Analyzing Social Interaction

Lecture 28
Human Nature

• Intelligent Creatures
  – Not Just Reflex, Taxis, Instinct, Conditioning
  – Behavior Reflects “Effort After Meaning”

• Social Creatures
  – Experience, Thought, Action in Social Context
  – Cooperation, Competition, Social Exchange

What is the relation between mental processes within the individual and social processes impinging from outside?
Analyzing Social Interaction
Lewin (1933/1935)

\[ B = f(P, E) \]

- **B** = Behavior
  - Overt Action
- **P** = Personal Determinants
  - Internal States and Dispositions
    - Cognitions, Emotions, Motivations
- **E** = Environmental Determinants
  - Physical Ecology
  - Social Ecology
Traditional Personality Psychology

\[ B = f(P) \]

- Emphasizes Personal Factors
  - Beliefs
  - Attitudes
  - Traits
  - Emotions
  - Motives
  - Values

- Situational Factors
  Largely Irrelevant

![Graph showing p(Smiling) for High and Low Friendliness]
Canonical Method for Personality Psychology

• Measure Some Personality Variable
  – Predictor Variable
    • Self-Report Questionnaire
    • Rating Scale
    • General Behavioral Observations

• Correlate “Individual Differences” with Behavior in Specific Situation
  – Criterion Variable
Conscientiousness and Punctuality
Ware & John (1995)

- UCB MBA Students
- Measure Trait of Conscientiousness
  - NEO-PI
- Punctuality at Scheduled Appointments
The Doctrine of Traits
After Allport (1937)

Behavior varies as a function of internal dispositions that render it coherent, stable, consistent, and predictable.

Traits
Attitudes
Moods
Motives
Values
Beliefs
Traditional Social Psychology
\[ B = f (E) \]

- Emphasizes Situational Factors
  - Physical
  - Social
    - Interpersonal
    - Organizational
    - Cultural
- Personal Factors Largely Irrelevant

\[ p(\text{Smiling}) \]

<table>
<thead>
<tr>
<th>Situation</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquaint</td>
<td>60</td>
</tr>
<tr>
<td>Stranger</td>
<td>10</td>
</tr>
</tbody>
</table>
Canonical Method for Social Psychology

• Manipulate Some Feature of the External Environment
  – Independent Variable
    • Expose Subjects to All Conditions or
    • Random Assignment of Subjects to Conditions

• Determine Effect of Manipulation on Behavior in Specific Situation
  – Dependent Variable
Appointment Time and Punctuality
Ware & John (1995)

- UCB MBA Students
- Appointment in Morning or Afternoon
- Punctuality at Scheduled Appointments

![Chart showing punctuality comparison between morning and afternoon appointments. The chart indicates a trend where morning appointments tend to be earlier compared to afternoon appointments.]
The Doctrine of Situationism
After Watson (1917); B.F. Skinner (1953)
[Often wrongly ascribed to Lewin (1938)]

Behavior varies as a function of features of the external environment, particularly the social situation.

“A person does not act upon the world, the world acts upon him.”
Personal and Environmental Factors Are *Independent*

\[ B = f(P, E) \]
Independence

\[ B = f (P, E) = f (P + E) \]

- Behavior is Predicted by Personality Trait
- Behavior is Affected by Situational Manipulation
- These Effects are Independent of Each Other
Conscientiousness, Appointment Time, and Punctuality
Ware & John (1995)

- UCB MBA Students
- Measure Trait of Conscientiousness
  - NEO-PI
- Appointment in Morning or Afternoon
- Punctuality at Scheduled Appointments
The Trait-Situation Debate

- The effect of the personality variable is the same, regardless of the situation the person is in.
- The effect of the situational variable is the same, regardless of the person in it.

Which effect is more powerful -- the person or the situation?
The Doctrine of Interactionism
After Bowers (1973)

Neither traits nor situations are the primary determinants of behavior, because...

Situations are as much a function of the person as the person’s behavior is a function of the situation.
Personal and Environmental Factors *Interact*

People Influence the Situations in which their Behavior Occurs.
The Person-by-Situation Interaction

\[ B = f(P, E) = f(P \times E) \]

- Behavior is Predicted by Personality Trait
- Behavior is Affected by Situational Manipulation
- These Effects are *Not* Independent of Each Other
Features of P/E Interaction

• The effect of a personality variable *depends on the situation* the person is in.
• The effect of a situation *depends on the kind of person* in it.
Other Forms of Interaction

\[ B = f(P \times E) \]

Crossover

Fan

Situation

Trait

- High
- Low

\[ p(\text{Behavior}) \]

A  B

Situation

A  B

Trait

- High
- Low

\[ p(\text{Behavior}) \]
Unidirectional Causation in the Person-Environment Interaction

People Influence the Situations in which their Behavior Occurs.
Feedback Relations in the Person - Environment Interaction (1)

If the Person can Affect the Environment...

Why Shouldn’t the Environment Influence the Person In Turn?
Feedback Relations in the Person - Environment Interaction (2)

Why Shouldn’t Behavior Influence the Person as Well?

If Personal Dispositions can Affect a Person’s Behavior...
Feedback Relations in the Person - Environment Interaction (3)

If the Environment Can Affect the Behavior that Occurs In It...

