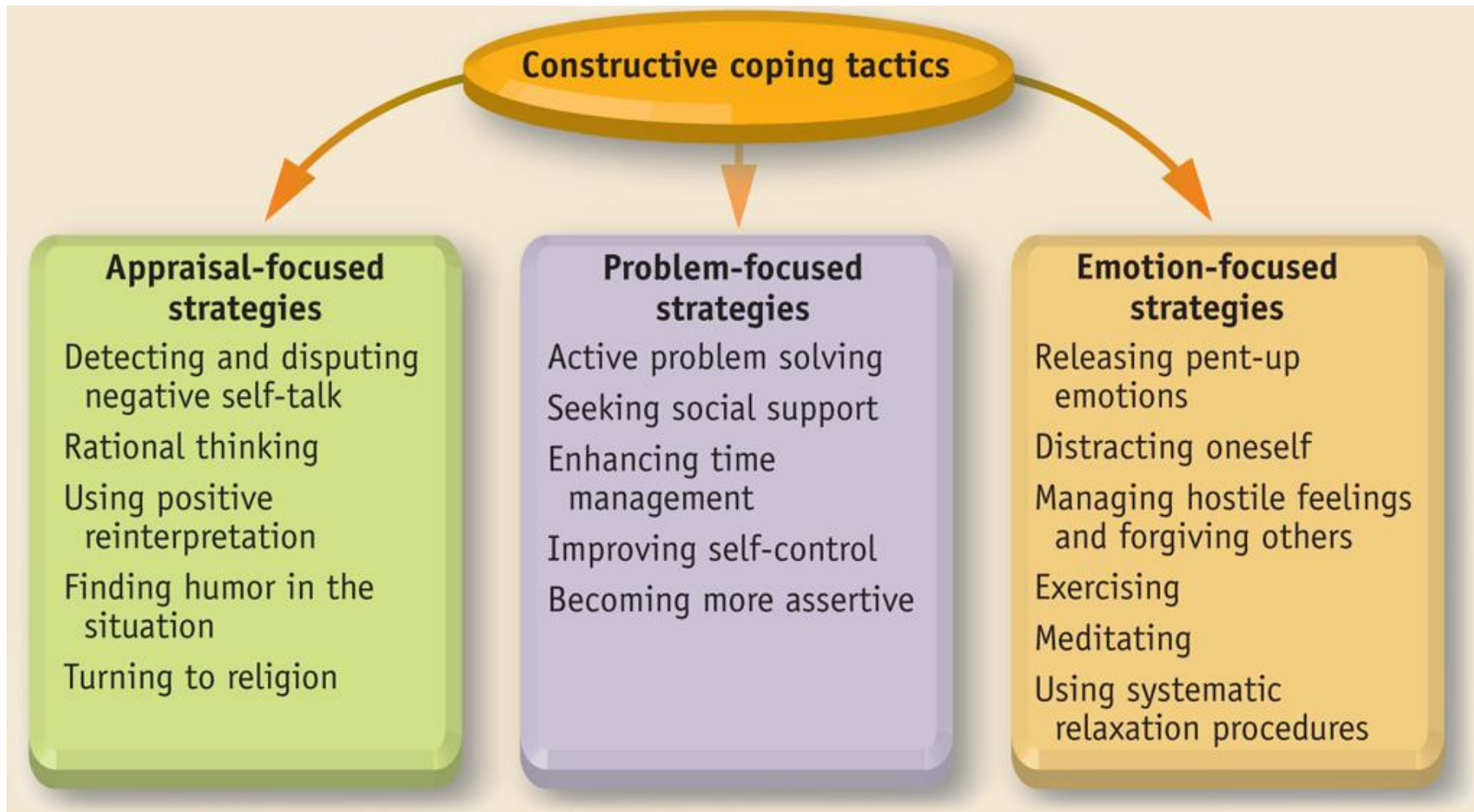   - Some have been linked to poor health.

Are they healthy?, continued

- Sometimes, however, they are useful for *severe* stress because they buffer us from extremely negative emotions.

  - (e.g., unrealistic optimism may benefit a terminally ill patient.)

There are three main categories of **constructive** coping strategies:

1. Appraisal-focused
2. Problem-focused
3. Emotion-focused

Constructive coping tactics

Appraisal-focused strategies
Detecting and disputing negative self-talk
Rational thinking
Using positive reinterpretation
Finding humor in the situation
Turning to religion

Problem-focused strategies
Active problem solving
Seeking social support
Enhancing time management
Improving self-control
Becoming more assertive

Emotion-focused strategies
Releasing pent-up emotions
Distracting oneself
Managing hostile feelings and forgiving others
Exercising
Meditating
Using systematic relaxation procedures

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Figure 4.6. **Overview of constructive coping tactics.** Coping tactics can be organized in several ways, but we will use the classification scheme shown here, which consists of three categories: appraisal-focused, problem-focused, and emotion-focused strategies. The list of coping tactics in each category is not exhaustive. We will discuss most, but not all, of the listed strategies in our coverage of constructive coping.

Appraisal-Focused Coping

- Our *appraisal* (or beliefs about stressful events) is critical to the coping process.

  - Negative appraisals (or beliefs) are often associated with catastrophic thinking, which exaggerates the magnitude of our problems.

  - Positive (realistic and/or optimistic) appraisals allow constructive coping.

- Positive reinterpretation can also buffer stress in the following ways:
  - We can recognize that "things could be worse".
  - We can utilize "benefit finding" in a bad situation (searching for something good in a bad experience).

Problem-Focused Coping

- **Using systematic problem-solving**
- Evidence shows that problem-solving skills can be increased through training (Heppner & Lee, 2002, 2005) and by using these steps:
    1. Clarify the problem.
    2. Generate alternative courses of action.
    3. Evaluation alternatives and select a course of action.
    4. Take action while maintaining flexibility.

- **Seeking help**
  - It is often helpful to seek aid from friends, family, coworkers, and neighbors.
  - Cultural factors in seeking help:
    - Asians, Asian Americans, and individuals from collectivistic cultures are less likely to seek help from others.
    - This is based in a cultural tendency to avoid "burdening" others with one's problems.

