Leisure activity is a significant factor in the personal-social adjustment of mentally handicapped adults. A particular leisure activity that holds promise for the development and application of age-appropriate social behavior is table games. Table games allow for participants to engage in problem-solving activities, sophisticated interpersonal behavior, and moral judgment. Social behavior involved with table games demands both appropriate verbal and nonverbal communication among group members. It is important that these games be conducted in an age-appropriate manner, using the same game materials for handicapped adults as are used by nonhandicapped adults, and as much as possible the same game and rules. Adapting age-appropriate table games involves consideration of motor skills, perceptual/cognitive abilities, and social skills. Examples are provided of adapting complex board games to allow mentally handicapped adults (approximate mental ages of 5 to 7 years) to successfully play the games in an adult manner. Examples include "Uno," "Parcheesi," and "Junior Trivia." A list of observations and suggestions on ideal group size, location, furniture, time allotment, types of games, participants, and facilitators is provided. Includes 17 references. (JDD)
AGE APPROPRIATE GAMES IN THE TEACHING OF LEISURE SKILLS TO PERSONS WITH MENTAL RETARDATION

SUSAN J. SHERIDAN, ED.D., CONSULTANT
HARRIS COUNTY DEPARTMENT OF EDUCATION
AND
H. LYNN SPRINGFIELD, ED.D., PROFESSOR
UNIVERSITY OF ARKANSAS AT MONTICELLO

AMERICAN ASSOCIATION ON MENTAL DEFICIENCY
111TH MEETING
LOS ANGELES, CALIFORNIA

MAY 25–29, 1987
That people are born with social feelings is a kinship that all persons share in common with each other. This innate social identity that we share is developed through our interactions with one another as we strive to become personally competent within our social surroundings (Adler, 1964). It is the actual participation in social activities that fosters development of this innate tendency in each person. Vicarious modeling is not as effective in raising the probability of such positive social behavior as is direct personal involvement (Staub, 1975).

Games and play activities provide opportunities for socialization among all age groups. Parten's (1932) classic study of preschool children suggests that five different levels of social interactional patterns characterize play activity:

1) Unoccupied behavior (not considered play), 2) Solitary play, 3) Onlooker play, 4) Parallel play, 5) Associative play, and 6) Cooperative play.

Bossard and Boll (1966) suggest that preschool children's group play is characterized by two major features. First, there is a degree of restrictiveness as far as the membership in the group is concerned. Due to being in an environment that does not offer much diversity in selection of playmates, preschoolers are obliged to accept or reject whoever happens to be in their immediate environment. A second characteristic is the exposure to the group setting which enables them to learn which rules and behaviors are expected of them within that particular social situation.
Much of the game and play activity of older children may be considered in the category of "tested play". Sutton-Smith (1973) suggests "testing play" serves as a process of self-validation whereby children can learn about themselves and their environment. Adult play is often very complex and in some ways has become "institutionalized" in that there are rigorous guidelines for selecting who may play, where it is and is not permissible, and how it may be done (Garvey, 1977). From a socialization perspective, table games may represent one of the more sophisticated forms of adult social behavior.

Closely aligned with the social aspect of games and play is the development of moral awareness. Kohlberg's (1971) research suggests that before persons can demonstrate active sharing, they must first develop a degree of moral maturity. This process of moral maturity enables us to convert our social interest and feelings into logical and reasonable forms which in turn will later enable us to translate that interest and feelings into prosocial behaviors in daily living. So, in a real sense, moral development interfaces social interactions in game situations.

The interaction of moral development, cognitive processes, and social behavior is most apparent in both Kohlberg's and Piaget's work. Organized games, such as Uno (card game), Sorry (board game), checkers, and marbles, not only bring persons in contact socially with one another, but they also serve to teach rules and certain codes of conduct. Piaget (1965) suggests that children progress through four stages of rule development which parallel his stages of cognitive development:

Stage 1) Perceptual-Motor: The child is not aware of rules, but interacts with objects in an assimilative manner (birth–2 yrs.; sensorimotor level).
Stage 2) Egocentric Play: Rules are regarded as sacred, untouchable; any alteration of the rules is considered a severe transgression (2-5 yrs.; preoperational level).