Doesn’t Behavior Also Affect the Environment?
The Doctrine of Reciprocal Determinism
After Bandura (1978)

The person, the environment, and behavior constitute a dynamic, complex system in which each element is both a cause and an effect of the others.
Interactionism and Reciprocal Determinism
After Bowers (1973), Bandura (1978)

Triadic Reciprocality
Properties of Reciprocal Determinism
After Bandura (1978)

• Triadic Reciprocality

  P \leftrightarrow B
  E \leftrightarrow B
  P \leftrightarrow E

• Not Necessarily Symmetry
  – Bidirectional Influences Not Necessarily Co-Equal

• Not Necessary Simultaneity
  – Bidirectional Influences Unfold Over Time
Analytic Decomposition of Reciprocal Determinism

Three Dialectics in Social Behavior

Between the Person and Behavior

Between the Person and the Environment

Between the Environment and Behavior
The Dialectic Between the Person and Behavior

Three Dialectics in Social Behavior
Personal Determinants of Behavior

*Internal States and Dispositions*

- Traits (Behavioral Dispositions)
- Attitudes (Evaluative Dispositions)
- Emotions (Feeling States)
- Motives (Drive States)
- Values (Priorities)
- Beliefs (Personal Convictions)
Measuring the Personal Determinants of Behavior

• Self-Reports
  – Questionnaires
  – Rating Scales

• Objective Behavioral Observations
  – Record Behavioral Frequencies
  – Rate Behaviors
The Problem of Trait-Names
Allport & Odbert (1936)

17,953 (or 17,954) different words
Describe psychological differences between people

Absent-minded  Bashful  Calculating
Dainty  Eager  Facetious  Gallant
Haughty  Idealistic  Jaunty  Kind
Laconic  Majestic  Narcissistic
Outgoing  Picky  Quarrelsome  Rash
Sagacious  Taciturn  Urbane
Vainglorious  Wanton  Xenophobic
Yappish  Zealous
The Structure of Personality

What are the Basic Dimensions of Individual Differences in Personality?

• Factor Analysis
  – Summarizes Patterns of Correlations Between Variables
  – Reveals Underlying Basic Dimensions
The “Big Five” Personality Traits
Costa & McCrae (1992), after Norman (1968)
also Goldberg (1990); Wiggins (1990); John (1990)

• Extraversion
  – Sociable, Forceful, Energetic, Adventurous, Enthusiastic, Outgoing

• Neuroticism
  – Tense, Irritable, Discontented, Shy, Moody, Un-Self-Confident

• Agreeableness
  – Forgiving, Undemanding, Warm, Not Stubborn, Not a Show-Off, Sympathetic

• Conscientiousness
  – Efficient, Organized, Not Careless, Thorough, Not Lazy, Not Impulsive

• Openness to Experience
  – Curious, Imaginative, Artistic, Wide Interests, Excitable, Unconventional
The Big Five:
A Universally Applicable Structure of Personality

Is s/he **Outgoing**? • Extraversion
Is s/he **Crazy**? • Neuroticism
Is s/he **Friendly**? • Agreeableness
Is s/he **Reliable**? • Conscientiousness
Is s/he **Interesting**? • Openness to Experience
The Structure of Attitudes
Judd & Milburn (1980); Button et al. (1993)

Traditional Morality

Liberalism-------------------Conservatism

Radical/Amoral
Hierarchical Structure of Attitudes
Hicks & Wright (1970), after Kerr (1946)

Liberalism---Conservativism

Political
Economic
Religious
Social
Esthetic

The “Big One” – Or Maybe Another “Big Five”?
The Doctrine of Traits

Lecture 29
The Doctrine of Traits
Allport (1937)

[A trait is] a generalized and focalized neuropsychic system... with the capacity to render many stimuli functionally equivalent, and to initiate and guide consistent (equivalent) forms of adaptive and expressive behavior.”

• Biosocial View
  – Traits Have Nominal Existence
• Biophysical View
  – Traits Have Actual Existence
Psychometric Properties of Personality Tests
Anastasi (1969); Nunnally (1969)

• Standardization
• Norms
• Reliability
  – Inter-Rater
  – Test-Retest
  – Internal Consistency
    • Item-to-Total
• Validity
  – Content
  – Face
  – Empirical
    • External
  – Construct
• Utility
  – Efficiency
  – Cost-Benefit Ratio
Standardization and Norms

• Standardization
  – Procedure for Administering the Test
  – Procedure for Scoring the Test

• Norms
  – Representative Sample of the Population
  – Permit Comparison of Individual Scores
Reliability

• Inter-Rater
  – Inter-Judge

• Test-Retest

• Internal Consistency
  – Item-to-Total
Validity
Meehl (1945); Cronbach & Meehl (1955); Loevinger (1957)

• Content
  – Universe of Content

• Face
  – Intuitive

• Empirical
  – External

• Construct
  – Theory
Utility
Mischel (1968)

• Efficiency of Measurement
• Cost-Benefit Ratio
The “Big Five” Personality Traits
Fiske (1949); Norman (1963); Goldberg (1981)

- Extraversion
- Neuroticism
  - Emotional Stability
- Agreeableness
- Conscientiousness
- Openness to Experience
  - Intellectance, Culturedness

NEO Personality Inventory
NEO Five-Factor Inventory

Facets of Extraversion
Self-Reported Behavioral Tendencies
NEO-PI-R; Costa & McCrae (1985, 1992)

• Interpersonal Warmth
  – I really like most people I meet.

• Gregariousness
  – I like to have a lot of people around me.

• Assertiveness
  – I have often been a leader of the groups I’ve belonged to.

• Activity
  – I often feel as if I’m bursting with energy

• Excitement-Seeking
  – I have sometimes done things just for “kicks” or “thrills”.

