

MOTIVATION

a unit lesson plan
for high school
psychology teachers

Revised by Shirley Collins, Mary Jarvis, Don Kober,
Brian LeCloux, Trudy Loop, Robert Peterson,
Wanda Wilson, Ronald Wood, and Amy Fineburg, PhD

Nancy Dess, PhD
Faculty Consultant, Occidental College

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ASSOCIATION

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procedural timeline

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content outline

Lesson 1: Motivation Theories

3

I. Evolutionary theory

A. Early instinct theories: fixed, genetically programmed patterns of behavior

1. William James' (1890) *Principles of Psychology*: instincts as habits stemming from innate tendencies

People inherit social behavior instincts (love, sympathy, modesty, etc.) and "survival instincts."

2. William McDougall—18 basic instincts
3. Migrating behaviors and mating displays of birds
4. Examples of human behaviors, including rooting, sucking, grasping

B. Ethology: relating behavior to features of the environment

1. Instincts are inherited dispositions that generate specific fixed-action patterns (e.g., Konrad Lorenz, nest building, bird songs).
2. Instincts reflect adaptation to a particular part of the habitat, or niche.
3. Development and expression of instincts can vary (e.g., with seasons, abundance of food or mates).
4. Sign stimuli, such as coloration or shape, trigger behavior.

C. Charles Darwin's evolutionary theory

1. Instincts are a product of natural selection: Instinctual behaviors that increase reproductive success (fitness) become more frequent; others die out.
2. Basic emotions are included among instincts.

D. Modern evolutionary psychology: predispositions and probabilities, not instincts

1. Natural selection acts on genes (genotype) expressed in particular circumstances (phenotype).
2. Selection takes place at the individual level; it is not "survival of species."
3. Evolutionary history makes people more or less likely to develop, learn, and behave in certain ways (e.g., to like sweets, to learn to fear snakes).
4. Behaviors adaptive in one time or place may not be adaptive in others (e.g., preferring fatty foods in marginal environments versus affluent society).
5. Adaptation is not the only way evolution occurs (e.g., heritable tendencies resulting from isolation of small breeding populations or genetic drift).

II. Arousal theory

A. Motivation: to achieve and maintain a certain level of arousal

1. Animals seek activities and situations that create a desired level of physiological arousal.
2. Theories differ in assumptions about whether arousal is negative or positive.

B. The drive-reduction theory (Clark Hull)

1. Behavior originates from physiological needs for food, water, air. These needs create tension (irritation) away from homeostasis (refer to Lesson 2).
 - a. When needs are met (homeostasis), arousal is low; needs give rise to drives.
 - b. Biological needs or tissue deficits lead to a drive state.
2. Animals are motivated to reduce the drive.
 - a. Behaviors such as eating, drinking, and breathing reduce the need by restoring homeostasis.
 - b. Behaviors are reinforced and strengthened through drive reduction.
 - c. Acquired motivation: Stimuli associated with drives become motivators; stimuli associated with drive reduction become rewarding.

3. Criticism
 - a. Demonstrations of drive induction: Animals will work to increase arousal levels (Sheffield, 1966).
 - b. Harry Harlow and his “Mother Love” experiment

C. Optimal arousal theory

1. Some nonzero level of arousal is optimal.
 - a. Arousal below optimal level motivates behavior to increase arousal.
 - b. Arousal above optimal level motivates behavior to decrease arousal.
2. Individual differences: People vary in the degree to which they seek lower or higher levels of arousal.

Zuckerman (1984, 2007): sensation seeking as an aspect of personality, related to risky behavior

See Activity 1.1: The Sensation-Seeking Scale (with Handout 1.1)

3. Yerkes-Dodson law relates arousal level to task performance.
 - a. Arousal level for optimal performance depends on task difficulty.
 - b. Optimal level of arousal is lower for harder tasks.
 - c. High arousal can improve performance on easy tasks and impair performance on difficult tasks.

III. Incentive theory: Motivation is produced by need for goal attainment.

A. Need for goal attainment or achievement may be either intrinsic or extrinsic.

1. *Intrinsic motivation* is based on internal need for achievement and internal reinforcers, such as positive feelings of accomplishment.
2. *Extrinsic motivation* is based on external, often tangible, reinforcers.

B. Effect of external reward on intrinsic motivation

1. Providing an extrinsic reward for intrinsically motivated behavior can decrease interest in the task (*overjustification effect*).
2. Extrinsic reward can decrease, increase, or have no effect on intrinsic motivation depending on many factors, e.g., whether performance standards are vague or clear (Eisenberger, Pierce, & Cameron, 1999).

C. Conditioned incentives

1. Through learning, environmental stimuli acquire control over approach behavior or “cravings,” i.e., *incentive salience increases*.

2. *Wanting*—motivation to approach incentives—is distinct from *liking*, or the hedonic evaluation of those stimuli (Berridge, 2004). Someone with a cold may *want* cough medicine but not *like* it.

IV. Cognitive consistency theory: Motivation for thoughts to be consistent with behavior

- A. Cognitive dissonance theory (Festinger): Beliefs contrary to some behavior produce tension or *dissonance* and, so, motivation to change beliefs or behavior to reduce dissonance.
- B. Self-perception theory (Bem): An individual perceives his or her own behavior and forms beliefs and attitudes that are consistent with it.