- **Using time more effectively: Time Management**
  - A common source of stress is feeling there is not enough time to accomplish tasks.
  - Often, this can be improved by using the time we have more effectively.

Using time more effectively, continued

- **The causes of wasted time**
  1. Inability to set or stick to priorities.
  2. Inability to say "no" to others' demands on our time.
  3. Inability to delegate responsibility.
  4. Inability to throw things away.
  5. Inability to accept anything less than perfection.

Using time more effectively, continued

- **The problem of procrastination**
  - About 70-90% of college students put off academic assignments (Knaus, 2000).
  - Many claim to benefit from this tactic (e.g., saying they "work well under pressure").

- **Why do students procrastinate?**
  - Desire to minimize time on a task.
  - Desire to optimize efficiency.
  - Close proximity to reward.
    - Students often get rewarded for it.
- However, procrastinators also tend to experience more anxiety and health problems.

- **Time management techniques**

  1. Monitor your use of time – keep a record to see where it all goes (see Figure 4.11).

  2. Clarify your goals – decide what you want to accomplish with your time.

  3. Plan your activities using a schedule – planning saves time in the long run.
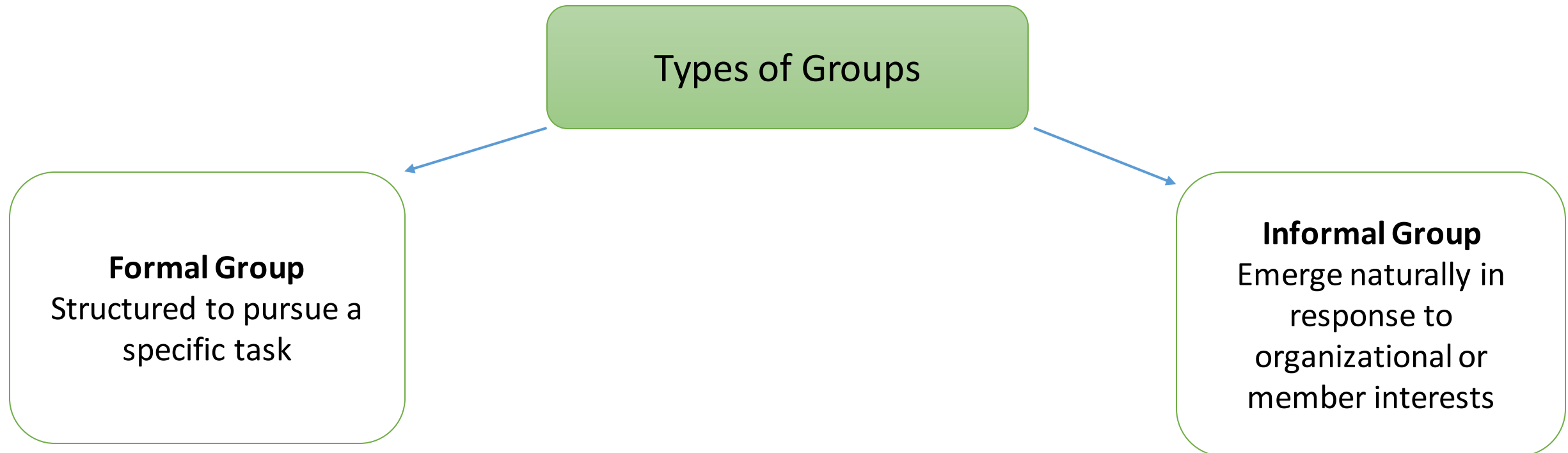
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7 a.m.	Wake-up, jogging, shower, breakfast with family					Sleep in	Sleep in
8							
9	Bus to campus	Molly to daycare	Bus to campus	Molly to daycare	Bus to campus	Walk at beach with Vic	Waffles for family. Read Sunday paper
10	Medical Anthropology	Prepare lecture	Medical Anthropology	Prepare lecture	Medical Anthropology		
11		Teach class		Teach class		Clean house	
12 noon	lunch	lunch	lunch	lunch and shopping with Barbara	lunch		Hiking and picnic with family and Tom
1 p.m.	Biology seminar	pick up Molly at daycare	writing at home		pick up Molly at daycare	Work in garden	
2		writing at home		Lab work	writing at home		
3		Drive Florrie to piano lesson					
4					Molly to dentist		
5			Grocery shopping			Practice guitar	
6	Dinner at home	Dinner at home	Dinner at home	Dinner at home	Dinner out with Vic	Pick up babysitter	
7	Spend time with Vic and kids			Spend time with Vic and kids		Party at Reid's	Call mother
8	Guitar lesson		Women's meeting	Band rehearsal			
9		Practice guitar	Practice guitar				Watch TV
10	Reading and journal						
11	Sleep						
12							
1 a.m.							

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Figure 4.11. **Example of a time log.** Experts recommend keeping a detailed record of how you use your time if your are to improve your time management. This example shows the kind of record keeping that should be done.

4. Protect your prime time – announce to others when you're blocking off certain times to work so you won't be interrupted.

5. Increase your efficiency. Try these tips:
   - Handle paper once.
   - Tackle one task at a time.
   - Group similar tasks together.
   - Make use of your "downtime".

Group Dynamics

- The social process by which people interact and behave in a group environment is called group dynamics.

- Group dynamics involves the influence of personality, power, and behavior on the group process.

Types of Groups

Formal Group
Structured to pursue a specific task

Informal Group
Emerge naturally in response to organizational or member interests

Group Development/Formation

Tuckman's Theory

Forming	The major goals of the group have not been established. The nature of the task or leadership of the group has not been determined
Storming	In this stage, the group is likely to see the highest level of disagreement and conflict. Members often challenge group goals and struggle for power. Individuals often vie for the leadership position during this stage of development.
Norming	This stage is characterized by the recognition of individual differences and shared expectations. Hopefully, at this stage the group members will begin to develop a feeling of group cohesion and identity.
Performing	Performing, occurs when the group has matured and attains a feeling of cohesiveness. During this stage of development, individuals accept one another and conflict is resolved through group discussion.
Adjourning	Not all groups experience this stage of development because it is characterized by the disbandment of the group.