Stage 3) Incipient Cooperative Play: Each tries to win, and therefore there is a desire to unify the rules in order to control the game situation. However, the idea about the rules is still vague because when participants are questioned separately about the rules, they give contradictory accounts of the rules (7-8 yrs.; beginning concrete operational level).

Stage 4) Codification of Rules: Rules of the game are known by members of the group and there is mutual agreement among members as to what the rules are (11-12 yrs.; latter concrete operational level).

Likewise, Kohlberg's suggested stages of moral development reflect a social element in that:

Level I, preconventional, moral behavior is concerned with avoiding pain and seeking pleasure from one's social environment.

Level II, conventional, morality is related to one's desire to please others and maintain authority in social situations.

Papalia and Olds (1981) depict the interrelationship among the cognitive, moral, and social factors that may operate in game activity in Table 8-6:

Games have great value in that they allow participants to apply cognitive skills in learning to play the game as well as learning how to get along with others cooperatively. They also provide an opportunity for individuals to evaluate themselves and their abilities realistically by comparing themselves with their peers (Hurlock, 1964; Festinger, 1957).
<table>
<thead>
<tr>
<th>TABLE 6-6</th>
<th>Major Milestones in Social Cognition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIMENSIONS</strong></td>
<td><strong>COGNITIVE STAGE</strong></td>
</tr>
<tr>
<td><strong>YEARS</strong></td>
<td>Preoperational</td>
</tr>
<tr>
<td>4-5</td>
<td>Preoperational/ Early concrete operations</td>
</tr>
<tr>
<td>8-10</td>
<td>Advanced concrete operations</td>
</tr>
<tr>
<td>10-12</td>
<td>Early formal operations</td>
</tr>
</tbody>
</table>

**SOURCE:** Adapted from Stein, 1975; Selman, 1973; Kohlberg, 1969, and Prejean and Inhelder, 1969.
Leisure Activities And Mentally Handicapped Adults

Leisure activities are those activities which we engage in as a result of free choice and personal gratification. These activities are in a real sense the most normalized behavior that we can participate in because they are defined with respect to each individual's preference. Leisure activities which are shared with others provide opportunities for those involved to engage in social, moral, and cognitive processes depending on the nature of the activity. This is evidenced by accommodation to rules of expected behavior and social interaction shared in the activity. These activities afford opportunities to share a togetherness via materials and/or activities for the common good and enjoyment of those participating. It is for this reason that leisure time activities are a vital part of the lives of mentally handicapped adults. We can truly share mutually in the lives of handicapped adults in recreational activities.

Leisure activity is a significant factor in the personal-social adjustment of mentally handicapped adults in the family, community, and/or the institution. Research findings from community/vocational follow-up studies of mentally handicapped adults indicate that successful personal-social adjustment relates directly to adequate social skills, positive self-concept, and a direct support system of one or more persons (Edgerton, Tarjan, & Dingman, 1961; Edgerton, 1967; Stephens & Peck, 1968; Dingman, 1973; Edgerton & Bercovici, 1976; Mithaugh, Horiuchi, & Fanning, 1985).
Of particular interest is Edgerton and Bercovici's (1976) follow-up of subjects in his first study (Edgerton, 1967) where they found that subjects who had improved in personal-social adjustment were characterized as being less dependent on benefactors and appeared to be more involved in recreation, hobbies, leisure, good times, friends, and family. These subjects seemed to be concerned with enjoying life and most saw their lives as being more enjoyable than at the time of the initial contact in the first study.

Age-Appropriate Table Games

A particular leisure activity which holds promise for the development and application of age appropriate social behavior for mentally handicapped adults is table games. Table games are a most acceptable type of adult leisure time activity. These games allow for participants to engage in problem solving activities, sophisticated interpersonal behavior, and moral judgment.