• Positive Emotions
  – I am a cheerful, high-spirited person.
Facets of Neuroticism
Costa & McCrae (1985, 1992)

- Anxiety
  - I often feel tense and jittery

- Angry Hostility
  - I often get angry at the way people treat me

- Depression
  - Sometimes I feel completely worthless

- Self-Consciousness
  - In dealing with other people, I always dread making a social blunder

- Impulsiveness
  - I have trouble resisting my cravings

- Vulnerability
  - When I’m under… stress, sometimes I feel like I’m going to pieces
Facets of Agreeableness
Costa & McCrae (1985, 1992)

• Trust
  – I think most people I deal with are honest and trustworthy

• Straight-Forwardness
  – I would hate to be thought of as a hypocrite

• Altruism
  – I go out of my way to help others if I can

• Compliance
  – I would rather cooperate with others than compete with them

• Modesty
  – I try to be courteous to everyone I meet

• Tender-Mindedness
  – I believe that most people are basically well-intentioned
Distribution of Agreeableness

NEO-FFI, >1,000 College Students, 1991

Scale Score

% of Subjects

12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60
Facets of Conscientiousness
Costa & McCrae (1985, 1992)

- Competence
  - I am a productive person who always gets the job done

- Order
  - I keep my belongings neat and clean

- Dutifulness
  - I try to perform all the tasks assigned to me conscientiously

- Achievement Striving
  - I work hard to accomplish my goals

- Self-Discipline
  - I’m pretty good about pacing myself so as to get things done on time

- Deliberation
  - I try to do jobs carefully, so they won’t have to be done again
Distribution of Conscientiousness

NEO-FFI, >1,000 College Students, 1991
Facets of Openness
Costa & McCrae (1985, 1992)

• Fantasy
  – I have a very active imagination

• Esthetics
  – I am sometimes completely absorbed in music I am listening to

• Feelings
  – Without strong emotions, life would e uninteresting to me

• Ideas
  – I often enjoy playing with theories or abstract ideas

• Actions
  – I think it’s interesting to learn and develop new hobbies

• Values
  – I believe that laws and social policies should change to reflect the
    needs of a changing world
Distribution of Openness
NEO-FFI, >1,000 College Students, 1991

% of Subjects

Scale Score
Distribution of “Big Five” Traits (Adding Neuroticism)
NEO-FFI, >1,000 College Students, 1991
# Relations Among “Big Five” Traits

**NEO-FFI, >1,000 College Students, 1991**

<table>
<thead>
<tr>
<th>Trait</th>
<th>$M$</th>
<th>N</th>
<th>E</th>
<th>O</th>
<th>A</th>
<th>C</th>
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<tbody>
<tr>
<td>Neuroticism</td>
<td>34.21</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Extraversion</td>
<td>42.91</td>
<td>-.11</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Openness</td>
<td>40.83</td>
<td>.01</td>
<td>.35</td>
<td>----</td>
<td></td>
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<tr>
<td>Agreeableness</td>
<td>42.57</td>
<td>.06</td>
<td>.27</td>
<td>.18</td>
<td>----</td>
<td></td>
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<tr>
<td>Conscientiousness</td>
<td>42.39</td>
<td>-.07</td>
<td>.22</td>
<td>.18</td>
<td>.31</td>
<td>----</td>
</tr>
</tbody>
</table>

**Average (unsigned) $r = .18$**
The Doctrine of Traits

• **Weak Version** (aka the Biosocial View)
  – Traits *summarize* the coherence, stability, consistency, and predictability of individual behavior

• **Strong Version** (aka the Biophysical View)
  – Traits *cause* the coherence, stability, consistency, and predictability of individual behavior
The Coherence of Personality

• Topographically Different Behaviors
• Semantically Different Traits

• Hierarchical Structure of Personality
  – Superordinate Traits
  – Basic-Level Traits
  – Behavioral Regularities (Habits)
  – Specific Behaviors
Hierarchical Structure of Personality and Social Behavior

Superordinate Level

Tertiary Traits

Secondary Traits

Primary Traits

Habitual Actions

Specific Actions

Subordinate Level
The Tertiary Level of Analysis
Rosenberg et al. (1968)

- Social Desirability
- Intellectual “Good-Bad”
  - Intelligence (+)
  - Openness to Experience (+)
- Social “Good-Bad”
  - Extraversion (+)
  - Neuroticism (-)
    - Emotional Stability (+)
  - Agreeableness (+)
  - Conscientiousness (+)

Fig. 7.1 Dimensions of traits. (From Rosenberg et al. 1968.)
Secondary Traits and Primary Traits
After McCrae & Costa (1992)

• Extraversion
  – Interpersonal Warmth
  – Gregariousness
  – Assertiveness
  – Activity
  – Excitement-Seeking
  – Positive Emotions
Hierarchical Structure of Personality

**Socially Desirable**

- **Extraversion**
  - **Warmth**
    - Likes Most People
    - Strong Attachments to Friends
  - **Assertiveness**
    - Dominant and Forceful
    - Usually Leads Groups

- **Agreeableness**
  - **Trust**
    - Believes Most Are Honest
    - Assumes Best About People
  - **Altruism**
    - Courteous to Everyone
    - Charitable
Coherence of Personality and Behavior

• The “Big Five” is Ubiquitous

• Restricted Level of Analysis
  – Primary Traits
  – Habitual Behaviors

• Implicit Personality Theory?
  – Self-Reports
  – Peer Ratings
    • By Acquaintances
    • By Strangers
Stability Across Time

- Greatest Over Short Intervals
- Greatest at Superordinate Levels of Analysis

- Tertiary Traits
  - Secondary Traits
    - Primary Traits
      - Habitual Actions
      - Specific Actions
Consistency Across Situations

- Greatest Across Similar Situations
- Greatest at Superordinate Levels of Analysis

- Tertiary Traits
  - Secondary Traits
  - Primary Traits
  - Habitual Actions
  - Specific Actions
Predictability

• Greatest Between Adjacent Levels

• But What About Predicting Specific Actions in Specific Situations?

• Tertiary Traits
  • Secondary Traits
    • Primary Traits
      • Habitual Actions
        • Specific Actions
The Dialectic Between the Person and Behavior
Lecture 30
Three Dialectics in Social Behavior

The Dialectic Between the Person and Behavior

P → B

Three Dialectics in Social Behavior
The Problem of Predictability

To what extent can we predict a person’s behavior in some specific situation from knowledge of his or her generalized personality traits?
Predicting Behavior from Traits

• Extraversion
  – Warmth
    • Likes Most People
      – Will he like Judy when he meets her?
    • Strong Attachments to Friends
      – Will he still call Judy after she moves away?
  – Assertiveness
    • Dominant and Forceful
      – Will she interrupt the speaker?
    • Usually Leads Groups
      – Will she take over the task?
Predicting Behavior from Traits

• Agreeableness
  – Trust
    • Believes Most People are Honest
      – Will he let his coworker borrow some money?
    • Assumes Best About People
      – Will he still like his coworker when he doesn’t repay?