Group Structure

- Effective group performance depends to a large extent, on the size and composition of the group. A group may consist of as few as two people

- Individual skills and performance must be a consideration in forming a group

- Diversification is a factor in both group development and skill requirement.

Group Structure

- Four Major Components of a Group

Group Size

Group Role

Group Norms

Group Cohesiveness

Group Size

- Group Size differ with respect to the type of group.

- Large groups are good for gaining divers perspective but they effect the individual performance.

Group Role

- Various parts played by the members of the group
- Two elements that define the identity of a group member

Role Perception	• An individual is expected to behave according to there own perception in a group
Role Expectation	• How others believe that one should behave in a group

Group Norms

- Acceptable standards of behavior within a group that are shared by the group's member.
- Group Norms mainly serve three functions

Predictive – basis for understanding others behavior

Relational – define relationships

Control – regulate the behavior of others

Group Cohesiveness

Cohesion
- Social — Interpersonal attraction that links the group together
- Task — Skills and abilities of the group members utilities to allow optimal performance
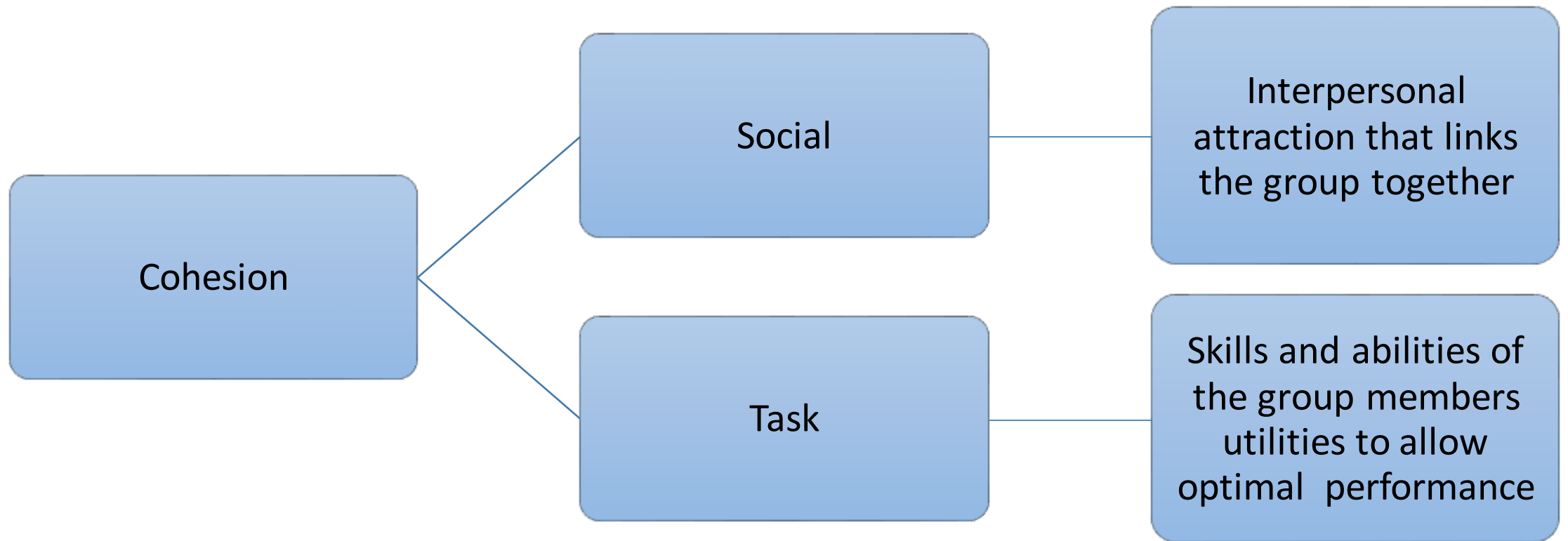
Who won, and why?

Did your group act like this...   ...Or like this?
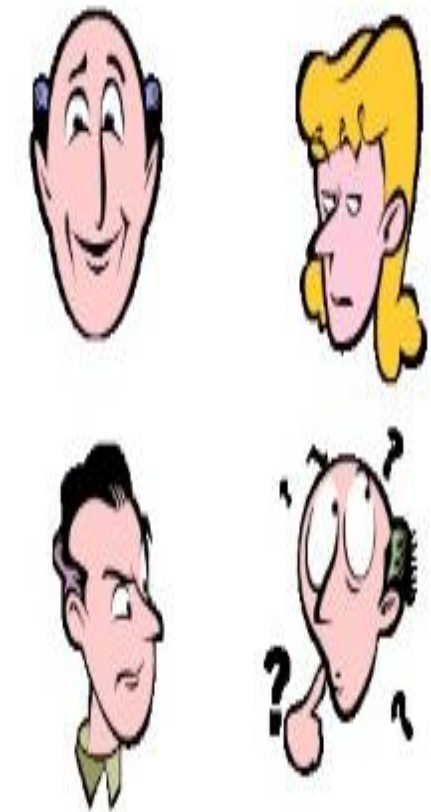
High Cohesiveness
- Unity
- Interactive
- Positive Feelings
- Ability to Cope with Problems
- More Productive

Low Cohesiveness
- Negative Feelings
- More Problems
- Less Productive

Groups with High Cohesiveness Get Better Results!

Group Phenomenon

Brain Storming	Groups can energize thought but can also be inefficient in sharing and compiling ideas
Social Loafing	The reduction of individual effort when people work in groups compared to when they work alone
Group Polarization	The tendency to respond in a more extreme way when making a choice or expressing an opinion as part of a group, as opposed to when responding individually
Group Think	Occurs when a group with a particular agenda makes irrational or problematic decisions because its members value harmony and coherence over accurate analysis and critical evaluation.

Technology, Society and Environment

Rajbala Singh

What is Technology?

- Origin: *techne* + *logos*
  - *Techne:* art, skill, craft, or the way, manner, or means by which a thing is gained

  - Logos: word or the utterance by which inward thought is expressed e.g., a saying, or an expression.

  - Technology: Words or discourse about the way things are gained.

