Attribution Theory

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EPSY 530

Where do you attribute your success?

Two students take an exam. One of them passes.

To what might each of them attribute the outcome?

How will that impact the motivation of each student in the future?

What attribution theory assumes

- The causes individuals attribute to events have an impact on the way they cognitively, affectively, and behaviorally respond on future occasions.

- People are naive scientists: trying to understand causal determinants of theirs and other's behavior.
  - Why things happen, why people say and do things

Relevant to many domains

- Achievement

- Affiliation

- Sports

- Politics

- Economics

- Criminal justice

- How do attributions explain achievement motivation?

- How do attributions and the attributional process influence subdomains in achievement?

What is an attribution?

- Attributions may or may not be actual causes.
  - Gives precedence to "an individual's construction of reality."

- In line with other constructive cognition/learning theorists:
  - Bruner
  - Piaget
  - Vygotsky

The roots of attribution theory

- Attribution theory is rooted in the work of Kurt Lewin, Julian Rotter, John Atkinson, Fritz Heider, Harold Kelley, and Bernard Weiner.

- Heider (1958) argued that people try to identify the dispositional properties that underlie observed behavior and do so by attributing behavior either to:
    - external (situational) causes
    - internal (dispositional) causes.

The roots of attribution theory

- Key player: Bernard Weiner and his colleagues in the early 1970s.
    - Weiner was a student of Atkinson.
    - 3 dimensional model of attribution theory

- Attribution theorists investigate the perception of causality, or the judgment of why a particular incident occurred. The allocation of responsibility manifestly guides subsequent behavior (Weiner, 1972).

Weiner's attribution theory model

- Antecedent conditions
- Perceived causes
- Causal dimensions
- Psychological consequences
- Behavioral consequences
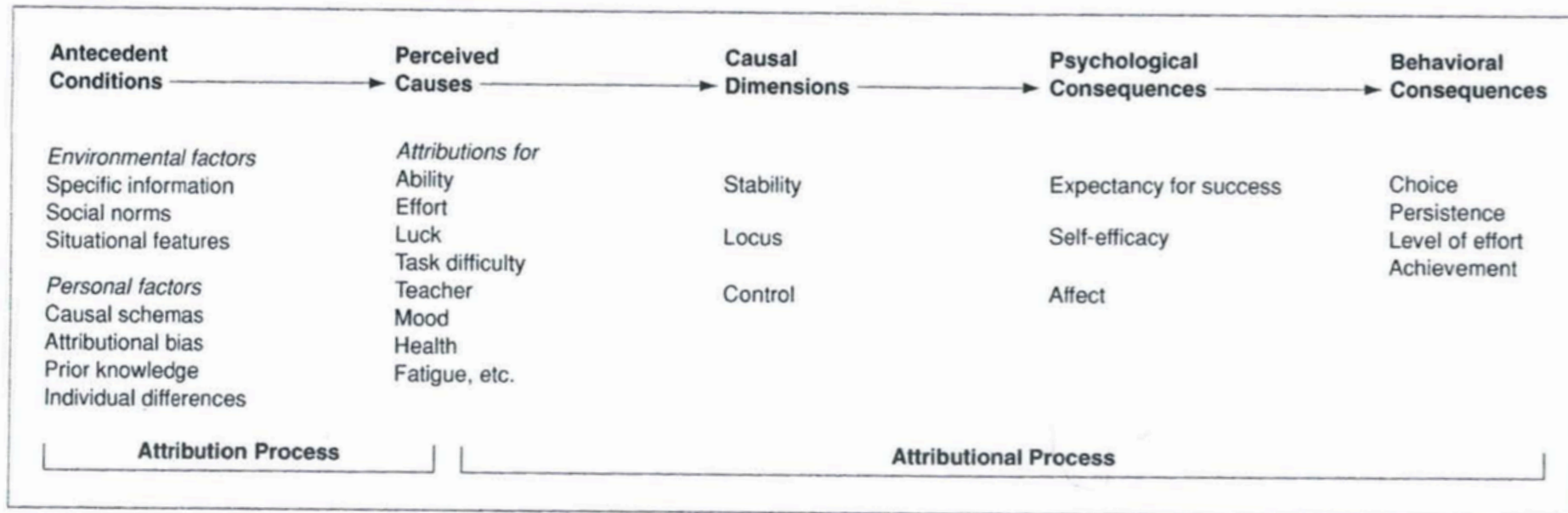
The general attributional model

Figure 3.1 Overview of the general attributional model
Material drawn from Weiner (1986, 1992).

Antecedent conditions: Environmental

Specific Information & Social Norms

- Actor-observer information differences

- Feedback: task, teacher, and more.
  - Task difficulty relative to peers

Consensus, Consistency, Distinctiveness

- Basic question for perceiver: how to assign causality to the person or the environment, in light of principle that behavior is both (Kelley, 1967).
    - Distinctiveness of entities
    - Consensus across persons
    - Consistency over time and situations

- Evidence shows that people do not weight all factors equally!
    - Consistency most used
    - Consensus least used

Attributions & the movies

- If Anne recommends a movie to Roger, he must decide:
  - Is the movie good? (the entity)
  - Does Anne's recommendation derive from something about her? (the person)

What are situations in which Roger might attribute the recommendation to Anne? To the movie?