  – Altruism
    • Courteous to Everyone
      – Will she say “please” to the store clerk?
    • Charitable
      – Will she donate to the Salvation Army?
Political Attitudes and Voting Behavior
1972-2004
Jost (2006)

\[ r = .92 \]
Racial Prejudice and Hospitality
LaPiere (1934)

• “Do you accept members of the Chinese race as guests?” No
  – Hotels: 43/47
    • All But 1 Actually Gave Accommodations
  – Restaurants: 75/81
    • Every One Actually Served Meals

• “In the end I was forced to conclude that those factors which most influenced the behavior of others towards the Chinese had nothing at all to do with race.”
Personality and Delay of Gratification
Funder, Block, & Block (1983)

• Ratings by Teachers at Age 4
• Ego Control (Conscientiousness)
  – Impulse Control
    • Delay of Gratification
    • Inhibition of Aggression
    • Planfulness
• Ego Resiliency (Neuroticism)
  – Ability to Adapt to Environmental Demands
    • Security
    • Competence
Personality and Delay of Gratification
Funder et al. (1983)

• Gift-Delay Situation
  – Offered Gift-Wrapped Package
  – Must Wait To Open Gift

• Resistance-to-Temptation Situation
  – Presented with Attractive and Unattractive Toys
  – Forbidden to Play with Attractive Set
# Personality and Delay of Gratification

Funder et al. (1983)

<table>
<thead>
<tr>
<th>Variable</th>
<th>$r$</th>
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<tbody>
<tr>
<td>Nonverbal IQ</td>
<td>.21</td>
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<tr>
<td>Ego Control</td>
<td>.25</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td></td>
</tr>
<tr>
<td>Ego Resiliency</td>
<td>.23</td>
</tr>
<tr>
<td>Neuroticism</td>
<td></td>
</tr>
<tr>
<td>“Unable to Delay Gratification”</td>
<td>-.27</td>
</tr>
</tbody>
</table>
# “Big Five” Correlates of Behavior

Paunonen (1998)

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPA</td>
<td>-0.24 (A)</td>
<td>0.20 (C)</td>
</tr>
<tr>
<td>Dating Frequency</td>
<td>-0.23 (A)</td>
<td>-0.19 (C)</td>
</tr>
<tr>
<td>Dating Variety</td>
<td>-0.21 (A)</td>
<td>-0.20 (N)</td>
</tr>
<tr>
<td>Smoker</td>
<td>-0.29 (C)</td>
<td>0.32 (O)</td>
</tr>
<tr>
<td>Smoking Amount</td>
<td>-0.17 (C)</td>
<td>0.28 (O)</td>
</tr>
<tr>
<td>Liberal Arts vs. Pre-Professional</td>
<td>-0.20 (A)</td>
<td>0.21 (O)</td>
</tr>
<tr>
<td>Fraternity/Sorority</td>
<td>0.26 (N)</td>
<td>0.15 (C)</td>
</tr>
<tr>
<td>Traffic Violation</td>
<td>0.25 (O)</td>
<td>-0.22 (E)</td>
</tr>
<tr>
<td>Religious Interest</td>
<td>0.24 (N)</td>
<td>-0.24 (O)</td>
</tr>
</tbody>
</table>
The Personality Coefficient
Mischel (1968)

• Upper-limit of correlation between personality in general (predictor) and specific behavior (criterion)
  \[ r = .30 \]
  (10% of variance)

• There is a ceiling on the extent to which we can predict behavior in a specific situation, knowing the individual’s traits
Three Dialectics in Social Behavior

The Dialectic Between the Person and Behavior

B → P
Self-Perception Theory of Attitudes
Bem (1972)

• Reverses Usual View of Causality
  – Attitudes Do Not Cause Behavior
  – Rather, Behavior Causes Attitudes

• Perception of our own behavior leads us to form attitudes that are consistent with that behavior
The “Foot-in-the-Door” Effect
Freedman & Fraser (1966)

• Safe-Driving Campaign in California
• Canvass Neighborhoods
• Ask 1/2 of Households to Sign Petition
  – Virtually All Agree
• Later Return to All Households
  – Ask to Post Large, Ugly “Drive Carefully” Sign
• How Many Will Agree?
Permission to Post Large Sign
Freedman & Fraser (1966)

<table>
<thead>
<tr>
<th>Condition</th>
<th>% Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petition</td>
<td>80</td>
</tr>
<tr>
<td>No Petition</td>
<td>10</td>
</tr>
</tbody>
</table>
Experiment on Subject Recruitment
Cialdini et al. (1978)

• Subjects Recruited by Telephone
• Informed that Experiment Begins at 7:00 AM
  – Before Agreeing to Participate
  – After Agreeing to Participate
• How Many Subjects Actually Appear?
Showing Up for Experiment at 7 AM
Cialdini et al. (1978)

% Appearing

Before | After
---|---
Notified of Time

Before: 20%
After: 58%

18
Conservation Attitudes and Behavior
Chaiken & Baldwin (1981)

• Pre-Test of Environmental Attitudes
  – Classify Subjects as Pro- or Anti-Environment
    • Weak or Strong Attitudes
• Reports of Pro- and Anti-Ecology Behaviors
  – “I pick up other people’s garbage”
  – “I leave on lights in rooms I’m not using”
• Salience Manipulation
  – “I do this on occasion” (Frequent Endorsement)
  – “I do this frequently” (Infrequent Endorsement)
• Post-Test of Environmental Attitudes
Attitudes Toward Conservation
Chaiken & Baldwin (1981)

Pre-Test Attitude Strength

Pro-Conservation Attitude

Weak

Strong

Salient Behaviors

Pro

Anti
Self-Perception Theory of Attitudes
Bem (1972)

• People infer their attitudes from observations of their own behavior.
  – Just as they infer others’ attitudes from observations of their behavior.