V. Humanistic theory

A. Maslow's *hierarchy of needs*

1. Needs are ordered from basic survival to psychological needs: physiological, safety, belongingness, esteem, self-actualization, and transcendence.
2. Each successive level of the hierarchy is addressed only after the preceding level's needs have been met (concept of *prepotency*).
3. Criticism: elitist, ordering of hierarchy, e.g., political or religious fasting (Wahba & Bridgewell, 1976)

See Activity 1.2: Classification of Needs (with Handout 1.2)

B. Csikszentmihalyi's *flow*

1. Deep, authentic involvement in meaningful activities
2. Requires skilled control over instinctive drives

See Activity 1.3: Flow (with Transparency Master 1.3)

LESSON 2: Eating

I. Physiological influences on eating

- A. Homeostasis: the tendency for animals to keep their physiological systems at a stable, steady level (refer to Lesson 1); often called a set point (like a thermostat)
- B. Glucose (blood sugar)
1. Increased level of the hormone insulin diminishes blood sugar.
 2. Hunger increases when blood glucose level drops.
- C. Hypothalamus: forebrain structure regulating hunger, thirst, and sex

1. Ventromedial hypothalamus (VMH): If VMH is stimulated, the animal will stop eating; if VMH is destroyed, the animal will eat ravenously until it reaches a much higher body weight.
2. Lateral hypothalamus (LH): If LH is stimulated, the animal eats vast quantities; if LH is destroyed, the animal stops eating almost entirely.
3. Dual-center theory: These two hypothalamic regions interact to defend a set point of body weight, food intake, or related metabolic signals (weight thermostat).
4. Criticism

LH-lesioned rats can recover and eat normally, so other brain regions must also regulate eating.

II. Sensory influences on eating

- A. Taste, smell, mouth feel, and sight of food all influence *wanting* (how much one desires it) and *liking* (how much one enjoys it).
- B. Sweet tastes can stimulate appetite by triggering insulin release, causing a drop in blood glucose.
- C. Wanting and liking of most foods depend on experience; food preferences and aversions are modified by familiarity and consequences of eating, including nutrition and nausea.

III. Sociocultural influences on eating

- A. People generally eat more when in a group than when alone (*social coaction*).

This is not necessarily true for women and girls; eating less is typically considered feminine, and given Western society's overly thin ideal, women may eat less in social settings.

- B. Family and cultural practices related to parental control of eating and meal customs (e.g., "clean your plate" rule) shape adult eating behavior (Birch & Fisher, 1998).
- C. Cultures have rules about which items are appropriate on certain occasions (e.g., birthday cake) or at all (e.g., beef, puppies, or insects may be either taboo or a delicacy).

See Activity 2: A Survey of Eating Habits (with Handout 2)

IV. Obesity

- A. Genetic influences
 1. Evolution of *thrifty genes*: Predisposition to find and eat fatty food was an advantage in times of food scarcity (i.e., most of human history).
 2. Many genes related to body weight regulation vary among individuals and contribute to the tendency to become obese (e.g., morbid obesity among Pima Indians).

B. Fat cells

1. Once the number of fat cells increases, it seldom decreases.
2. Causes of fat cell increase
 - a. Early childhood eating patterns
 - b. Adult overeating
3. Weight-loss diets usually shrink fat cells but do not destroy them.

C. Set point

1. The particular level of weight the body strives to maintain
2. Obese peoples' set points are higher than the average range.

D. Metabolism: rate of energy expenditure

1. Varies among individuals, explaining why two people who eat the same may have very different body weights
2. Weight-loss diets can lower metabolic rate, making it harder to lose weight.

E. Sociocultural influences on obesity

1. Parents using food as a reward for children's behaviors
2. Media: advertisements describing irresistible foods
3. Abundance of high-calorie fast foods (Schlosser's *Fast Food Nation*, Spurlock's *Supersize Me*)

V. Eating disorders

A. Anorexia nervosa

1. Diagnosis based on:
 - a. Significantly underweight (typically below 85% of "normal" body weight)
 - b. Distorted view of body size or shape
 - c. Intense fear of gaining weight
 - d. In postpubertal females, menstruation stops (amenorrhea).
2. Predisposing or maintaining factors
 - a. Genetic influences (twin studies by Fichter & Noegel, 1990)
 - b. Cultural influences: a thin body ideal for women (e.g., ultra thin models in fashion magazines and other media)
 - (1) Objectification theory: Women and girls are acculturated to internalize an observer's perspective as a primary view of their physical selves.
 - (2) Certain factors can make a person more vulnerable to idealized images (Tolman & Brown, 2001).

- (3) African American adolescent girls report more positive body images than White or Latina girls (Halpern et al., 1999; Ge et al., 2001).
- c. Preference for thinness in sports (e.g., gymnastics, track, ballet)
 - (1) Relation to female athlete triad (anorexia, amenorrhea, osteoporosis)
 - (2) Differences exist in ideal body sizes in various sports (e.g., swimming, soccer).
- d. Behavioral reasons: Starvation stimulates excessive exercise, even in laboratory rats (Epling & Pierce, 1996).