Social behavior involved with table games demand both appropriate verbal and nonverbal communication among group members. Such activity provides opportunity for appropriate emotional responses to participants' behaviors or reactions during the progression of the game. Playing the game according to rules requires moral judgment and active cognitive processes of attention, discrimination, association, memory, and reasoning.

The bottom line in using table games as an avenue in enhancing
personal-social development of mentally handicapped adults is that these games be conducted in an age-appropriate manner. That is, the same game materials should be used by handicapped adults as is used by nonhandicapped adults. And as much as possible, the same game objective and rules should apply for handicapped adults as well as for nonhandicapped adults. Adult game materials and processes used with mentally handicapped adults enable nonhandicapped friends, family, and peers to more easily respond to them in an appropriate adult social role. This mutual respect and identity fosters more appropriate adult social responses from handicapped adults. The extent of game modification for use with mentally handicapped adults will depend largely on the levels of social, moral, cognitive, and perceptual-motor development of those handicapped adults participating in the game.

Factors to Consider in Adapting Age-appropriate Table Games for Mentally Handicapped Adults

Factors relevant to adapting age-appropriate table games for use with mentally handicapped adults are included in four major categories of skills and abilities which include: 1) Motor skills, 2) Perceptual/cognitive abilities, and 3) Social skills. Task analysis of each game activity must be done with regard to participants abilities and skills within these areas. The following is a general outline of skills and abilities to consider in adapting age-appropriate table game activities for mentally handicapped adults.

PHYSICAL- MOTOR SKILLS

Sensory Integrity:

Visual—does or does not have functional visual.
Auditory—does or does not have functional hearing.

Nonlocomotor Skills:

Sitting—ability to maintain a sitting posture at a table.
Bending—ability to bend body, arms, and wrists.
Turning—ability to turn body, shoulders, and head in a sitting position.
Twisting—ability to twist selective parts of the body, e.g., neck, shoulders, and wrists.
Stretching/Reaching—ability to extend upper body, arms, and hands.
Pulling/Pushing—ability to pull and/or push with arms and hands.

Manipulative Skills:

Grasping/Holding Objects—ability to hold hard, soft, and or small objects with strength and flexible dexterity.
Coordination of Manipulative and Nonlocomotor skills—ability to hold and push and/or pull objects, holding, pushing, pulling, bending, and stretching in manipulating different objects (hard, soft, small, and large).

PERCEPTUAL/COGNITIVE SKILLS

Matching—ability to match by:

- color, shape, size,
- figure, picture, design,
- letters, numerals, and group

Directions—ability to follow a series of visual demonstrations and/or verbal directions.

Attention to Task—ability to stay on task for varying lengths of time.
Grouping/Classifying—ability to perceive various groupings according to number, shape, design, color, and size.

Cause-effect—ability to perceive the purpose of game activity in terms of goal and/or process of the game.

Counting—ability to count in serialization and/or by grouping and to count rationally and/or by rote.

SOCIAL SKILLS

Communication—ability to understand verbal conversation and nonverbal behavior and to verbally express oneself in conversation.

Cooperation—ability to share and take turns in game activity and to delay immediate gratification; respect and show courtesy toward members of the group.

Moral Understanding—ability to understand and follow the rules of the game.

Independence/Dependence—ability to function independently in the game activity.

Adaptation of Age-Appropriate Table Games

UNO: (A Playing Card Game)

Physical Motor Skills:

Sensory—It is necessary that players be able to see the cards or have an attendant who can assist in discarding, drawing, and card selection.

Nonlocomotor skills—It is necessary for players to be able to:

1) sit at or around the playing table.
2) be able to bend and extent arms.
3) be able to push and pull with hands and arms.

Manipulative skills: Players should be able to:

1) grasp and hold single cards and a group of seven to ten cards.
2) coordinate picking up a card from the deck of cards and placing a discard in the card tray.

