Understanding Feedback and Reinforcement

- *Reinforcement* is the use of rewards and punishment, which increase or decrease the likelihood of a similar response occurring in the future.
Principles of Reinforcement

• If doing something results in a good consequence (such as being rewarded), people tend to repeat the behavior to achieve additional positive reinforcement.

• If doing something results in an unpleasant consequence (such as being punished), people tend not to repeat the behavior to avoid more negative consequences.
Principles of Reinforcement (continued)

• Why principles of reinforcement are complex:
  – People react differently to the same reinforcement.
  – People are unable to repeat desirable behaviors.
  – People receive different reinforcers in different situations.
Approaches to Influencing Behavior

- Positive approach focuses on rewarding appropriate behavior, which increases the likelihood of desirable responses occurring in the future.

- Negative approach focuses on punishing undesirable behaviors, which should lead to future redirection of these inappropriate behaviors.
TARGET Approach to Creating a Positive Motivational Climate

• Create a mastery-oriented climate by manipulating the following environmental conditions using the TARGET principle.

• TARGET: tasks, authority, rewards, groupings, evaluation, timing.
Principles of Positive Reinforcement

• Choose effective reinforcers (e.g., social, material, activity, special outings, intrinsic and extrinsic).

• Choose timing or schedule of reinforcement.
  – Early learning—continuous and immediate reinforcement desirable
  – Learned skill—intermittent and immediate reinforcement desirable

(continued)
Principles of Positive Reinforcement (continued)

- Reward appropriate behaviors—choose the proper behaviors to reward.
- Shape or reinforce successful approximations of difficult behaviors.
- Reward performance as well as outcome.
- Reward effort.
- Reward emotional and social skill.
Providing Performance Feedback

• Provide knowledge of results (feedback regarding the correctness of an action).
• Provide sincere and contingent feedback.
• Provide motivational and instructional feedback.
• Use varied types of feedback—verbal praise, facial expressions, and pats on the back.
Negative Approaches to Motivation: What Not to Do

• Intimidation.
• Focus on criticism.
• Focus on criticism with sarcasm.
• Use physical abuse.
• Employ guilt.
Punishment

- Punishment can control and change behavior, but 80% to 90% of reinforcement should be positive.

- **Support of punishment:**
  - Punishment can serve a useful educational purpose (i.e., maintain stability, order, mastery).
  - Punishment can deter future cheating or wrongdoing.

(continued)
Punishment (continued)

- **Drawbacks of punishment:**
  - Punishment can arouse fear of failure.
  - Punishment can act as a reinforcer.
  - Punishment can create an unpleasant, aversive learning environment.
Guidelines for Using Punishment

• Be consistent by giving everyone the same type of punishment for breaking similar rules.

• Punish the behavior, not the person—convey to the person that it’s his or her behavior that needs to change.

• Allow athlete’s input in making up punishments for breaking rules.
Guidelines for Using Punishment (continued)

• Do not use physical activity as a punishment.

• Make sure the punishment is not perceived as a reward or simply as attention.

• Impose punishment impersonally—do not berate the person or yell. Simply inform the person of the punishment.
Guidelines for Using Punishment (continued)

- Do not punish athletes for making errors while playing.
- Do not embarrass individuals in front of teammates or classmates.
- Use punishment sparingly, but enforce it when you use it.
Guidelines for Using Punishment (continued)

• Do not punish other teammates for an individual’s mistake

• Make sure punishment is age appropriate.

• Make certain athletes understand the reason for punishment.
Modifying Behavior in Sport

• Behavior modification
  – Systematic application of the principles of positive and negative reinforcement to change behavior
  – Contingency management = behavioral coaching = behavior modification

(continued)
Principles of Behavior Programs

• Target the behaviors you want to change.
• Define targeted behaviors.
• Record the behaviors.
• Provide meaningful feedback.
• State outcomes clearly.
• Tailor reward systems.
Ways to Choose and Monitor Target Behaviors

- Direct observation of single behaviors
- Behavioral checklists for recording multiple behaviors
- Athlete self-monitoring
- Videotape of practice, precompetition, and competition
- Postperformance videotape reconstruction of verbal behavior
Intrinsic Motivation

- People who have intrinsic motivation strive inwardly to be competent and self-determining in their quest to master the task at hand.
- They enjoy competition, like the action and excitement, focus on having fun, and want to learn skills to the best of their ability.
Factors Influencing Intrinsic Motivation

• **Social factors**
  – Success and failure
  – Focus of competition
  – Coaches’ behavior

• **Psychological factors**
  – Need for competence, autonomy, and relatedness

(continued)
Factors Influencing Intrinsic Motivation *(continued)*

• Passion is a strong inclination and desire toward an activity one likes, finds important, and invests time and energy in.
  
  – *Harmonious passion (HP)*: A strong desire to engage in an activity freely as it becomes part of one’s identity.
  
  – *Obsessive passion (OP)*: An uncontrollable desire to participate in an activity that does *not* become part of one’s identity.
Intrinsic Motivation and Extrinsic Rewards

• Basic question: Do extrinsic rewards undermine intrinsic motivation?

• Research shows that being paid for working on an intrinsically interesting activity can decrease a person’s intrinsic motivation for the activity.
Intrinsic Motivation and Extrinsic Rewards (continued)

- Cognitive evaluation theory: How rewards are perceived is critical in determining whether intrinsic motivation increases or decreases.
Cognitive Evaluation Theory

- **Controlling aspects:** Rewards perceived to control a person decrease intrinsic motivation, whereas rewards that contribute to an internal locus of causality increase intrinsic motivation.