B. Bulimia nervosa

- 1. Diagnosis based on:
 - a. Repeated episodes of overeating followed by vomiting, laxative use, and/or exercise
 - b. Undue concern with body size or shape
- 2. Predisposing or maintaining factors
 - a. Genetic
 - b. Cultural
 - c. Behavioral

C. Methodological note on obesity and eating disorders

- 1. When people who are obese or have an eating disorder are compared to those who are not or do not, distinguishing what causes the problem from having the problem can be difficult (as having the problem changes thoughts, feelings, and behavior). The problem can be cause and effect.
- 2. Longitudinal research beginning early in childhood and experimental research with laboratory animals are important to distinguishing cause and effect.

LESSON 3: Sex, Achievement, and Aggression

I. Sexual motivation: Desire to have pleasurable erotic experiences

A. Distinction between *sexual desire* and *romantic love* (Diamond, 2004)

- 1. Evolutionary roots in mating versus attachment
- 2. Distinct brain and hormonal mechanisms
- 3. Sexual desire is related to many cognitive, behavioral, and emotional processes.

B. Neuroendocrine factors

- 1. Role of the brain (hypothalamus, pituitary gland)
- 2. Role of hormones from gonads and adrenal glands (androgens, estrogens)

C. Behavioral factors

1. Animals seek pleasure and repeat behaviors leading to it.
2. Stimuli associated with sexual arousal become rewarding.

D. Sociocultural factors

1. Society influences what is sexually attractive (e.g., body size, adornment).
2. All cultures have rules about acceptable sexual partners and practices.

E. Evolutionary factors

1. Sexual desire rooted in reproductive success of ancestors
2. Cross-cultural consistencies in sexual partner preferences (e.g., incest avoidance, waist-to-hip ratio)
3. Sexuality is more loosely linked to reproduction in humans than in most animals; complex aspect of identity, relationships, and social life.

F. Sexual orientation: enduring sexual attraction to people whose gender is the same as (gay/lesbian) or different from (heterosexual) oneself or to both (bisexual).

1. Strong evidence for prenatal and genetic influences (Bocklandt et al., 2006; Hines et al., 2004)
2. Development, nature, and fluidity of orientation differ between genders and individuals.
3. See Smith et al. (2008) for more information on sexual orientation.

II. Achievement motivation: Desire for significant accomplishment

A. Mastery versus helpless orientation (Dweck, 1996)

1. Learning versus performance goals
2. Difficulty as challenge versus failure
3. Choice of moderately challenging versus very hard or very easy tasks

See Activity 3.1: Intrinsic Motivation and Achievement (with Handout 3.1)

B. Parenting characteristics that enhance achievement motivation

1. Encouraging children to attempt moderately challenging tasks

2. Providing strategies to succeed rather than discouraging complaints about failures
3. Giving praise and appropriate rewards for success
4. Encouraging the child to accept new challenges after success
5. Gender differences exist in socialization for achievement in school.

C. Cultural influences

1. Collectivist societies encourage group success.
2. Individualistic societies encourage individual success.
3. There are pros and cons to each societal type; each fits with respective cultural or religious belief systems.

III. Aggression: Behavior intended to harm an unwilling target

A. Types of aggression

1. Hostile aggression: striking out against someone or something because of anger, frustration, or envy (e.g., road rage)
2. Instrumental aggression: desired results obtained through hostile means due to reinforced hostile behavior (e.g., professional wrestling, playground bullies)
3. Physical versus relational aggression: intent to do physical harm versus social-psychological harm (e.g., gossiping, ostracism)

B. Factors increasing aggression

1. Neural factors: activation of certain regions in the brain, e.g., amygdala
2. Environmental factors: crowding and temperature (Anderson, 2001)
3. Social models of reinforced aggression (Bandura's Bobo doll study)

C. *Catharsis hypothesis*: reduction of anger by release through aggressive actions

1. Advantage: can be temporarily calming
2. Disadvantage: More likely outcomes are guilt, anxiety, more anger.

D. Appropriate ways to channel anger

1. Exercising
2. Playing music
3. Talking to a friend
4. Using conflict resolution skills

CONCEPT

Arousal theory assumes that people seek an optimum level of stimulation. Marvin Zuckerman has argued that people differ in the amount of stimulation they need or want and hence in their “sensation-seeking.” Most research indicates that moderate levels of arousal are adaptive: Either too low or too high a level is disruptive. It’s not surprising then that most people seek a moderate level of arousal by controlling the amount of external stimulation. Too much stimulation, and they retreat to a quiet place. Too little, and they seek greater activity. This activity seeks to measure students’ levels of arousal.

MATERIALS

Handout 1.1

DESCRIPTION

Handout 1.1 is a portion of Zuckerman’s scale for measuring sensation-seeking behavior. In scoring their responses, students should count one point for each of the following items they have circled: 1A, 2A, 3A, 4B, 5A, 6B, 7A, 8A, 9B, 10B, 11A, 12A, 13B. Zuckerman suggests the following interpretation of total scores: 1–3 is very low on sensation-seeking; 4–5 is low; 6–9 is average; 10–11 is high; 12–13 is very high. Zuckerman emphasizes caution in interpreting scores, however, because norms are based on the scores of college students. As people get older, their scores tend to be lower.

DISCUSSION

Zuckerman and other researchers have identified four forms of sensation-seeking.

- 1. Thrill- and Adventure-Seeking:** Some people may seek excitement in risky but socially acceptable activities such as parachute jumping, sky diving, and

race-car driving. Whether or not those who have taken the test have had an opportunity to engage in these activities, their expression of a desire to do so is highly predictive of their behavior in many other areas.