• Attitudes Do Not Cause Behaviors to Occur
• Rather, Behaviors Cause Attitudes to Form
James-Lange Theory of Emotion
James (1884); Lange (1887)

- Traditional View: Emotion → Behavior
  - Stimulus Elicits Emotional State
  - Emotional State Causes Behavior
    - Coping
    - Expression

- Revisionist View: Behavior → Emotion
  - Stimulus Elicits Response
  - Perception of Response Causes Emotional State
    • Reverses Usual Direction of Causality
Basic Emotions and The Facial Feedback Hypothesis
Tomkins (1962); Adelman & Zajonc (1989)

• Weak Version (Darwin, 1872)
  – Expression Modulates Emotion Already Present

• Strong Version (Laird, 1974)
  – Expression is Sufficient to Create Emotion
Mood and Manipulated Expressions
Duclos, Laird et al. (1989)

• Psychophysiology Experiment
  – “Calibrate Equipment”

• Hold certain poses
  – Adjust Facial Muscles in Certain Ways
    • Hold Pen Between Teeth
    • Hold Pen Between Lips

• Collect “Incidental” Mood Ratings
Mood and Manipulated Expression
Duclos, Laird et al. (1989)

![Graph showing the relationship between mood and manipulated facial expressions](image)
Perceived Self-Efficacy

Bandura (1977)

One’s belief (or expectation) that s/he can act effectively to bring about desired results

• Sources of Self-Efficacy Expectations
  – Vicarious Experience
  – Verbal Persuasion
  – Emotional Arousal
  – Performance Accomplishments
“Whistle a Happy Tune”
*The King and I* (Rodgers & Hammerstein, 1951)

Whenever I feel afraid,
I hold my head erect
And whistle a happy tune,
so no one will suspect
I’m afraid.

While shivering in my shoes,
I strike a careless pose
And whistle a happy tune
And no one ever knows
I’m afraid.

The result of this deception
is very strange to tell
For when I fool the people I fear
I fool myself as well.

I whistle a happy tune and
ev’ry single time
The happiness in the tune
Convinces me that
I’m not afraid.

*Make believe you’re brave*
*and the trick will take you far*
*You may be as brave as you make believe you are.*
The Dialectic Between the Environment and Behavior

Lecture 31
The Dialectic Between the Environment and Behavior

Three Dialectics in Social Behavior
Social Psychology as the Psychology of Social Influence

• Social Behavior (F. Allport, 1924)
  – Behavior that Occurs in Response to the Stimulus of Another’s Behavior
  – Behavior that Serves as a Stimulus to Another’s Response

• Social Influence (G. Allport, 1954)
  – “[H]ow the thought, feeling and behavior of individuals are influenced by the actual, imagined, or implied presence of other human beings”
Conformity Experiment
Asch (1956, 1958)

• Perceptual Task
  – Identify Line Whose Length Matches Standard
  • Some Trials Easy, Others Difficult
Conformity Experiment
Asch (1955)

- Conditions of Testing
  - Isolation vs. Group of

- Group Composed of Confederates
  - Some Trials, Unanimously Opposed to Subject

- How Does the Subject’s Judgment Vary?
Group Size and Conformity
Asch (1955)
Conformity Experiment
Asch (1956, 1958)

• Conditions of Testing
  – Isolation vs. Group of 7

• Group Composed of Confederates
  – Some Trials, Unanimously Opposed to Subject
  – Other trials, Single Dissenter with Subject

• How Does the Subject’s Judgment Vary?
Conformity
Asch (1956)

% Trials Conforming

<table>
<thead>
<tr>
<th>Condition</th>
<th>% Trials Conforming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unanimous</td>
<td>~40</td>
</tr>
<tr>
<td>Dissenter</td>
<td>~5</td>
</tr>
</tbody>
</table>

The graph shows the percentage of trials conforming under two conditions: Unanimous and Dissenter. The majority of conforming responses occur in the Unanimous condition, indicating a higher rate of conformity in this setting compared to when the individual is a dissenting voice.
Minority Size and Conformity
Nemeth et al. (1977)

• Judgments of Color
  – Blue vs. Blue-Green

• Group composition
  – 6 Naïve Subjects (Usually Judged “Blue”)
  – 1-4 Confederates (Wrongly Judged “Blue-Green”)

• Adoption of Erroneous Minority Judgment
Adoption of Minority Judgment
Nemeth et al. (1977)

The diagram illustrates the number of minority judgments adopted as a function of minority size. The x-axis represents the size of the minority, ranging from 0 to 4, while the y-axis shows the number of judgments adopted, ranging from 0 to 2.5. The data shows a peak in the adoption of minority judgments when the minority size is 3.
“Mere Presence” Effects on Behavior
Zajonc (1965); Guerin (1986)

• Social Facilitation (Triplett, 1898; Allport, 1920)
  – Simple Tasks
  – Automatic Processes
  – Experts

• Social Inhibition (Zajonc, 1965)
  – Difficult Tasks
  – Controlled Processes
  – Novices
Social Loafing
Latane et al. (1979), after Ringelmann (1913)
Ambient Temperature and Violent Crime
Anderson, 1989

Murder and Rape Combined

Season

Winter  Spring  Summer  Fall

% of Yearly Total

0  5  10  15  20  25  30  35
The Frustration-Aggression Hypothesis
Dollard et al. (1939); Miller (1941)

• Aggression is a Reflexive Response to Frustration
• Frustration Defined
  – Any Obstacle to Goal-Completion
• Other People Can Be Obstacles to Goals
The Revised Frustration-Aggression Hypothesis
Berkowitz (1989, 1993)