- Technology can be defined as "purposeful intervention-by-design"

  - It is a human activity, known as 'technological practice', that results in technological outcomes that have impact in the world

  - Technology uses and produces technological knowledge

Technology: Contemporary Usage

- **Technology as a Process:**
  - Begins with a need and ends with a solution

- **Technology as an Objects:**
  - Set of means created by technological process such as, tools, machines, instruments, weapons, appliances etc.

- **Technology as Knowledge:**
  - The know-how behind technological innovation

- **Technology as Activities:**
  - What people do - their skills, methods, procedures, routines

- **Technology as a Socio-technical System:**
  - The manufacture and use of objects involving people and other objects in combination

  - Examples: internet (and its problems of security, privacy, and design), urban, regional and global transportation systems, regional and national power grids, telecommunication networks, the global financial system, environmental systems, national healthcare systems, cities and other large-scale projects with significant societal impact.

- Technology draws on science and contributes to it
  - Technology as eyes, ears of science and some muscles too…
  - Technology provide motivation and direction for theory and research

- It involves design

- It involves making

- It is multidimensional

- It is concerned with values

- Technology extends our abilities to change the world

- All technologies involve control

- All technological system can fail

- Technologies always have side effects

- It is Socially Shaped/Shaping?

ISSUES IN TECHNOLOGY

▸ Human presence

▸ Technological and social systems interact strongly

▸ The social system imposes some restrictions on openness in technology

▸ Decisions about the use of technology are complex

Society?

▸ A **society** is a group of people with common territory, interaction, and culture

  ▸ **Territory:** Most countries have formal boundaries and territory that the world recognizes as theirs. However, a society's boundaries don't have to be geopolitical borders, such as the one between two countries. Instead, members of a society, as well as non-members, must recognize particular land as belonging to that society.
    ▸ No Mans Land

  ▸ **Interaction:** Members of a society must come in contact with one another. If a group of people within a country has no regular contact with another group, those groups cannot be considered part of the same society. Geographic distance and language barriers can separate societies within a country.

  ▸ **Culture:** People of the same society share aspects of their culture, such as language or beliefs. **Culture** refers to the language, values, beliefs, behavior, and material objects that constitute a people's way of life. It is a defining element of society.

Technology and Human Evolution

▶ Where does our capacity for developing technology come from?

  ▶ The periodization of human history

  ▶ Paleolithic' ('ancient stone,' the period of chipped stone artifacts)

  ▶ 'Mesolithic' ('middle stone')

  ▶ 'Neolithic' ('new stone,' the period of polished stone artifacts)

  ▶ 'Bronze Age' (when copper and bronze artifacts appear)

  ▶ 'Iron Age' was inspired by human tool production and tool use

It reflects that all species of humans that have ever existed probably used and modified tools

- Humans: On the top of the food chain to dominate all other life forms on planet earth
- Man the tool maker
  - Paleolithic Technology ([Kenneth Page Oakley](#))

  - *As long as there have been people, there has been technology. Indeed, the techniques of shaping tools are taken as the chief evidence of the beginning of human culture. On the whole, technology has been a powerful force in the development of civilization*

  - *In the broadest sense, technology extends our abilities to change the world: to cut, shape, or put together materials; to move things from one place to another; to reach farther with our hands, voices, and senses.*

- Are humans the only tool-using species on earth?

  - Otters using stones to crack crab shells, birds that use stones to crack snail shells, and chimpanzees that use twigs to catch termites, ants, or honey from a honey comb

- Artifacts are being used to manipulate nature

- So, how special are Humans in use of technology?

- Does Human tool use differ qualitatively from those of other species?

Technological object vs social object

Sherry Turkle: Alone together

Ted Talk: Connected yet disconnected by Sherry Turkle

Technology and Society

"We have embraced technologies because of the wonders we have accomplished with them and the promise that they will continue to unlock new possibilities. Technologies have helped us to eradicate diseases, communicate with friends around the world, and even eliminate bad breath. New technologies are often equated with progress itself in large part because they can help us to do things that were not previously possible and solve problems that have plagued humanity for centuries."

▸ Does technology has some negative social and environmental side effects?

▸

Connected, Yet Disconnected (Dr. Hirnmay Ghosh, IEE Senior Member)

Dear Editor:

The sociological impact of modern technology is indeed a concern. I happened to witness a small event – but with a deep implication. I thought of sharing it with IEEE SSIT members.

"It was a Saturday evening. My spouse and I went to a nearby coffee-shop to have a dessert and some quiet time together … There they came … a young couple. They walked in and occupied a cozy corner. A chocolate cladpastry and a cup of coffee appeared on their table in due time. The man took a sip and the woman took a bite … and then a cell phone rang. Was it an urgent business call? The man got engrossed …The woman finished the pastry in silence…. some more time … and she pulled out her cell phone from her purse. She fiddled with the buttons and somebody was there at the other end … She got quite frivolous as she talked on. Time ticked by….

The man finished his coffee with a frown on his forehead. After a while, the check was presented … the man quickly paid and they walked out …Cell phones were still glued to their ears … hands were not held and glances were not stolen. We thanked our stars that we did not belong to that generation. Cell phones have the great power of "Connecting people" … do they have the power to disconnect too?"

- Technological Singularity (Ray Kurzweil) and Cyborgs
  - Bridging the gap
    - Natural born cyborgs vs. Empowered Cyborgs
    - Embodying values in Technology

I'm a Cyborg, But That's OK

▸ Humans have a lot of emotional baggage. Perhaps one of the reasons Young-goon decided she was a cyborg was because she stopped feeling things — or she felt too much and inadvertently turned it all off. We get glimpses of her past, which include a grandmother who was convinced her offspring were all mice and a mother who avoided her child's existential questions by turning to radish. Later, when she finds the secret cyborg manifesto while staying at the hospital, it stipulates that theseven deadly sins for cyborgs are sympathy, thankfulness, hesitation, daydreaming, being sad, restlessness, and feeling guilty

▸

Seeking comfort in machinery:
Since Young-goon can't relate to other humans, she seeks solace in her conversations with the vending machine and the pay phone, and she takes orders from the mysterious voice coming out of her radio. The nurses can't get her to eat, so at one point in the film, they decide to give her shock therapy. Lying there with hundreds of wires sticking out of the treatment cell they put her in, Young-goon feels right at home. She reveals that she was raised by electrical wires in an incubator. "I feel like I've been born again," she says as the session ends and her toes light up. She walks off her wheelchair, goes upstairs, loads up her ammo, and goes on a full-scale massacre of the evil white coats, storing cartridges in her mouth and dispatching bullets machine gun-style from her dainty fingers.