- 2. Experience-Seeking:** This represents the desire to seek sensation through the mind, the senses, and a nonconforming lifestyle. Some people reject the conventional middle-class lifestyle and seek a freer existence with unusual friends, frequent travel, or artistic expression.
- 3. Disinhibition:** Those who have chosen the middle-class lifestyle but find it boring may seek escape in social drinking and partying. Zuckerman calls this a kind of “extraverted sensation-seeking”—some of us need other people as sources of stimulation.
- 4. Boredom Susceptibility:** This is not so much another form of sensation-seeking as it is a low tolerance for experience that is repetitious or constant. While not all sensation-seekers are incapable of facing long periods with little external stimulation, the boredom-susceptible person gets extremely restless under such conditions.

Psychologist Frank Farley has applied the term “Type T personality” (for thrill seeking) to those who seem to need a life of constant stimulation and risk-taking. Type Ts, observes Farley, are invariably high-energy people. Some, such as Nobel-prize-winning biologist Francis Crick, find excitement in mental exercise. Crick, at one time a successful physicist, switched in midcareer to biology, where he won honors for his work with DNA. Sometimes, however, the energy goes awry. John Belushi was a successful, creative entertainer who sought stimulation in drugs.

Whereas Type A personalities are dangerous to themselves, “Type T,” says Farley, “are potentially doubly dangerous—to themselves and to others.” For example, he reports that some even make a point of driving while drunk for the added excitement and risk. He further argues that Type Ts can be identified during childhood and should be pushed away from the destructive and toward the creative. Recently, researchers Louise Masse and Richard Tremblay of the University of London reported that 6-year-old boys who are most inclined to seek new thrills and least fearful of possibly dangerous situations are at greatest risk of starting to use alcohol, tobacco, or drugs between ages 10 and 15.

Both Farley and Zuckerman reject the notion that sensation- or thrill-seekers have a neurotic need or desire to solve a psychological problem. Rather, these people have a distinctly different brain chemistry. “Some people have brains that keep pace with stimulation intensities,” writes Zuckerman. “The stronger the stimulus, the more the brain responds. Other persons have some kind of inhibition that actually diminishes their response at high intensities.” High-sensation seekers tend to be the former. They may need the excess stimulation to reach the level that “feels best,” their optimal level of arousal or where they perform most efficiently. Once having adapted to that level, they may again need a higher degree of stimulation.

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Staff. (1985, April 15). Looking for a life of thrills. *Time*, pp. 91–93.

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Activity Source: Adapted from Fineburg, A. C. (2008). Teacher's resources to accompany *Thinking About Psychology* (2nd ed.) by Blair-Broeker & Ernst. New York: Worth. Used with permission.

HANDOUT 1.1

sensation-seeking scale

For each of the 13 items, circle the choice, A or B, that best describes your likes or dislikes, or the way you feel.

1. A. I would like a job that requires a lot of traveling.
B. I would prefer a job in one location.
2. A. I am invigorated by a brisk, cold day.
B. I can't wait to get indoors on a cold day.
3. A. I get bored seeing the same old faces.
B. I like the comfortable familiarity of everyday friends.
4. A. I would prefer living in an ideal society in which everyone is safe, secure, and happy.
B. I would have preferred living in the unsettled days of our history.
5. A. I sometimes like to do things that are a little frightening.
B. A sensible person avoids activities that are dangerous.
6. A. I would not like to be hypnotized.
B. I would like to have the experience of being hypnotized.
7. A. The most important goal of life is to live it to the fullest and experience as much as possible.
B. The most important goal of life is to find peace and happiness.
8. A. I would like to try parachute-jumping.
B. I would never want to try jumping out of a plane, with or without a parachute.
9. A. I enter cold water gradually, giving myself time to get used to it.
B. I like to dive or jump right into the ocean or a cold pool.
10. A. When I go on a vacation, I prefer the comfort of a good room and bed.
B. When I go on a vacation, I prefer the change of camping out.
11. A. I prefer people who are emotionally expressive even if they are a bit unstable.
B. I prefer people who are calm and even tempered.
12. A. A good painting should shock or jolt the senses.
B. A good painting should give one a feeling of peace and security.
13. A. People who ride motorcycles must have some kind of unconscious need to hurt themselves.
B. I would like to drive or ride a motorcycle.

Source: Zuckerman, M. (1994). *Behavioral expressions and biosocial bases of sensation seeking*. New York, NY: Cambridge University Press. Reprinted by permission.

activity 1.2

classification of needs

CONCEPT

Maslow created a hierarchy of needs which proposes that more basic needs must be satisfied before it is possible to meet higher needs. The exercise presented here allows students to graphically represent Maslow's hierarchy and to classify the options according to Maslow's scale.

MATERIALS

Handout 1.2

DESCRIPTION

Distribute the handout to students to complete as classwork or homework. Have them classify the following needs according to Maslow's Hierarchy of Needs. First, they should fill in the chart, placing the levels in their correct place in the hierarchy. Then they should look at the needs listed below and classify them according to level.