• Broaden Definition of Frustration
  – Any Aversive Event
    • Construed as Intentionally Harmful

• Aggression not a Reflexive Response
  – Mediated by Anger
    • Elevated Emotional Arousal
    • Thoughts of Attack
  – Presence of Situational Cues
Anger, Weapons, and Aggression
Berkowitz & LePage (1967)

• Subject, Confederate Work Together on Problems
  – Evaluate Each Other’s Performance
    • Deliver 1-10 Shocks

• Confederate Evaluates Subject First
  – Delivers 1 vs. 7 Shocks
  – Induces Anger in Subject

• Subject Evaluates Confederate
  – Opportunity to Retaliate Against Confederate

• Objects in the Room
  – Guns vs. Badminton Equipment
    • Belong to Confederate or Someone Else
The Weapon Effect
Berkowitz & LePage (1967)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Badminton</th>
<th>No Object</th>
<th>Other's Weapon</th>
<th>Partner's Weapon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Angeried</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Object in Room
- Badminton
- No Object
- Other's Weapon
- Partner's Weapon
Altruism Experiment
Darley & Latane (1968); Latane & Darley (1970)

- Subjects Recruited for Experiment
- Sit in Room, Fill Out Questionnaires
  - Seated Alone or With Others
- Experimenter Departs
- Staged Emergency
  - Smoke through Ventilator
  - Fall in Next Room
Helping Behavior
Darley & Latane (1968); Latane & Darley (1970)

% Seeking Help

Smoke

Foot

Experiment

Alone
Group

19
Modeling Effects on Altruism
Bryan & Test (1967)

• Female College Student with Flat Tire
  – Model 1/4 Mile Previously

• Salvation Army Christmas Kettle
  – Model Donates
Modeling Effects on Altruism

Bryan & Test (1967)

% Helping

<table>
<thead>
<tr>
<th>Situation</th>
<th>No Model</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat Tire</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Kettle</td>
<td>50</td>
<td>80</td>
</tr>
</tbody>
</table>

Legend:
- No Model
- Model
More Social Influences on Behavior

• Conformity
  – Real or Imagined Social Pressure
    • At the Level of Behavior
    • At the Level of Belief

• Obedience
  – Unequal Power Relationship

• Compliance
  – Response to Explicit Requests
The Psychosocial Law

\[ SI = sN^t, \]
where \( t < 1 \)

- **Social Impact** of “Many on One”
  - Grows More Slowly than the Number of Sources

- **Social Impact** of “One on Many”
  - Total Impact is Diffused Across Many Targets

\[ SI = f \left( \text{SIN} \right) \]
- Salience
- Immediacy
- Number

Figure 1. Multiplication of impact: \( I = f(SIN) \).

Figure 5. Division of impact: \( I = f(1/SIN) \).
Automaticity of Social Behavior

• Inevitable Evocation
• Incorrigible Completion
  • Efficient Execution
• Parallel Processing
Interruptions of Experimenter
Bargh et al. (1996), Experiment 1

• Cover Task: Scrambled sentences
  – “Rude” Primes
    • aggressively, rude, bother, disturb, intrude
  – “Polite” Primes
    • respect, honor, considerate, appreciate, patiently
  – “Neutral” Primes
    • exercising, flawlessly, occasionally, rapidly, gleefully

• Experimenter Engaged with Confederate
  – Ignores Waiting Subject

• Interruptions During 10-Minute Waiting Period
Interruptions of Experimenter
Bargh et al. (1996), Experiment 1

% of Subjects

"Polite"  Neutral  "Rude"

Prime
“[M]ost of a person’s everyday life is determined not by their conscious intentions and deliberate choices but by mental processes that are put into motion by features of the environment and that operate outside of conscious awareness and guidance.”
The Dialectic Between the Environment and Behavior

B ➔ E

Three Dialectics in Social Behavior
Behavior Changes the Situation

• Instrumental or Operant Behavior
  – Operates on the Environment
    • Changes It In Some Way

• Person as Part of the Situation
  – Individual Behavior Changes Situation
    • For Others in that Situation
    • For Him- or Herself
  – Behavior of Others Also Changes Situation
Helping Experiment
Darley & Latane (1968); Latane & Darley (1970)

% Seeking Help

Experiment

Smoke  Foot

Alone     Group
Pluralistic Ignorance
Darley & Latane (1968); Latane & Darley (1970)

• Diffusion of Responsibility
• Situation Ambiguous
  – Natural to Wait for Clarification
  – Look to Others to Resolve Ambiguity
• Others’ Lack of Action
  – Defines Situation as Non-Emergency for Subject
• Subject’s Lack of Action
  – Defines Situation as Non-Emergency for Others
The Dialectic Between the Person and the Environment

Lecture 32
The Dialectic Between the Person and the Environment

E ➔ P

Three Dialectics in Social Behavior
Social Influence Extends Beyond Overt Behavior

- **Social Influence** (G. Allport, 1954)
  - “[H]ow the thought, feeling and behavior of individuals are influenced by the actual, imagined, or implied presence of other human beings”

- **Internal States and Dispositions**
  - Thoughts, Beliefs, Feelings, Desires
  - Traits, Attitudes, Values
Persuasive Communication
Janis et al. (1965)

• Subjects Read Opinion Essays
  – Express “Pro” or “Con” Attitude
    • Government Funding for Cancer Cure
    • Increased Military Funding
    • Federal Program for Moon Landing
    • Prohibition of 3-D Movies

• Rate Agreement with Essay
  – Snack or No Snack While Reading
Agreement with Argument
Janis et al. (1965)

% Agreement

Control
Snack

Topic
Cancer  Military  Moon  3D Movies

0  10  20  30  40  50  60  70  80  90

Interpersonal Attraction
Berscheid & Walster (1978)

