



BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI - 620 024

(Accredited With A+ Grade By NAAC In The Third Cycle)

Department Of Physical Education And Yoga

Bachelor Of Physical Education (B. P. Ed)

CC- VII SPORTS TRAINING (21BPE31)

Sem. -III

Credit-4

Unit-5

Training Program

Motor Development and Its Implication In Relation To Different Sexes and age Groups:

- Motor development refers to the progression of physical abilities, including gross and fine motor skills, as a person grows. It plays a significant role in shaping how individuals perform various physical tasks at different life stages. The patterns of motor development, while universal in certain respects, show variations between sexes, especially as children mature into adolescence and adulthood.

Infancy and Early Childhood (0-5 years)

Motor Development Characteristics:

Both Sexes: During infancy, motor milestones like lifting the head, sitting, crawling, and walking are achieved. Fine motor skills, like grasping objects, also start developing.

Sex Differences: During this stage, the differences between boys and girls are minimal. Both sexes develop motor skills at similar rates, with variations largely due to individual growth patterns rather than sex-based distinctions.

Implications:

Boys and Girls: At this age, motor development is less influenced by sex, so interventions like physical activities, toys, and games designed to stimulate motor skills are effective for both boys and girls. This is the best time to introduce equal opportunities for physical exploration and skill-building activities.

Middle Childhood (6-10 years)

Motor Development Characteristics:

Both Sexes: This stage is marked by improved coordination, strength, and balance. Children engage in more complex movements such as jumping, running, throwing, catching, and writing.

Sex Differences:

- **Boys:** Tend to show a slight advantage in tasks requiring gross motor skills and physical strength, like running, throwing, and climbing. This is partly due to natural physical growth and early hormonal influences.
- **Girls:** Often excel in fine motor skills and activities that require precision, balance, and flexibility, such as drawing, cutting, and dancing.

Implications:

Physical Education: Programs should offer a balance of activities that cater to both boys and girls, encouraging participation in both strength-based (e.g., sports like soccer) and coordination/flexibility-based activities (e.g., gymnastics).

Gender-Specific Preferences: While boys may lean toward rougher physical activities and girls toward more dexterous ones, encouraging cross-participation can promote balanced motor development across sexes.

Adolescence (11-18 years)

Motor Development Characteristics:

Both Sexes: This stage is characterized by rapid physical growth and hormonal changes, which impact muscle mass, coordination, and strength.

Sex Differences:

- **Boys:** The onset of puberty brings increased testosterone, leading to greater muscle mass, bone density, and strength. Boys excel in activities requiring endurance, speed, and power.
- **Girls:** While girls experience a growth spurt, estrogen leads to increased fat distribution, especially around the hips and thighs. Girls may retain an advantage in tasks requiring fine motor skills and flexibility, but their performance in strength-based tasks may not match that of boys due to lower muscle mass.

Implications:

Physical Training: Boys may benefit from strength and endurance training, while girls may excel in agility, balance, and flexibility exercises. However, encouraging all adolescents to engage in varied physical activities can help address motor skill development holistically.

Social and Psychological Factors: Societal expectations and gender norms can influence how boys and girls engage in physical activities. Providing equal access to different types of physical activities (e.g., strength training for girls, dance for boys) can help break down stereotypes and support well-rounded motor development.

Adulthood (18 years and beyond)

Motor Development Characteristics:

Both Sexes: As adults, motor skills tend to peak in the 20s and 30s, then gradually decline with age. Strength, coordination, and fine motor control remain relatively stable but begin to decrease due to aging and a reduction in physical activity levels.

Sex Differences:

- **Men:** Retain higher levels of muscle mass, strength, and endurance, which can help in activities that require power and physical exertion.
- **Women:** Typically retain greater flexibility and balance, but their physical performance may decline more in areas involving strength unless specifically trained.

Implications:

Long-Term Health: Regular physical activity, including strength training, balance exercises, and flexibility routines, is critical for both sexes to maintain motor function and prevent age-related decline.

Gender-Specific Health Programs: While men may benefit from focusing on flexibility and balance to complement their strength, women may benefit from strength training to counter the natural decline in muscle mass.

PERIODIZATION

Meaning of Periodization:

- Periodization is a systematic approach to planning training and exercise programs by dividing them into specific phases or periods, each with distinct goals and focuses. The purpose of periodization is to optimize performance and recovery by gradually adjusting training variables (intensity, volume, and specificity) over time, allowing the athlete to peak at the right moment, typically for a competition or key event.

Types of Periodization

Single Periodization

When there is only one major competition in one year, it is called single periodization.

Macro cycle	I											
Period	Preparatory							Competition				T
Months	1	2	3	4	5	6	7	8	9	10	11	12

Multiple periodization

1. Double periodization

Macro cycle	I						II					
Period	Preparatory				Competition			Preparatory		Competition		T
Months	1	2	3	4	5	6	7	8	9	10	11	12

2. Triple periodization

Macro cycle	I				II				III				
Period	P		C		P		C		P		C		T
Months	1	2	3	4	5	6	7	8	9	10	11	12	

Aim and content of Periods

a. Preseason (Preparatory Phase)

- **Goal:** Build a solid base of fitness.
- **Duration:** 8-12 weeks.
- **Focus:** General conditioning (endurance, strength, flexibility).
- **Activities:** Moderate to high volume, low to moderate intensity. Strength training and technical skills development.

b. Competition Season (Peak Phase)

- **Goal:** Peak physical condition and optimal performance.
- **Duration:** 6-12 weeks.
- **Focus:** Increase intensity, reduce volume to peak.
- **Activities:** Sport-specific drills, high-intensity intervals, tapering toward competitions.

c. Transition (Offseason)

- **Goal:** Active recovery and rehabilitation.
- **Duration:** 4-6 weeks.
- **Focus:** Rest and regeneration, maintaining general fitness.
- **Activities:** Light exercises, recreational sports, active rest.