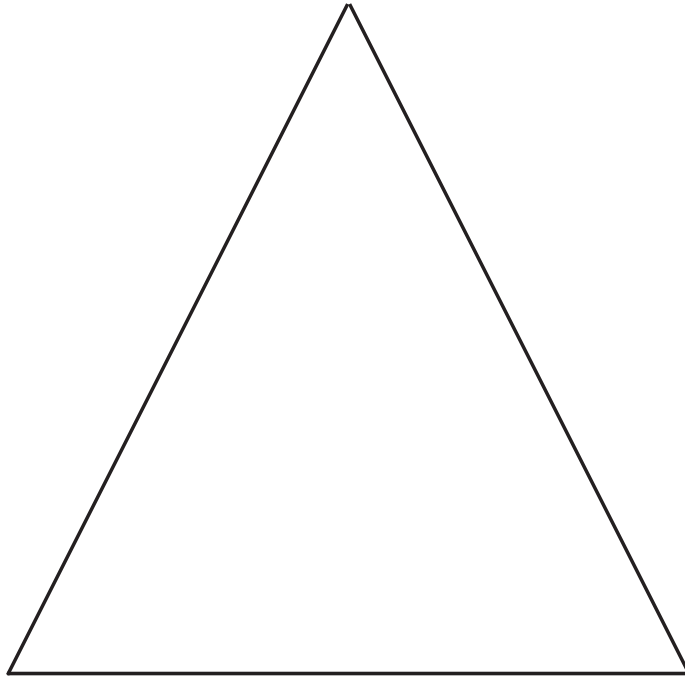
DISCUSSION

Students can see graphically how specific needs fit into the hierarchy. You can assess student understanding of Maslow's theory. You can also use this to debate whether some items can be listed in more than one category or if fulfillment of the lower categories is necessary to move up the hierarchy.

HANDOUT 1.2

classification of needs

Classify the following needs according to Maslow's Hierarchy of Needs. First, fill in the chart placing the levels in their correct place in the hierarchy. Then, look at the needs listed below, and classify them according to level.



Belongingness Needs
Esteem Needs
Physiological Needs
Safety/Security Needs
Self-Actualization Needs
Self-Transcendence Needs

Food
Water
Air
Sunlight
Car
Identity Beyond the Self

Self-Respect
Support
Friendship
Procreation
Shelter Realizing

Money
Heat
Love
Acceptance
Potential

CONCEPT

Flow is a state of optimal experience. This activity shows students how flow fits in with other subjective experiences.

MATERIALS

Transparency Master 1.3

DESCRIPTION

Using the transparency, discuss the following qualities of flow experiences:

- **Attention that is freely invested and centered on achieving goals—** Choosing to spend time in activities and working toward goals encourages flow.
- **The lack of psychological disorder—**The less stress and distraction, the greater the opportunity for flow. Psychic entropy is information that conflicts with existing intentions or that distracts people from carrying out intentions (Csikszentmihalyi, 1990). When people experience psychic entropy, they tend to lose flow.
- **Merging action and awareness—**Fully concentrating on an activity that requires all of one's relevant skills produces flow. People in flow situations describe themselves as being so focused on the activity that they do not notice distractions that come along.
- **Challenges that require skill—**Without the need for skill in an activity, the activity becomes meaningless. For example: For those who are not skilled at analyzing English literature, reading a novel by Dickens seems boring and pointless. However, to the expert, such a novel contains nuances that are both exciting and meaningful.

- **Clear goals and feedback**—Goals must be clear, attainable, and meaningful, and feedback must be immediate if flow is to be experienced. For example: The tennis player knows his goal is to hit the ball over the net successfully, even aiming at certain spots to increase the challenge. However, a person whose goal is to watch TV all day usually doesn't experience flow because the goal is ambiguous (how long is "all day"?) and is not challenging or meaningful.
- **The lack of worry about losing control of the situation**—Although people in flow situations are usually engaging in activities that could lead to failure, they often do not fear it because they believe they possess the necessary skill to accomplish the goal. There are two types of "dangers" people experience in flow situations: objective dangers and subjective dangers. Objective dangers are unpredictable physical events that one can prepare for in advance. For example: Rock climbers can prepare for a sudden storm, avalanches, and so on, that are objective dangers. Subjective dangers are dangers that arise from a person's lack of skill that can be overcome through discipline and preparation. For example: Rock climbers who lack the experience to determine their limits (physical and psychological) should gradually take on more challenging climbs to gain this skill.
- **The transformation of time**—In flow, time seems to slip away without notice. During flow experiences, what one perceives as a short period of time usually becomes hours without a second thought.
- **The loss of self-consciousness**—People in flow experiences are not worried about the perceptions of others or feelings of inadequacy. Remember that attention is so concentrated that there is no room for such distractions.

DISCUSSION

Flow experiences tend to be more enjoyable than pleasurable. The difference between pleasure and enjoyment hinges on what causes the good feelings.

- *Pleasure* is the good feeling that comes from satisfying homeostatic needs like hunger. Feelings of pleasure are usually temporary.
- *Enjoyment* is the good feeling(s) people experience when they are challenged beyond homeostatic pursuits. Enjoyable experiences produce flow.