Positive and Negative Appraisal of Technology

‣ Esther Dyson, one of the early enthusiasts for the Internet, states in her book *Release 2.0* . :

‣ 'The Net offers us a chance to take charge of our own lives and to redefine our role as citizens of local communities and of a global society. It also hands us the responsibility to govern ourselves, to think for ourselves, to educate our children, to do business honestly, and to work with fellow citizens to design rules we want to live by.' (Dyson, 1997).

‣ Dyson argues that the Internet offers us the chance to build exciting communities of likeminded individuals, enables people to redefine their work as they see fit, fosters truth-telling andinformation disclosure, helps build trust between people, and can function for people as a second home.

▶

For a negative appraisal, consider the opinion of the Council of Torah Sages, a group of leading orthodox rabbis in Israel

- in 2000 issued a ruling banning the Internet from Jewish homes. The Council claimed that the Internet is "1,000 times more dangerous than television" (which they banned thirty years earlier). The Council described the Internet as "the world's leading cause of temptation" and "a deadly poison which burns souls" that "incites and encourages sin and abomination of the worst kind." The Council explained that it recognized benefits in the Internet, but saw no way of balancing these with the potential cost, which they defined as exposure to "moral pollution" and possible addiction to Internet use that could quash the motivation to learn Torah, especially among children.

The Future of Artificial Intelligence and Humans

▸ Whether AI will be more powerful than Human cognition?

▸ What should be the role of Humans in overly developed technological world?

▸ Technology being slave of humans vs. humans being the slave of technology?