Perceptual/Cognitive Skills:

Matching skills—It is necessary that players be able to:

1) discriminate and match by color, letter, and design.
2) execute right/left directionality in taking turns during the process of the game.
3) carry out a series of three verbal directions.
4) attend to task for at least fifteen to twenty minutes (which is the average length of a game of Uno).
5) group and classify cards according to color, letter shape, and design.
6) conceive that the purpose of the game is to discard all of one's cards and to try and cause other players to draw extra cards.
7) recognize when one card is left in one's hand and to say, "uno".

Social Skills:

Communication skills—It is beneficial for the feeling tone of the group:
1) if players can verbally communicate emotional responses to the events during the progression of the game.
2) if group members are able to take turns in proper rotation while playing the game.
3) if players can listen to the conversation of others in the group.

Moral concepts—It is important that players be able to:

1) play by the rules established (adaptations) for the game.
2) be willing to assist each other in playing by the established (adaptations) rules of the game.
3) win and lose with a courteous attitude.

In addition to considering the skill demands of a particular age-appropriate table game, one must adapt games to accommodate the skill levels of the participants. The following is an example of adapting a complex board game to allow mentally handicapped adults (approximate mental ages of 5-7 years) to successfully play the game in an adult manner.

Parcheesi: (Board Game Using Dice and Tokens)

Materials:

Tokens—Use only one colored token for each player rather than four as suggested in the game instructions. This eliminates the complexity of blockades and the choices of which combinations of tokens to move and speeds up the game. This adaptation allows for more games to be played and therefore, a possibility for more winners.

Dice—Use one die instead of two which eliminates the necessity to
count beyond number six and the need to understand those rules
governing the throwing of doubles.

Board—Places where players enter their tokens onto the playing grid
from the starting circles should be marked (color coded) to assist
players in moving their tokens in the appropriate (clockwise)
direction on the board.

Procedure Modifications:
Starting a token—Players can start a token on any throw of the die by
moving the number of spaces shown on the die.
Criterion for winning—The object of the game is to be the first
player to reach "home" with one token rather than with all four
tokens. The player that is next closest to "home" finishes second,
etc.

Another board game that can be adapted in much the same way as
Parcheesi is the game, Sorry. The major difference is that cards are used to
determine when a token can be started and how far it can be moved on on the
board at any one playing turn.

Junior Trivia

Materials:
Die—Each participant is given a die to hold and throw to determine
the category from which the trivia question will be asked.
Trivia cards—Cards are used as a source for questions, as
reinforcement, and to determine the winner of the game or round.
Timer--A timer is used to determine the length of the game. The length may vary from group to group, but 10-15 minutes is generally appropriate.

Procedures/Activities:

Beginning the game--Each throws a die and the player with the highest number begins the game by rolling his die again to determine from which category his question will come. If the question is too difficult, then the facilitator should choose another of the six questions that would be most suitable for the players in the group. In some cases all the questions on the card may be too difficult or inappropriate. If this is the case, the facilitator may opt to choose another card or to modify one of the questions on the card.

Order of play--Players take turns playing from left to right of the player who begins the game (clockwise direction).

Scoring--If the player, whose turn it is, gets the correct answer, he is given the card to keep which is worth one point. If he misses it, the player at his immediate left is given the opportunity to answer and this procedure is repeated until the question is correctly answered. If no one can answer the question correctly, the facilitator reads the answer and keeps the card. When the answer is one of quantity and all miss it, the one with the closest answer wins the card.

Winning the game--When the timer goes off, play is terminated and the player with the most cards in his possession is declared the winner and the one who has the next highest number is second, etc.
Observations and Suggestions

As a result of my experiences in facilitating age-appropriate table games with mentally handicapped adults in a community group facility, I wish to make the following observations and suggestions:

1. Ideal group size: four to six players. It is very difficult to establish and maintain an adult-type social situation with smaller or larger groups.