Key Elements of Periodization:

Phases: The training is broken into blocks or periods, such as:

- **Preparatory Phase:** Focus on building a base of general fitness and strength.
- **Competitive Phase:** Aim to reach peak performance for competition.
- **Transition Phase:** Time for recovery and regeneration after competition.

Volume and Intensity:

- **Volume:** Refers to the amount of work (e.g., sets, reps, miles).
- **Intensity:** Refers to the difficulty or effort level (e.g., weight lifted, speed).
- **Peaking:** Ensuring that the athlete reaches their highest performance level at the most crucial time, often for a competition.

General Psychology of Coaching:

Principle 1: Mental Resilience

- One of the core tenets of sports psychology coaching is developing mental resilience. Athletes learn to bounce back from setbacks, cope with pressure, and maintain focus under duress. Resilience helps athletes stay motivated and committed to their goals, even in the face of challenges.

Principle 2: Goal Setting

- Setting clear and achievable goals is fundamental to sports psychology coaching. Athletes learn how to define their objectives, break them down into smaller milestones, and create action plans to achieve them. Goal setting provides direction and motivation, driving athletes to push their limits.

Principle 3: Visualization and Mental Imagery

- Visualization and mental imagery are powerful tools used by sports psychologists. Athletes practice mentally rehearsing their performances, helping them build confidence and reduce anxiety. Visualizing success can lead to improved execution during actual competitions.

Principle 4: Focus and Concentration

- Sports psychology coaching emphasizes the ability to maintain focus and concentration during competition. Athletes learn to block out distractions, stay in the present moment, and perform “in the zone,” leading to enhanced performance and enjoyment.

Principle 5: Self-Talk and Positive Thinking

- Positive self-talk is key to boosting an athlete’s confidence and self-belief. Coaches teach athletes to replace negative thoughts with positive affirmations, fostering a growth mindset and improving overall mental well-being.

Principle 6: Stress Management

- Athletes often face high-pressure situations. Sports psychology coaching equips them with stress management techniques, such as deep breathing, progressive muscle relaxation, and mindfulness, which help control anxiety and improve performance.

Principle 7: Team Cohesion

- For team sports, building team cohesion is essential. Athletes learn effective communication, trust-building, and conflict resolution strategies. Strong team bonds enhance collaboration, boost morale, and lead to improved results.

Principle 8: Emotional Regulation

- Managing emotions is vital in sports. Athletes are taught to identify and control their emotional responses, preventing emotional outbursts or lapses in focus. Emotional regulation promotes consistent and reliable performance.

Principle 9: Pre-Performance Routines

- Developing pre-performance routines helps athletes mentally prepare for competition. These routines include specific actions or rituals that create a sense of control and readiness, reducing anxiety and enhancing confidence.

Principle 10: Post-Performance Evaluation

- Athletes are encouraged to engage in post-performance evaluation to learn from their experiences. This reflection helps identify areas for improvement and fosters a growth mindset, promoting continual development.

Psychological preparation in sports

- The corrective responses of the sportsmen or players are the combination of isolated motor responses and cognitive responses. This package of various responses filled together forms the correct motor skills demanded in performance. This preparatory responses are "Psyching up" preparations, traditionally recognized by sportsmen as vital which can be influenced by physical and psychological steps.

For **example**, in weight lifting, the lifter mentally attempts to dominate weights. This preparation causes arousal levels to move in either direction, that is, "Psyching up" or "Psyching down" and assessment of his level prior to the performance is the must for every sportsman. Because Donschellander states that "winning is 20% physical and 80% mental" it clearly indicates that psychological preparation of sportsmen is the important aspect of the Total preparation of sportsmen.

Short Term Psychological Preparation

- It ends as soon as the competition is over. It is normally between 4 to 6 weeks. And the aim of this kind of preparation is as follows:
- It mainly aims at direct preparation for an important competition.
- a) It mainly points out the information about the importance, date, venue, time of competition, the area and its conditions, climate, its surface, the officials of the competition, the nature of the opponents, their experience, strategies, style of play etcetera.
- b) Try to understand his own strong and weak points.
- c) Consult with the other players about their nature of play repeatedly and thereby avoid confusion which highly leads to anxiety and tension.

Long Term Psychological Preparations

- In this the aim of the player is to be achieved over a long period. Its aims are as follows:
- 1. Development of position attitudes and motives for strength training
- 2. Development of self-control, persistence and concentration.
- 3. Development of specific psychic abilities such as rhythmic
- 4. Development of high psychic lead tolerance ability.

Thus, psychological preparation mainly aims to help the players to obtain self-confidence, self-control, self-realization and high concentration which mainly help to improve the player's performance. Lack of these parasupra things mainly 'burns up' the sportsmen within. So, a player must prepare adequately - psychologically to achieve optimum performance which can be obtained through psychological preparation. Due to this strong will for mental preparation and behavioural pattern a player can overcome so many psychological problems such as anxiety, stress and emotional outburst due to fear of opponents, lack of control, lack of proper feedback, Improper attention, visualisation, lack of self-confidence, lack of experience, crowding etcetera.

Thank
you