Technology: Issue of Acculturation and Assimilation

▸ To assimilate or acculturate

Perceived Benefits

▶ Access to information

▶ Information Dissemination

▶ Communication

▶ Developing and maintain social relationships

▶ Community formation and social organization

▶ Production and commerce

▶ Leissure and entertainment

▶ Identity formation and Psychological development

▶ Learning and cognitive development

▶ Cultural Understanding

▶

Perceived Harms

- Information Overload
- False Information
- Harmful Information
- Harmful communications
- Harmful effect on social relationship
- Harmfull effects on community and social organisations
- Harmful effects on identity formation and psychological development.
- Harmful effects on learning and cognitive development.
- Cultural fragmentation.
- Loss of the sense of reality.
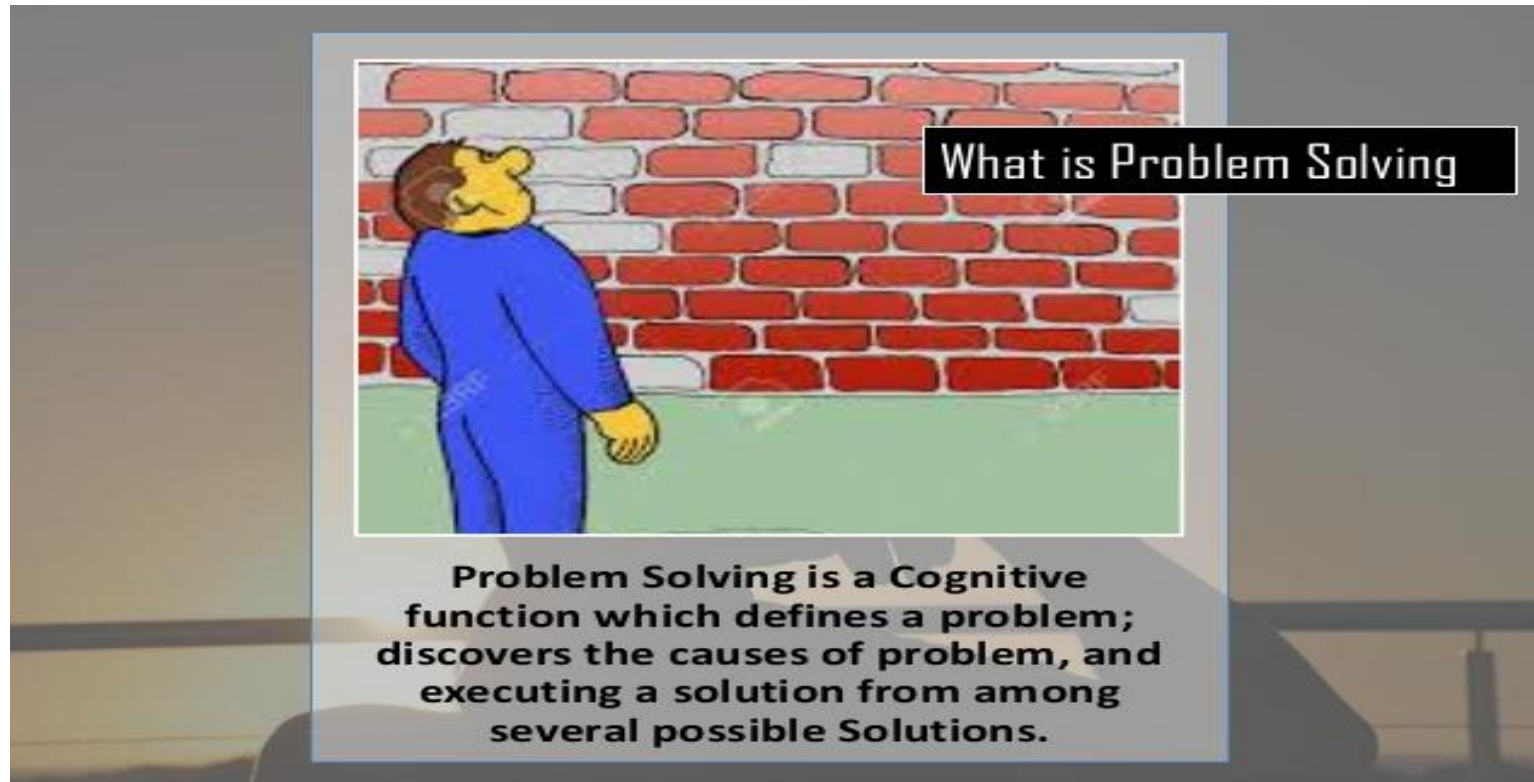- Loss of privacy and private-public boundaries.
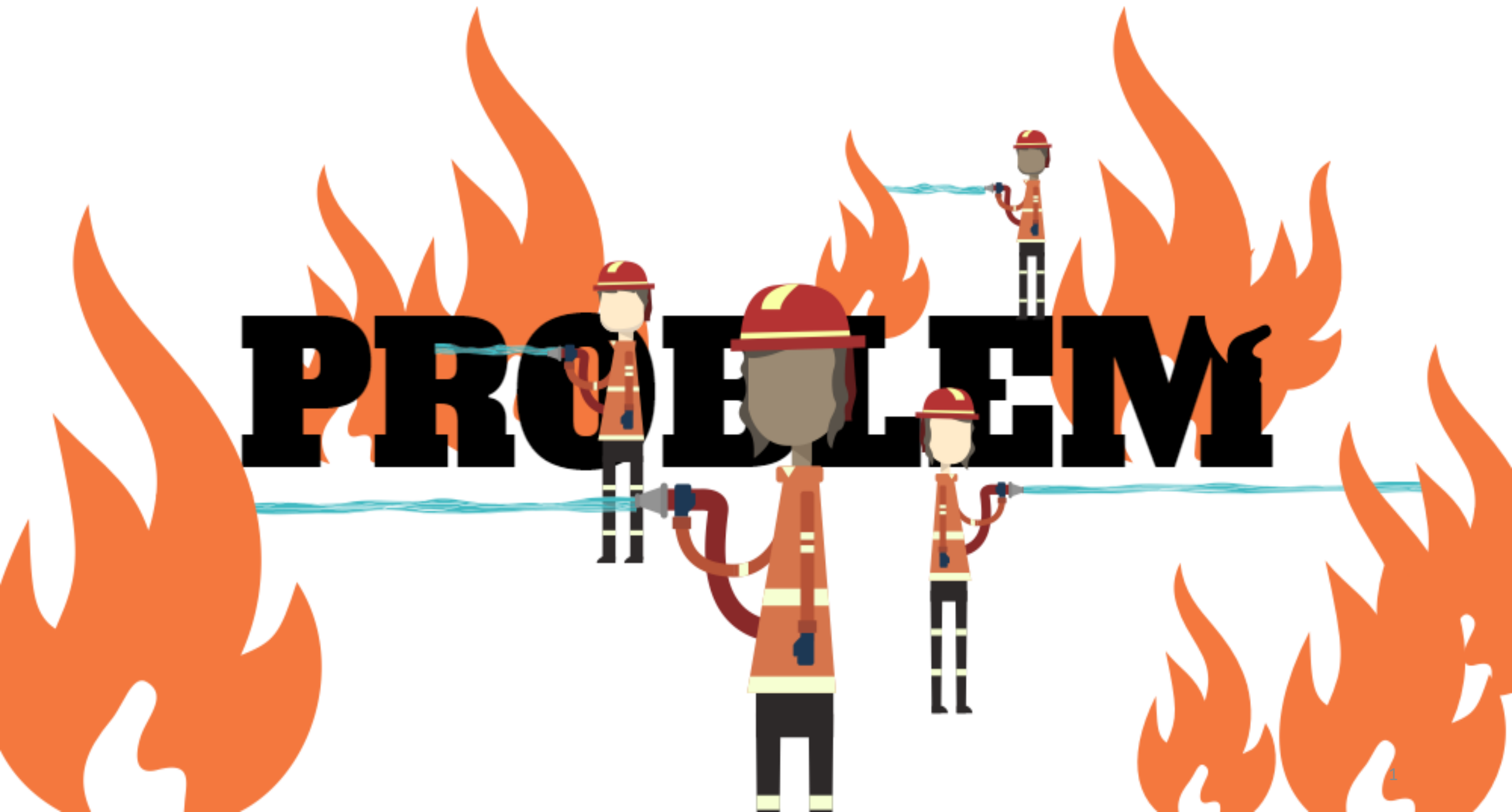
Problem Solving

- A problem occurs when there is an obstacle between a present state and a goal, and it is not immediately obvious how to get around the obstacle.

What is Problem Solving

Problem Solving is a Cognitive function which defines a problem; discovers the causes of problem, and executing a solution from among several possible Solutions.

- (9 +43 - 4) ÷24 – 4
- (8 + 3) + (8 +16 ÷ 4)
- X in an algebraic equation, and
- calculating the trajectory of a rocket's flight

- Determining what really happened during the 'Demolition of the Babri Masjid'
- Suggesting measures to address the current environmental issues.
- Predicting how to dispose of nuclear waste safely.

- **Well-defined problems** usually have a correct answer; certain procedures, when applied correctly, will lead to a solution.

- **Ill-defined problems**, which occur frequently in everyday life, do not necessarily have one "correct" answer, and the path to their solution is often unclear.

| Ill-Defined	Well-Defined
Given state is not clearly specified , unclear goal state, unclear set of allowable procedures and multiple solutions For example: How should we resolve global warming? Argumentation, attitudes and "metacognition highly predicted problem-solving score[	Given state is clearly specified, there are clearly specified goals, clearly specified set of allowable procedures and one clear solution For example: 5x=10 Domain knowledge and justification skills highly predicted problem-solving scores

Decision Making

- Decision making occurs as a reaction to a perceived problem

- Making sound decisions is a skill set that needs to be developed like any other

- Nothing will test your leadership mettle more than your ability to make decisions.

- Gut instincts can only take you so far in life.

- Operating outside of a sound decision making framework will eventually fall prey to an act of oversight, misinformation, misunderstanding, manipulation, impulsivity or some other negative influencing factor.