Flow can be experienced in several areas of life:

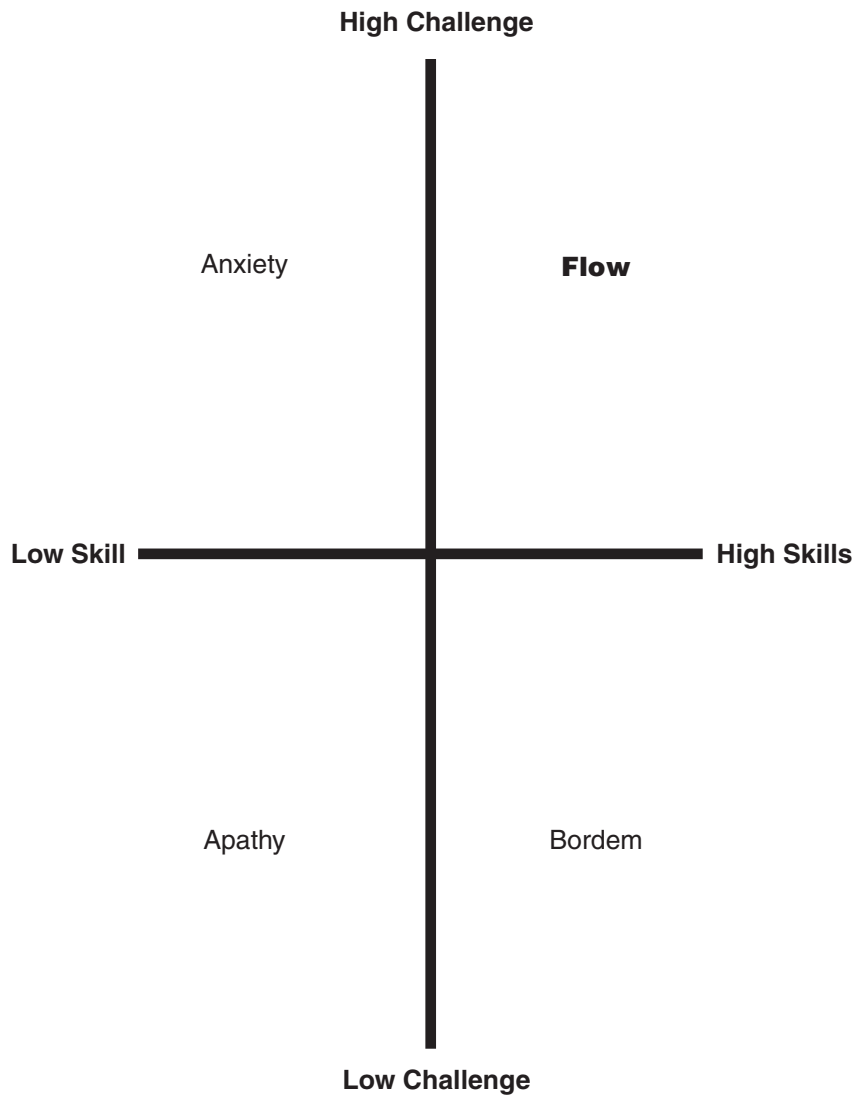
- *Work*—attempting to transform mind-numbing jobs into meaningful challenges promotes work as a flow experience. For example: Assembly-line workers may set hourly production goals for themselves and try to beat those goals throughout the day. Each new goal requires more and more skill to accomplish.
- *Hobbies/Leisure Activities*—The more involving of time and energy a leisure activity is, the more enjoyable. For example: Socializing with friends is more enjoyable than watching TV.

REFERENCE

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Activity Source: Adapted from Fineburg, A. C. (2008). Teacher's resources to accompany *Thinking About Psychology* (2nd ed.) by Blair-Broeker & Ernst. New York: Worth. Used with permission.

TRANSPARENCY MASTER 1.3
graphical representation of flow



Source: Bolt, M. (2001). Instructor's resources to accompany *Psychology: Myers in Modules* (6th ed.). New York: Worth.

activity 2.1

a survey of eating habits

CONCEPT

Are our attitudes toward food and eating shaped by our childhood experiences? Donn Byrne and his colleagues argued that this may be the case and designed the Survey of Eating Habits. The survey is divided into two parts and, as might be expected, Byrne found that past attitudes and habits correlated significantly with current ones.

MATERIALS

Handout 2.1

DESCRIPTION

Distribute the handout to students, allowing them to complete it as classwork or homework. In this survey, high scores represent a positive orientation to food; low scores, a negative orientation. Have students complete and score their own survey using the guide below. In developing the scale, the authors analyzed results for males and females separately because prior studies of food aversion indicated significant sex differences. These separate item analyses yielded somewhat different scales for males and females.

Males: 2-T, 3-F, 4-T, 5-T, 7-F, 9-F, 10-T, 11-T, 12-T, 15-F, 16-F, 17-T, 18-F, 19-T, 24-T, 25-T, 26-T, 27-T, 32-T, 33-T, 34-F, 37-F, 38-T, 39-T, 42-T, 45-F, 46-F, 47-F, 51-T, 52-T, 53-T, 54-T, 58-F, 60-T, 61-T, 63-T, 64-T.