Kelley, 1967 as described in Schunk et al., 2002

Antecedent conditions: Personal factors

- Causal rules and schemas
  - The various principles and beliefs that individuals have learned about causality they use to make attributions

- Six general principles (Fiske & Taylor, 1991):
  - Causes must precede events.
  - Events that share temporal contiguity with target event are more likely to be seen as causal factors.
  - Events that spatially contiguous are more likely to be linked in cause/effect relationship.
  - Perceptually salient stimuli more likely to be seen as causal than stimuli in the visual background
  - Causes resemble effects.
  - Representative causes are attributed to effects.

Attributional biases

- Attributional biases
  - Actor-observer perspective - attribute others behavior to disposition, but own to situation
  - Self-serving bias - accept personal responsibility for success, deny responsibility for failure
    - People more likely to accept credit for success than deny responsibility for failure (Fiske & Taylor, 1991).
  - Self-centered bias - Regardless of success or failure, people accept more personal responsibility for joint outcome
    - False consensus effect - individuals come to see their behavior as typical, perhaps by associating with other with similar views

Fundamental attribution error

Classic study by Jones & Harris, 1967:

In each of the experiments the subjects were instructed to estimate the "true" attitude of a target person after having either read or listened to a speech by him expressing opinions on a controversial topic. Independent variables included position of speech (pro, anti, or equivocal), choice of position vs. assignment of position, and reference group of target person. The major hypothesis (which was confirmed with varying strength in all three experiments) was that choice would make a greater difference when there was a low prior probability of someone taking the position expressed in the speech. Other findings of interest were: (1) a tendency to attribute attitude in line with behavior, even in no-choice conditions…

Antecedent conditions: Personal factors

- Prior knowledge and individual differences

- Rotter (1966) - Locus of control
  - Internals - high contingency between behavior and outcomes
  - Externals - Not a strong link between behavior and outcomes

Learned helplessness

- Learned helplessness theory addresses individual differences.
- Perception of little relationship between behaviors and outcomes.

- *These included significantly lower initial estimates of success, less persistence, attribution of failures to lack of ability and of successes to factors beyond personal control, and greater decrements in expectancy of success following failure.*

  - Butkowsky, I. S., & Willows, D. M. (1980). Cognitive-Motivational Characteristics of Children Varying in Reading Ability: Evidence for Learned Helplessness in Poor Readers. *Journal of Educational Psychology*, *72*(3), 408–422. http://doi.org/10.1037/0022-0663.72.3.408

Perceived causes

- Early attributional research looked at four causes for success/failure:
    - Ability
    - Effort
    - Task difficulty
    - Luck

- Later research included more attribution possibilities
    - These items came from self-reported study data.
    - Ability and effort seen as causes cross culturally.

Content of attributions

Table 3.2 Summary of Perceived Causes in Different Domains

Achievement	Interpersonal Attraction	Wealth/Poverty	Health/Illness
Aptitude	Physical attractiveness	Family background	Heredity
Skill	Personal style	Intelligence	Personality
Stable effort	Physical hygiene	Effort	Family history
Unstable effort	Personality	Schooling	Life stress
Task difficulty	Status	Government policies	Fatigue
Luck	Timing and availability	Prejudice and discrimination	Good/poor habits
Interest	Health	Luck	Weather
Mood	Mood	Health	Exposure to germs
Fatigue	Wealth		Luck
Health			
Help from others			

From *An Attributional Theory of Motivation and Emotion*, by B. Weiner, 1986, New York: Springer-Verlag. Copyright © 1986 by Springer-Verlag New York, Inc. Adapted by permission.

Causal dimensions

- The motivational push of attributions derives from their classification along dimensions based on an analysis of their causal structure.

- Dimensions
  - Stability
  - Internality
  - Controllability

- All of these impact:
  - Expectancy beliefs
  - Emotions
  - Motivated behaviors

Weiner's dimensions

Original Scheme

Stability

Locus

	Internal	External
Stable	Ability	Task difficulty
Unstable	Effort	Luck

Locus dimension

- Is the cause is internal or external to the individual?

- Internal
  - Ability
  - Effort

- External
  - Task difficulty
  - Luck

Stability dimension

- How stable the cause is over time?
  - Stable versus unstable.
  - Causes: Fixed or variable over situation and time?

  - Better adaptively to not have a purely locus model: we want to think that internal effort is unstable cause over stable ability.
  - Globality vs specificity: how many situations does a cause generalize to?

The 3rd dimension: Controllability

Stability	Locus			
	Internal		External	
	Controllable	Uncontrollable	Controllable	Uncontrollable
Stable	Long–term effort	Aptitude	Instructor bias/ favoritism	Ease/difficulty of school or course requirements
Unstable	Skills/knowledge Temporary or situational effort for exam	Health on day of exam Mood	Help from friends/teacher	Chance

Controllability dimension

- How controllable the cause is
  - Controllable versus uncontrollable
  - Are there external controllable causes?