2. Location: It appears to enhance normalized social behavior to conduct game activity in smaller living areas of the group home or cottage (not in large a recreational room or hall).

3. Furniture: Square or rectangle tables are more desirable to play games on than round or oval table because they reduce distracting (inappropriate physical contact) behaviors. Sitting at a square or rectangle table enables players to sit across from each other which facilitates conversation and communication.

4. Time: Allow for about an hour for table game activities. During this time, the group can play approximately three games. Fifteen to twenty minutes per game is generally satisfactory. Sometimes longer playing time is appropriate. It seems that table game activity may be appropriate only one or two days a week, before bed time.

5. Types of Games: The use of a variety of games is desirable. However, handicapped adults tend to have their favorite games and these game may need to be played each game time. It is always good to encourage the players to bring their own games to share with the group from time to time.
6. **Participants:** Residents should be allowed to participate on a voluntary basis and not forced to play as if it were a scheduled recreational activity in an educational/training program. They should be allowed to choose the games in which they wish to participate.

7. **Facilitators:** There should be a facilitator for each group of four to six players. At this point in my work, it seems that a volunteer person outside the resident group home, cottage, or apartment can more easily create a normalized social environment than house parents, supervisors, or attendants. The major role of the facilitator is to monitor and assist players with the game process and encourage conversation and a positive feeling tone among the group members.
REFERENCES


Stephens, W. B. & Peck, J. R. *Success of young adult male retardates*.

LEISURE ACTIVITIES ARE:

1. Activities of Free Choice
2. Activities Which Are Gratifying
3. Allow For Self Actualization
4. The Right of Everyone
5. A Common Experience of Everyone
6. An Opportunity for Personal and Social Growth
7. An Instructional Aspect of any Educational Curriculum

H. Lynn Springfield

Arkansas Special Education
Forest Heights Office Bldg.
1405 N. Pierce St., Suite 101
Little Rock, AR 72207
(501) 368-5636
1-800-482-9437
BENEFITS OF AGE-APPROPRIATE TABLE GAMES WITH ADULTS WITH MENTAL RETARDATION

1. A Normalization Opportunity
2. Allows for Cognitive Development
3. Provides Opportunity to Apply Communication Skills
4. An Opportunity for Moral Development
5. Allows for Use of Personal-Social Skills
6. Provides for Personal Enjoyment
7. Provides Situations for the Use of Fine Motor Skills in a Relaxed Environment
8. Allows for the Integration of the Above Mentioned Skills

H. Lynn Springfield

Arkansas Special Education Resource Center

Forest Heights Office Bldg.
1405 N. Pierce Suite 101
Little Rock, AR 72207
(501) 983-3836
(1-800-462-8437)
AGE-APPROPRIATE TABLE GAME DEMANDS:

1. Specific Verbal and/or Nonverbal Communication
2. Appropriate Emotional Expressions
4. Appropriate Personal-Social Responses
5. Attention to Task
6. Application of Moral Judgment
7. Conformity to Group Established Rules of Play

H. Lynn Springfield
Arkansas Special Education  
Resource Center  
1-800-482-6437

Forest Heights Office Bldg.  
1405 N. Pierce Suite 101  
Little Rock, AR 72207  
(501) 683-3835
FACTORS TO CONSIDER
IN TABLE GAME ADAPTIONS

1. Physical-Motor Skills
   —Sensory integrity
   —Nonlocomotor skills
   —Manipulative skills

2. Perceptual/Cognitive Skills
   —Matching: color, size, shape, amount
   —Directions
   —Attention to task
   —Grouping/classifying
   —Cause-effect
   —Counting

3. Social Skills
   —Communication
   —Cooperation
   —Moral understanding
   —Independence

EXAMPLES OF GAME ADAPTIONS

1. Uno: A playing card game
2. Parcheesci: Board game using tokens and dice
3. Junior Trivia: Knowledge game
4. Connect Four: Strategy game with checkers in a tic-tac-toe format