• “Liking Someone” as an Attitude
  – Internal Mental State
• Target Characteristics
  – Physical Attractiveness
  – Competence
  – Similarity
• Situational Influences
  – Proximity
Propinquity and Classroom Friendships
Segal (1974)

- Police Academy Students
  - Housed, Seated Alphabetically
- Survey After Training
  - 3 Closest Friends on Force
- Reciprocation Rate
  - Neighbor, 74%
  - Non-Neighbor, 42%

"Propinquity Contributes to Positive Affect."

\[ r = .92 \]
Friendship Patterns

• As Function of Distance
  – Within Town
  – Within Living Unit
  – Within Classroom, Workplace

• Functional Rather than Physical Distance
  – Availability

• Availability Means Exposure
  – Familiarity Breeds Liking, Not Contempt
“Mere Exposure” Effect
Zajonc (1968)

• Subjects Taught to Pronounce Unfamiliar, Meaningless Material
  – “Turkish” Words
  – “Chinese” Ideographs
• Vary Number of Trials
  – 0 (Control) to 25 Exposures
• Items Identified as Adjectives
  – Guess Meaning
    • “Something Good”
    • “Something Bad”
“Mere Exposure Effect”
Zajonc (1968)

Frequency of Exposure vs. 0-6 "Goodness" Rating

- "Turkish"
- "Chinese"
The Mere Exposure Effect
Zajonc (1968)

- Repeated Exposure Increases Judgments of Likability
  - Even in Absence of Substantive Contact
- Likability is an Expression of Preference
  - Preference is an Attitude
- Exposure is a Purely Situational Effect
  - Prefer Whatever is Encountered Frequently in the Environment
Facial Image Preference
Mita et al. (1977)

• Facial Photographs of Women

- Acquaintance Should Prefer Original
  - As S/he Usually Sees Her

- Person Should Prefer Mirror Reversal
  - As She Sees Herself in Mirror
Preference of Targets and Acquaintances

Mita et al. (1977)

![Bar chart showing preference of targets and acquaintances in Study 1 and Study 2. The chart compares the preference of 'Self' and 'Friend' in Study 1, and 'Self' and 'Partner' in Study 2. The bars indicate the percentage preference for 'True' and 'Reversal' categories.]
The Dialectic Between the Person and the Environment

Three Dialectics in Social Behavior

“Situations are as much a function of the person as the person’s behavior is a function of the situation.”

K.S. Bowers (1973)
How People Affect Their Environments
Buss (1987); Kihlstrom & Cantor (1987)

• Evocation
  – Mere Presence, Appearance in Environment
    • Independent of Any Behavior

• Selection
  – Choose Environments for Some Purpose

• Behavioral Manipulation
  – Overt Behavior

• Cognitive Transformation
  – Covert Mental Activity
How People Affect Their Environments
Buss (1987); Kihlstrom & Cantor (1987)

• Evocation
  – Mere Presence in Environment Alters Environment
    • Independent of Any Behavior
    • Physical Appearance
  – Evoke Behavior from Others
    • Intentional or Unintentional
    • Conscious or Unconscious
Examples of Evocation

• “Mere Presence” Effects
  – Social Facilitation
  – Social Inhibition

• Gender-Role Socialization
  – Male/Female External Genitalia
  – Sociocultural Standards for Gender Role
    • Masculinity
    • Femininity
Baby X
Seavey et al. (1975)

• Nonparent Adults
  – Study of Infants’ Responses to Strangers
• Interact with 3-Month-Old Girl
• Identification by Gender and Name
  – Boy
  – Girl
  – Neutral
Choice of Toy
Seavey et al. (1975)

The diagram illustrates the frequency of choice of different toys by boys, neutral, and girls, categorized as:

- Football
- Doll
- Teething Ring

The y-axis represents the frequency of choice, ranging from 0 to 2. The bars indicate the choice patterns for boys (light blue), neutral (dark blue), and girls (teal). The graph shows a significant difference in the choice of toys by these groups.
Physical Contact
Seavey et al. (1975)

Gender of Subject

Male
Female

# of Contacts

Identification

Boy
Neutral
Girl

0
4
8
12
Baby X Revisited
Sidorowicz & Lunney (1980)

• Nonparent Undergraduates
  – Study of Infants’ Responses to Strangers
• Interact with 3-Month-Old Child
  – Used Infants of Both Sexes
• Identification by Gender and Name
  – Boy
  – Girl
  – Neutral
Choice of Toy
Sidorowicz & Lunney (1980)

% Choosing

Identification

Toy

Football

Doll

Teething Ring

Boy

Neutral

Girl

0 20 40 60 80 100

Identification
Stereotyping and Prejudice

• Stereotypes
  – Social Categories Marked by Physical, Social-Demographic Attributes
    • Race, Ethnicity, National Origin
    • Sex (Gender)
    • Socioeconomic, Educational Status

• Evoke Prejudicial Behavior from Others
  – Ingroup vs. Outgroup
How People Affect Their Environments
Buss (1987); Kihlstrom & Cantor (1987)

• Evocation

• Selection
  – Choose Environments to Match Personality
  – Support, Promote Interests, Moods, Beliefs, Desires
  – Each Choice Preempts Alternatives
### Personality and Mate Preference

Buss (1987)

<table>
<thead>
<tr>
<th>Subject Trait</th>
<th>Preference in Mate ($r$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>.47</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>.40</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>.49</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.35</td>
</tr>
<tr>
<td>Openness</td>
<td>.58</td>
</tr>
</tbody>
</table>
Selection of Environment

• *Not* Darwinian Selection *by* Environment
• Selection *of* Environment is Ubiquitous
  – Every Choice Changes Environment
• Social Roles
  – Change Environment in Which Role is Played
• Source of Choice
  – Choices Made *by* Individual for Him/Herself
  – Choices Made *for* Individual by Others
How People Affect Their Environments
Buss (1987); Kihlstrom & Cantor (1987)