Females: 1-T, 2-T, 4-T, 5-T, 6-T, 8-T, 9-F, 10-T, 11-T, 12-T, 13-F, 14-T, 15-T, 16-F, 17-T, 18-F, 19-T, 20-T, 21-T, 22-T, 23-F, 26-T, 27-T, 28-F, 29-T, 30-F, 31-F, 34-F, 35-F, 36-F, 39-T, 40-T, 41-T, 43-F, 44-T, 45-F, 48-F, 49-F, 50-T, 51-T, 52-T, 53-T, 54-T, 55-F, 56-F, 57-F, 59-T, 61-T, 62-T, 63-T, 65-T

You may want to collect the scales (or at least have students turn in their scores). You can then calculate the mean for males and females separately and provide

students with some basis for comparing their own scores with those of others of the same sex. You might also calculate separate scores for the two parts of the scale (“past attitudes and habits” versus “present attitudes and habits”) to see if the two are significantly correlated. If student names are kept anonymous, volunteer students may want to collect the scales and calculate the means themselves.

DISCUSSION

The survey is a good introduction to a discussion of psychological and sociocultural influences on hunger, eating, and obesity.

In the original survey, Byrne also looked at the relationship between the subjects’ scores and the number of foods liked. For males, the higher the score, the greater the number of foods liked. No significant correlation was found for females. More interesting were the significant sex differences found in specific food likes and dislikes. As shown in the following table, in only one case (celery) did males indicate greater dislike than females.

items yielding significant sex differences in food aversion

Food	Percentage males indicating dislike	Percentage females indicating dislike
Calves’ brains	70	90
Celery	32	8
Clam dip	46	74
Eggs	4	18
Hominy	28	52
Kidney stew	80	94
Lamb	20	38
Leftovers	24	44
Nuts	2	14
Oysters	26	64
Tripe	64	96
Turtle soup	60	88
Waffles	4	18
Watermelon	2	12

Source: Adapted from Byrne, D., Golightly, C., & Capaldi, E. J. (1963). Construction and validation of the Food Attitude Scale. *Journal of Consulting Psychology, 27*(3), 215–222. Copyright © 1963 by American Psychological Association.

Activity Source: Adapted from Fineburg, A. C. (2008). Teacher’s resources to accompany *Thinking About Psychology* (2nd ed.) by Blair-Broeker & Ernst. New York: Worth. Used with permission.

HANDOUT 2

survey of eating habits

Read each statement and decide if it is true as applied to you or false as applied to you. Do not omit any of the items. Mark either true or false before every statement by placing a check mark in the TRUE column or in the FALSE column.

I. Past Attitudes and Habits

True False

- | | | |
|-------|-------|---|
| _____ | _____ | 1. My family seldom argued at the dinner table. |
| _____ | _____ | 2. Many different types of meals were served at our house. |
| _____ | _____ | 3. I did not particularly care for the food served at home. |
| _____ | _____ | 4. My mother was a good cook. |
| _____ | _____ | 5. Our family seemed to be in a better disposition at and shortly after meals than before. |
| _____ | _____ | 6. My mother enjoyed cooking. |
| _____ | _____ | 7. Meals were simple but substantial in our family. |
| _____ | _____ | 8. My mother served desserts frequently. |
| _____ | _____ | 9. Discipline was usually enforced shortly before or after the evening meal. |
| _____ | _____ | 10. Mealtimes were quite unhurried; in fact, they took on the aspect of a social activity. |
| _____ | _____ | 11. My father enjoyed eating. |
| _____ | _____ | 12. I enjoyed eating. |
| _____ | _____ | 13. Younger members of the family were requested not to talk too much at meals. |
| _____ | _____ | 14. My family often celebrated something important by going to a restaurant. |
| _____ | _____ | 15. Less than an average amount of conversation occurred at mealtime in my family. |
| _____ | _____ | 16. My father tended to dampen mealtime conversation. |
| _____ | _____ | 17. Conversation at meals was more light than serious. |
| _____ | _____ | 18. Business matters were often discussed at meals (chores, etc.). |
| _____ | _____ | 19. Flowers or candles were sometimes placed on the table at evening meals. |
| _____ | _____ | 20. Sometimes my mother would give me my favorite food when I was sick or unhappy. |
| _____ | _____ | 21. My mother used to take special precautions to avoid giving us contaminated food. |
| _____ | _____ | 22. The emphasis was on nutritional meals in our family. |
| _____ | _____ | 23. My mother liked cooking least of all household chores. |
| _____ | _____ | 24. Meals were quite elaborate in our family. |
| _____ | _____ | 25. Individuals other than my immediate family, such as grandparents, usually participated in the evening meal. |
| _____ | _____ | 26. Following the main meal, I tended to linger about the table talking and so on, rather than leaving the table. |
| _____ | _____ | 27. My mother enjoyed eating. |
| _____ | _____ | 28. Sometimes I felt like leaving the table before the meal was over. |
| _____ | _____ | 29. My mother fixed my favorite foods when I was sick. |
| _____ | _____ | 30. At restaurants everything I ordered had to be eaten. |
| _____ | _____ | 31. Eating out was infrequent. |
| _____ | _____ | 32. The entire family was usually present at the evening meal. |

True False

- _____ 33. On my birthdays I helped plan the menu.
- _____ 34. My mother tended to dampen mealtime conversation.
- _____ 35. Discipline was often applied at mealtime.
- _____ 36. Family meals were more hurried than unhurried.
- _____ 37. My father sometimes scolded us at the evening meal.
- _____ 38. At breakfast, I often read what was printed on the cereal boxes.