- **Informational aspects:** Rewards that provide information and positive feedback about competence increase intrinsic motivation, whereas rewards that suggest the person is not competent decrease intrinsic motivation.
• Functional significance of the event: How a reward affects intrinsic motivation depends on whether the recipient perceives it to be more controlling or more informational.
How Extrinsic Rewards Affect Intrinsic Motivation in Sport

• Scholarships
  – Athletic scholarships can either decrease or increase athletes’ levels of intrinsic motivation.
  – Effects depend on which is more emphasized by the coach—the controlling or information aspects.

(continued)
How Extrinsic Rewards Affect Intrinsic Motivation in Sport (continued)

• Competitive success and failure
  – Success tends to increase intrinsic motivation.
  – Failure tends to decrease intrinsic motivation.

• Feedback: Positive feedback increases intrinsic motivation.
Other Determinants of Intrinsic Motivation

- Higher levels of intrinsic motivation are related to the following:
  - Playing for an autonomous (democratic) versus a controlling coach
  - Participating in a recreational versus competitive league
  - High versus low perceived competence
  - High versus low perceived control
Strategies for Increasing Intrinsic Motivation

- Provide for successful experiences.
- Give rewards contingent on performance.
- Use verbal and nonverbal praise.
- Vary content and sequence of practice drills.
- Involve participants in decisions.
- Set realistic performance goals.
Flow: A Special Case for Intrinsic Motivation

- **Flow** is a holistic, intrinsically motivating sensation that people feel when they are totally involved in an activity or are on automatic pilot.
- A flow model describes the essential elements of flow.
The Flow Model

• **Essential elements of flow:**
  – Balance of challenges and skills
  – Complete absorption in the activity
  – Clear goals
  – Merging of action and awareness
  – Total concentration on the task
The Flow Model (continued)

• Essential elements of flow:
  – Loss of self-consciousness
  – A sense of control
  – No goals or rewards external to the activity
  – Transformation of time
  – Effortless movement
Figure 6.4

Anxiety

Challenge
High

Flow

Skills
Low

Apathy

Average

Boredom

Challenge
Low

Skills
High

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How People Achieve Flow

• Be motivated to perform (maintain a balance between goals and skills).

• Achieve optimal arousal before performing.

• Maintain an appropriate focus (stay in the present, focus on key points).

• Use precompetitive and competitive plans and preparation.

(continued)
How People Achieve Flow (continued)

• Achieve optimal physical preparation and readiness.

• Experience optimal environmental and situational conditions.

• Exhibit confidence and positive mental attitude.

• Have positive team play and interaction (positive play and shared purposes).

• Feel good about performance.
Controllability of Flow States

• Research with athletes indicates that they cannot control flow.

• Athletes do report that they can increase the probability of flow occurring.
Factors that Prevent Flow from Occurring

• Nonoptimal physical preparation and readiness
  – Injury
  – Fatigue
  – Not feeling good physically

(continued)
Factors that Prevent Flow from Occurring (continued)

- Nonoptimal environmental or situational conditions
  - External stresses
  - Unwanted crowd response
  - Uncontrollable influences of the event
Factors that Prevent Flow from Occurring (continued)

• Lack of confidence or a negative mental state
  – Negative thinking
  – Self-doubt
  – No control of mental state
Factors that Prevent Flow from Occurring (continued)

• Inappropriate focus
  – Thinking too much
  – Worrying about what others are doing
  – Frustration with teammates’ effort
Factors that Prevent Flow from Occurring (continued)

• Problem with precompetitive preparation
  – Poor precompetitive preparation
  – Distraction before competition
  – Interruption to precompetitive preparation
Factors that Prevent Flow from Occurring (continued)

• Lacking motivation to perform
  – No goals
  – Lack of challenge
  – Low arousal or motivation

• Nonoptimal arousal level before competition
  – Not feeling relaxed
  – Feeling too relaxed
Factors that Prevent Flow from Occurring (continued)

- Negative team play and interactions
  - Team not performing well
  - Not feeling part of the team
  - Negative talk within the team
Factors that Prevent Flow from Occurring (continued)

• Performance going poorly
  – Unforced errors
  – Poor technique
  – Things not going as planned
Factors that Disrupt Flow (continued)

• Nonoptimal environmental and situational influences
  – Stoppage in play
  – What the opposition is doing
  – Negative refereeing decisions
  – Inappropriate, negative, or no feedback
Factors that Disrupt Flow (continued)

• Problems with physical readiness or physical state
  – Lack of physical preparation
  – Injury during the competition
  – Fatigue
Factors that Disrupt Flow (continued)

- Problems with team performance or interactions
  - Negative talk on the field
  - Team not playing well
  - Lack of team interactions
Factors that Disrupt Flow (continued)

- Inappropriate focus
  - Worrying about competitor’s ability
  - Daydreaming
  - Loss of concentration

- Doubting self and putting pressure on self
Negatives Side of Flow

• A potential negative consequence might be that of contributing to dependence on an activity once associated with a flow experience.

• Surfers talked of being addicted to the euphoric feelings they experienced and were willing to continue to surf despite family commitments, injury, or potential death to replicate these sensations.