- Intentionality and controllability
    - According to Weiner, the same thing!

Dimensions & Expectancy Beliefs

Some notable findings:

- Failure: adaptive to attribute to unstable and controllable causes.
- For attributions to have effects, they must not be discredited by future outcomes
- Realistic ability judgments led to the best performance.
- Stability dimension more closely linked to expectancy for success than locus

Attributions & Emotions

- So what about emotions?
  - Attribution theory doesn't explain emotions.
  - Emotions are really just kinds of attributions.

- Emotions ≠ values from expectancy value theory!

Developmental differences

- Findings for attribution theory may vary by age.
  - Weiner (1985) described ability as the prototypic example of an internal, stable, and uncontrollable causal attribution, whereas effort exemplifies an internal, unstable, and controllable attribution.

- Research shows children do not have the same meanings for attributions as adults!

Nicholl's developmental stages & concept of ability

TABLE 1.3 Levels of Differentiation of Ability and Effort

1. *Effort or outcome is ability.* Effort, ability, and performance outcomes are imperfectly differentiated as cause and effect. Explanations of outcomes are tautological. Children center on effort (people who try harder than another are seen as smarter even if they get a lower score) or on outcome (people who get a higher score are said to work harder—even if they do not—and are seen as smarter).

2. *Effort is the cause of outcomes.* Effort and outcomes are differentiated as cause and effect. Effort is the prime cause of outcomes: equal effort is expected to lead to equal outcomes. When attainment is equal but effort differs, this is seen as resulting from compensatory effort by students who try less (e.g., she worked really hard for a while) or misapplied effort by those who try harder (e.g., he went quickly and made mistakes).

3. *Effort and ability partially differentiated.* Effort is not the only cause of outcomes. Explanations of equal outcomes following different efforts involve suggestions that imply the conception of ability as capacity (e.g., the person trying less is faster or brighter). These implications, however, are not systematically followed through (e.g., children may still assert that individuals would achieve equally if they applied equal effort).

4. *Ability is capacity.* Ability and effort are clearly differentiated. Ability is conceived as capacity which, if low, may limit or, if high, may increase the effect of effort on performance. Conversely, the effect of effort is constrained by ability. When achievement is equal, lower effort implies higher ability.

In the .... f ..

Table 3.3 Developmental Differences in Children's Concepts of Ability, Effort, Difficulty, and Luck

Differentiating Ability and Effort	Differentiating Ability and Difficulty	Differentiating Ability and Luck
1. *Effort or outcome is ability* (3–5 years) People who try harder are smarter. People who get a higher score try harder and are smarter.	1. *Egocentric (3–5 years)* Task difficulty is relative to individuals' ability to succeed. "Hard" means "hard for me," which also means "I'm not good at it."	1. *Luck and skill are undifferentiated* (3–5 years) Luck or chance tasks are seen as easier or requiring less effort than skill tasks.
2. *Effort is the cause of outcomes* (6–8 years) People who try equally hard should have the same outcome, regardless of ability.	2. *Objective (5–6 years)* Levels of difficulty of tasks are recognized as independent of individuals' ability to succeed. Attributions for failure, however, still confound low ability and high task difficulty such that "it's hard" still means "it's hard for me," which means "I'm not good at it."	2. *Skill and luck are partially differentiated, but basis unclear* (6–8 years) Effort is still expected to improve performance on both tasks, but a skill task is seen as more amenable to effort.
3. *Effort and ability are partially differentiated* (9–10 years) People who try equally hard may not have the same outcome because of ability, but do not follow this principle systematically.	3. *Normative (by age 7)* Ability and task difficulty are differentiated in terms of success rates of others. Tasks that fewer people succeed on are harder and require more ability, so "it's hard" is different from "it's hard for me."	3. *Skill and luck are partially differentiated but basis is not explicit* (9–10 years) Effort is still expected to improve performance on both tasks, but a skill task is seen as more amenable to effort because individuals can compare stimuli on skill task.
4. *Ability is capacity* (12–13 years) Ability and effort are separate and can covary. Ability level acts as a capacity limitation and can constrain effort. If ability is low, there is some limit to outcome, regardless of effort level. Also, if outcome is equal, then lower effort implies higher ability.		4. *Skill and luck are fully differentiated* (12–13 years) Effort can't affect outcome on luck tasks, whereas effort can influence performance on skill tasks.

Adapted from Nicholls (1990).

Entity versus incremental view of intelligence

- Nicholls: Relied on Sternberg's investigations of intelligence.
  - The hardware of how your brain works to achieve goals.
    - Fluid
    - Crystalized

- Is it possible to look at intelligence as an attribution?
  - Intelligence is a fuzzy concept…

Next steps in attribution theory

- Sandra Graham
  - Follows up on work by Weiner.
  - Looks at aggression and achievement
  - How do we help unstable/external attributors improve performance?

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