II. Present Attitudes and Habits

- _____ 39. Mealtime is usually pleasant in my home.
- _____ 40. I like to smell food cooking.
- _____ 41. In general, I prefer a slow, leisurely meal to a quick, hurried one.
- _____ 42. I like many different types of food.
- _____ 43. I tend to be underweight.
- _____ 44. At a party, I tend to eat a lot of peanuts.
- _____ 45. I do not care much for desserts.
- _____ 46. I seldom like to try a new food.
- _____ 47. I often get indigestion or heartburn.
- _____ 48. If I am very busy, I may forget all about eating.
- _____ 49. Shopping for groceries is unpleasant.
- _____ 50. I like to eat foreign foods.
- _____ 51. A good wife must be a good cook.
- _____ 52. I think that going to an expensive restaurant is a good way to celebrate an important event such as an anniversary, a birthday, etc.
- _____ 53. I have a tendency to gain weight.
- _____ 54. Sometimes I have a craving for sweets.
- _____ 55. I tend to be quiet rather than talkative.
- _____ 56. If a child refuses dinner, he should be made to eat.
- _____ 57. I almost never eat between meals.
- _____ 58. I dislike many foods.
- _____ 59. I enjoy eating at restaurants.
- _____ 60. I often eat while I am watching television.
- _____ 61. Watching people eat makes me hungry.
- _____ 62. People who eat heartily in public have bad manners.
- _____ 63. I often buy refreshments at movies, ball games, etc.
- _____ 64. I sometimes reward myself by eating.
- _____ 65. When depressed I sometimes eat my favorite foods.

Source: Reprinted by permission of Donn Byrne, PhD, Distinguished Professor Emeritus, University at Albany, State University of New York.

activity 3.1

intrinsic motivation and achievement

CONCEPT

Extend the text discussion of intrinsic motivation with Janet Spence and Robert Helmreich's research on the relationship between intrinsic motivation and achievement. This activity reproduces their scale for assessing three different facets of intrinsic motivation: The *work factor* represents "the desire to work hard and to do a good job," the *mastery factor* reflects "a preference for difficult, challenging tasks and for meeting internally prescribed standards of performance excellence," and the *competitiveness factor* consists of "the enjoyment of interpersonal competition and the desire to win."

MATERIALS

Handout 3.1

DESCRIPTION

Distribute the handout to students, allowing them to complete it for classwork or homework.

DISCUSSION

In scoring, students should reverse the numbers they placed in front of questions 7 and 9 (5 = 1, 4 = 2, 3 = 3, 2 = 4, 1 = 5), then add their scores for each subscale. For college students, the authors reported mean scores on the "Work" scale of 19.8 for males and 20.3 for females; on the "Mastery" scale, the means were 19.3 for males and 18.0 for females; on the "Competitiveness" scale the means were 13.6 for males and 12.2 for females.

Research has indicated that people oriented toward mastery and hard work achieve more. As students, they have a higher GPA, as MBA graduates they earn more money, as scientists their work is more likely to be recognized. In contrast, the effect of competitiveness depends on the degree of combined work/mastery

(activity 3.1 continued from previous page)

orientation. Among people who don't intrinsically enjoy mastery and hard work, the highly competitive achieve more. However, among those driven to mastery and hard work, less competitive people achieve more.

Source: Spence, J. T., & Helmreich, R. L. (1983). Achievement-related motives and behavior. In J. T. Spence (Ed.), *Achievement and achievement motives: Psychological and sociological approaches*. New York: W. H. Freeman.

Activity Source: Adapted from Fineburg, A.C. (2008). Teacher's resources to accompany *Thinking About Psychology* (2nd ed) by Blair-Broeker & Ernst. New York: Worth. Used with permission.

HANDOUT 3.1

Work Questionnaire

INSTRUCTIONS

Rate yourself on each item below, using the following scale.

- 1 = strongly disagree
- 2 = somewhat disagree
- 3 = neither agree nor disagree
- 4 = somewhat agree
- 5 = strongly agree

work

- _____ 1. It is important to me to do my work as well as I can even if it isn't popular with my coworkers.
- _____ 2. I find satisfaction in working as well as I can.
- _____ 3. There is satisfaction in a job well done.
- _____ 4. I find satisfaction in exceeding my previous performance even if I don't outperform others.
- _____ 5. I like to work hard.
- _____ 6. Part of my enjoyment in doing things is improving my past performance.

mastery

- _____ 7. I would rather do something at which I feel confident and relaxed than something which is challenging and difficult.
- _____ 8. When a group I belong to plans an activity, I would rather direct it myself than just help out and have someone else organize it.
- _____ 9. I would rather learn easy, fun games than difficult, thought games.
- _____ 10. If I am not good at something, I would rather keep struggling to master it than move on to something I may be good at.
- _____ 11. Once I undertake a task, I persist.
- _____ 12. I prefer to work in situations that require a high level of skill.
- _____ 13. I more often attempt tasks that I am not sure I can do than tasks that I believe I can do.
- _____ 14. I like to be busy all the time.

competitiveness

- _____ 15. I enjoy working in situations involving competition with others.
- _____ 16. It is important to me to perform better than others on a task.
- _____ 17. I feel that winning is important in both work and games.
- _____ 18. It annoys me when other people perform better than I do.
- _____ 19. I try harder when I'm in competition with other people.

Source: Spence, J. T. (Ed.). (1983). *Achievement and achievement motives: Psychological and sociological approaches* (Table 1-1). New York, NY: W. H. Freeman and Company. Used with permission.

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