• Evocation

• Selection

• Behavioral Manipulation
  – Overt Behavior
    • Alters Objective Environment
      – As Publicly Experienced by Everyone
  – Instrumental/Operant Behavior
    • Operation Changes Environment
The Prisoner’s Dilemma
Luce & Raiffa (1957), after Tucker (1950)

<table>
<thead>
<tr>
<th>Prisoner A</th>
<th></th>
<th>Prisoner B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stays Silent</td>
<td></td>
<td>Stays Silent 1 Year for A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stays Silent 1 Year for B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Confesses 3 Months for A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Confesses 3 Months for B</td>
</tr>
<tr>
<td>Confesses</td>
<td>3 Months for A</td>
<td>10 Years for A</td>
</tr>
<tr>
<td></td>
<td>10 Years for B</td>
<td>8 Years for A</td>
</tr>
<tr>
<td></td>
<td>8 Years for B</td>
<td>8 Years for B</td>
</tr>
</tbody>
</table>

Stays Silent
Confesses
Behavioral Assimilation of Cooperators to Competitors
Kelley & Stahelski (1970)
Situational Influences on Delay of Gratification
Mischel & Ebbesen (1970)

Waiting Time (min)

Study

Reward Present
- None
- Preferred
- Nonpreferred
- Both

Study 1

Study 2

0 2 4 6 8 10 12

0 12
What Do “High-Delay” Children Do?
Mischel et al., (1989)

• Avoid Deliberately Looking at Rewards
  – Covering Eyes with Hands
  – Resting Heads on Arms
• Generate Own Diversions
  – Talk/Sing Quietly to Themselves
  – Create Games with Hands/Feet
  – Try to Sleep

In Other Words, They Manipulate the Situation Through Their Overt Behavior
Overt Self-Distraction in Delay of Gratification
Mischel, Ebbesen, & Zeiss (1972), Exp. 1

<table>
<thead>
<tr>
<th>Waiting Time (min)</th>
<th>Distraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Light blue</td>
</tr>
<tr>
<td>Slinky</td>
<td>Dark blue</td>
</tr>
</tbody>
</table>

Contingent Type of Waiting
How People Affect Their Environments
Buss (1987); Kihlstrom & Cantor (1987)

• Evocation
• Selection
• Manipulation
• Transformation (Cognitive)
  – Alters Mental Representation of Environment
    • Environment as Subjectively Experienced by Actor
    • Not Environment as Publicly Observed by Others
Overt and Covert Self-Distraction in Delay of Gratification
Mischel, Ebbesen, & Zeiss (1972), Exp. 1

Contingent Type of Waiting

Waiting Time (min)

Distraction
- None
- Slinky
- "Fun" Thoughts

<table>
<thead>
<tr>
<th>Distraction</th>
<th>Waiting Time (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>0</td>
</tr>
<tr>
<td>Slinky</td>
<td>8</td>
</tr>
<tr>
<td>&quot;Fun&quot; Thoughts</td>
<td>10</td>
</tr>
</tbody>
</table>
Ideation in Delay of Gratification
Mischel & Baker (1975)

**Consummatory**
- Look at the marshmallows. They are sweet and chewy and soft. When you look at marshmallows, think about how sweet they are when you eat them…. When you look at marshmallows, think about how soft and sticky they are in your mouth when you eat them….
- Look at the pretzels; they are crunchy and salty. When you look at pretzels, think about how crunchy they are. When you look at pretzels, think about how salty they taste when you lick them or chew them….

**Transformative**
- When you look at marshmallows, think about how white and puffy they are. Clouds are white and puffy too -- when you look at marshmallows, think about clouds…. The moon is round and white. When you look at marshmallows, think about the moon….
- When you look at pretzels you can think about how long and brown they are. A log is long and brown. When you look at pretzels, think about logs and tree trunks. Or you can think about how round and tall they are. A pole is round and tall….
Ideation in Delay of Gratification

Mischel & Baker (1975)

The graph illustrates the ideal time (in minutes) for consummatory and transformational types of waiting under relevant and irrelevant conditions.

- **Consummatory**:
  - Relevant: 4 minutes
  - Irrelevant: 16 minutes
  - Control: 8 minutes

- **Transformational**:
  - Relevant: 14 minutes
  - Irrelevant: 14 minutes
  - Control: 8 minutes

The control group is highlighted with a red arrow.
Objective and Subjective Environments

• General Tendencies are Not Strong Predictors of Actual Behavior in Specific Situations
  – Actual Behavior is also Determined by Specific Details of the Evoking Situation

• The Situation is Not Independent of the Person
  – People can Manipulate the Objective Situation Through Their Overt Behavior
  – People can Transform the Subjective Situation Through Mental Operations
    • Cognitive, Emotional, Motivational Strategies
Rosa Parks in Montgomery
Martin Luther King in Birmingham
Pygmalion in the Classroom
Rosenthal & Jacobson (1968)

Graph showing IQ gain for late-bloomers and controls across grades.

- All grades: Late-Bloomers 10, Controls 5
- 1st Grade: Late-Bloomers 25, Controls 15
- 2nd Grade: Late-Bloomers 15, Controls 7

Pygmalion & Galatea, From Hamilton, Mythology
The Self-Fulfilling Prophecy
Merton (1947, 1958)

"Definitions of a situation... become an integral part of the situation and thus affect subsequent developments.... The self-fulfilling prophecy is, in the beginning, a false definition of the situation evoking a new behavior which makes the originally false conception come true.

The specious validity of the self-fulfilling prophecy perpetuates a reign of error. For the prophet will cite the actual course of events as proof that he was right from the very beginning.

Such are the perversities of social logic."

• Behavioral Confirmation
• Perceptual Confirmation
Complexity in Personality and Social Interaction

\[ B = f(P, E) \]

- **Simple System**
  - Components are Independent
  - Unidirectional Causation
- **Complex System**
  - Components Interact
  - Bidirectional Causation