Rational Decision Making Process
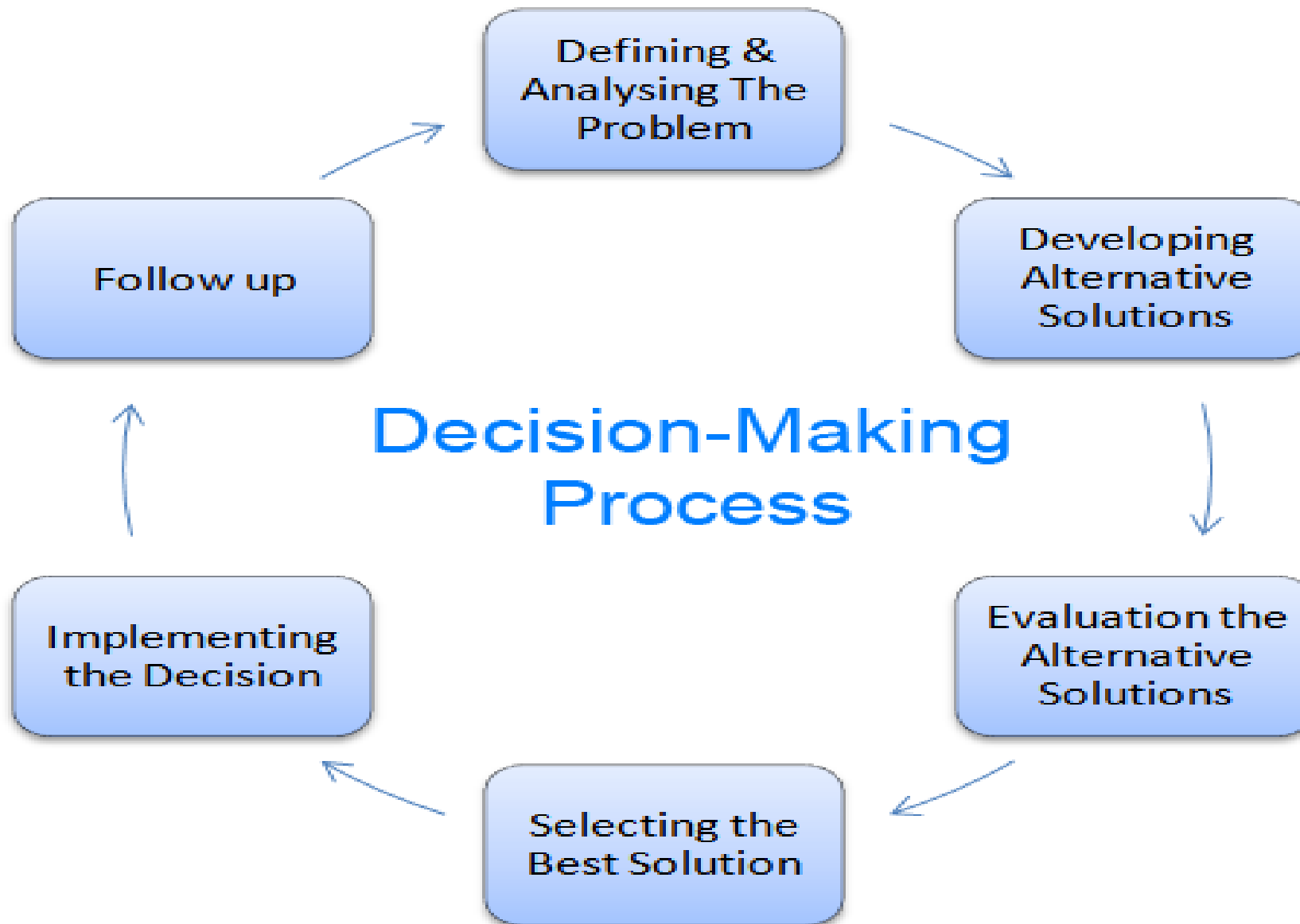
Assumptions of the Model

- Complete knowledge of the situation

- All relevant options are known in an unbiased manner

- The decision-maker seeks the highest utility
- No time constrain

- Problem solving is a "higher –order cognitive process that requires the modulation and control of more routine or fundamental skills"(Goldstein & Levin,1987)

- Everyday we solve a number of problems ranging from simple to complex. Some problems take little time whereas some take much time to solve. We look for alternative solutions if do not get the right kind of resources to solve the problem in hand.

1. Problem identification: Do we actually have a problem?

2. Problem definition and representation: What exactly is our problem?

3. Strategy formulation: How can we solve the problem?

The strategy may involve analysis—breaking down the whole of a complex problem into manageable elements. Instead, or perhaps in addition, it may involve the complementary process of synthesis—putting together various elements to arrange them into something useful.

Another pair of complementary strategies involves divergent and convergent thinking. In divergent thinking, you try to generate a diverse assortment of possible alternative solutions to a problem. Once you have considered a variety of possibilities, however, you must engage in convergent thinking to narrow down the multiple possibilities to converge on a single best answer.

4. Organization of information: How do the various pieces of information in the problem fit together?

5. Resource allocation: How much time, effort, money, etc., should I put into this problem?

6. Monitoring: Am I on track as I proceed to solve the problem?

7. Evaluation: Did I solve the problem correctly?

Classic Problems and General Methods to Solution

- GENERATE AND-TEST TECHNIQUE – generating possible solutions and then testing them.

- It fails when there are many possibilities and no particular guidance for generation process.

- It can be useful, however, when there aren't a lot of possibilities.

- WORKING BACKWARDS - Analyzes the goal to determine the last step needed to achieve it, then the next-to-the last step and so on.

When to use the work backward strategy

- The final result is clear and the initial portion of a problem is obscure.

- A problem proceeds from being complex initially to being simple at the end.

- A direct approach involves a complicated equation.

- A problem involves a sequence of reversible actions.

- MEANS-ENDS ANALYSIS - *goal-based* problem solving, a framework in which the solution of a problem can be described by finding a sequence of *actions* that lead to a desirable goal.

- Create a sub-goal.

- Allows both backward and forward searching

- The MEA technique is a strategy to control search in problem-solving.

Tower of Hanoi Problem

- **Tower of Hanoi problem** as three discs stacked on the left peg, and the goal state as these discs stacked on the right peg. Try solving this problem by following the instructions in the demonstration.

- **1.** Discs are moved one at a time from one peg to another.

- **2.** A disc can be moved only when there are no discs on top of it.

- **3.** A larger disc can never be placed on top of a smaller disc.

- https://www.youtube.com/watch?v=rVPuzFYIfYE

Tower of Hanoi – 3 Discs
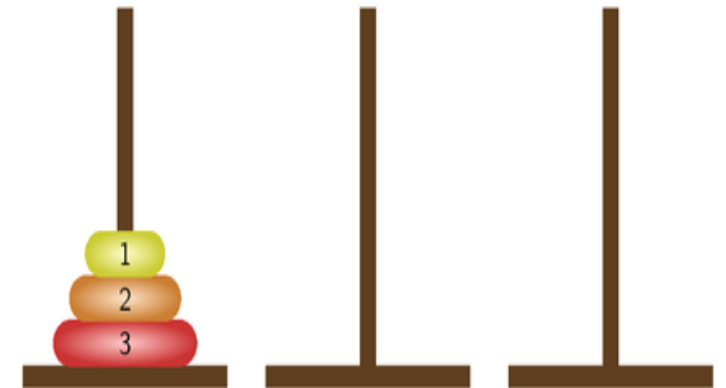
BLOCKS TO PROBLEM SOLVING

- **Functional Fixedness** - refers to people's tendency to see objects as serving conventional problem-solving functions and thus failing to see possible novel functions.

Figure 7.2   The String Problem
How do you tie the two strings together if you cannot reach them both at the same time?

https://www.youtube.com/watch?v=Uv-KycvzHCA

- Mental set is the tendency to adopt a certain framework, strategy, or procedure or, more generally, to see things in a certain way instead of in other, equally plausible ways.

Draw four straight lines that pass through each of the nine dots without removing your pencil from the paper.

Arrange six matches so that they form four triangles with all sides equal to the length of one match.
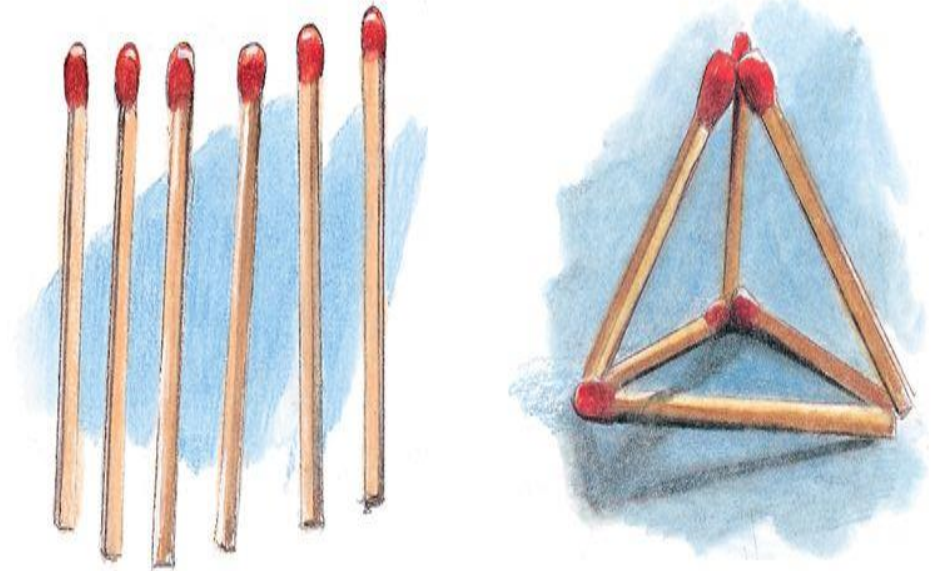
Nine dots mental set

� Most people will not draw lines that extend from the square formed by the nine dots

✖ To solve the problem, you have to break your mental set

14
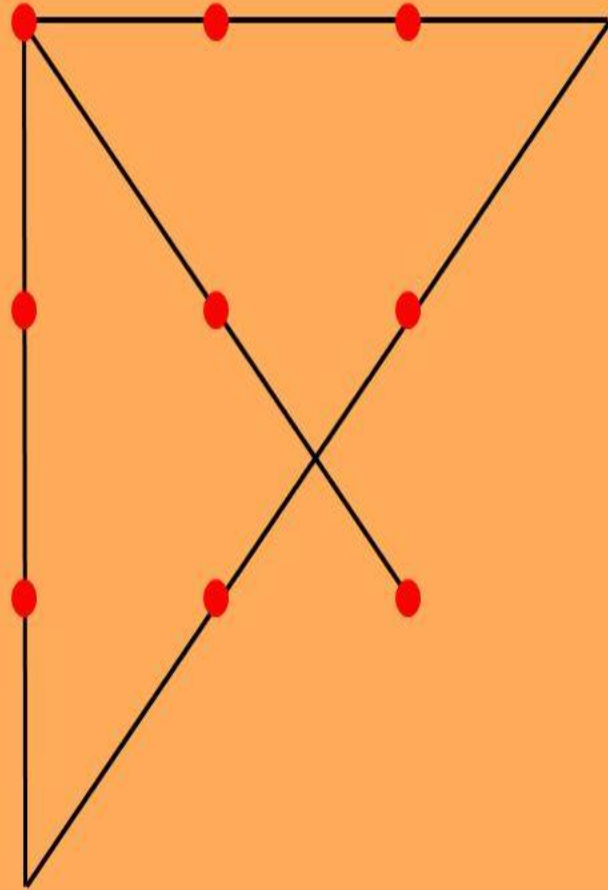
The Matchstick Problem

Our mental set from our past experiences with matchsticks predisposes our arranging them in two dimensions.

To arrange six matches to form four equilateral triangles, you must view the problem from a new perspective.

18

- Incubation Effects - People often report that after trying to solve a problem and getting nowhere, they can put it aside for hours, days, or weeks and then, upon returning to it, can see the solution quickly.