MARUDHAR KESARI JAIN COLLEGE FOR WOMEN (AUTONOMOUS)

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PG Department of Psychology

1st M.Sc. Psychology – Semester - II

E-Notes (Study Material)

Code: 24PPSE21

Elective Course - 3: Behaviour Modification

Unit: 4 – OTHER BEHAVIOUR CHANGE PROCEDURES: Token Currency – practical considerations – implementing a token economy – applications of token economy – advantages of a token economy – Behavioral contract – components of a behavioral contract – Introduction to third wave therapies – Dialectical Behavior therapy – Metacognitive therapy. **(18 Hours)**

Learning Objectives: To Understand the basic ideas of behavior and the ways to modify them.

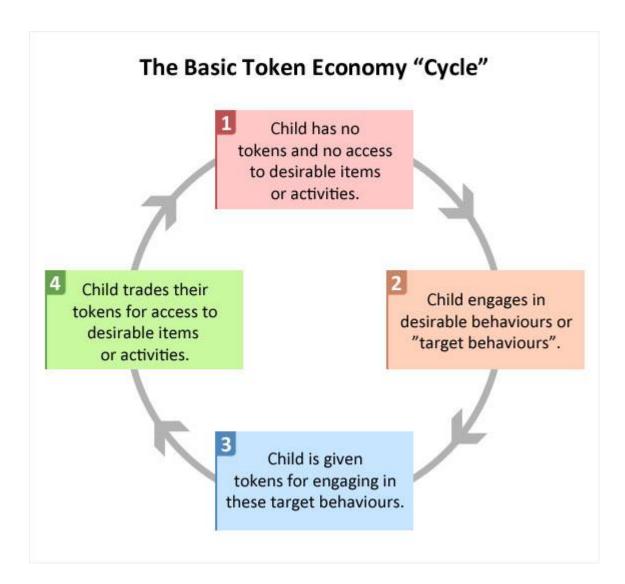
Course Outcome: To distinguish between behavior modification techniques for anxiety induction and anxiety reduction, and their practical applications.

Overview:

This unit deals with some significant topics like token currency, practical considerations, behavioral contract, third wave therapies, dialectical behavior therapy, meta cognitive therapy, these topics will help you to gain knowledge on other behaviour change procedures.

1. Token Currency

- Token currency is a system for providing positive reinforcement to a child or children by giving them tokens for completing tasks or behaving in desired ways.
- Token currency are used as a method of strengthening a behaviour, or increasing its frequency, because the tokens are a way of "paying" children for completing tasks and the children can then use these tokens to buy desired activities or items (Miltenberger, 2008).
- The basic principle is that a child earns a certain number of tokens by engaging in desired behaviours (called "target behaviours") and can then exchange these tokens effectively using them as payment to gain access to backup reinforcers.
- The target behaviours could be anything. For example, completing academic tasks like getting a certain amount of spellings correct, or it could be saying hello to their teacher in the morning, or playing nicely with their peers.
- What a target behaviour will be depends on each individual child. Some token economies could be used to increase a child's desire to complete academic tasks while another token economy could be used to decrease the amount of aggression a child engages in by giving tokens for not engaging in aggressive behaviours.



2. Practical Consideration

When implementing a token economy in a real-world setting, there are several practical considerations to keep in mind to ensure its effectiveness. These considerations help prevent common pitfalls and enhance the system's success. Here's an outline of key points:

1. Clear Definition of Target Behaviors

- **Specificity**: Be very clear about what behaviors you want to reinforce. Vague goals (e.g., "be good") should be avoided. Instead, focus on observable and measurable behaviors like "raise your hand before speaking" or "complete your homework on time."
- **Consistency**: Ensure that all individuals involved (e.g., teachers, parents, therapists) understand and agree on the target behaviors.

2. Type of Tokens

- **Suitability**: Choose tokens that are meaningful and motivating to the individuals in the system. For example, stickers or points may work well for children, while older individuals might prefer more abstract tokens like points that can be exchanged for larger rewards.
- **Tangibility**: The tokens should be easily trackable, visible, and not easily lost (e.g., physical tokens, digital points, etc.).

3. Reinforcement Schedule

- **Initial Reinforcement**: Initially, more frequent reinforcement (e.g., immediate token delivery) might be necessary to establish behavior patterns. Gradually, you can shift to a less frequent or variable reinforcement schedule to maintain the behavior long-term.
- Variable Schedules: Once the behavior is learned, consider using variable reinforcement schedules (randomized reinforcement) to maintain the behavior. This reduces dependence on constant rewards.

4. Reward System

- **Appropriate Rewards**: Rewards should be desirable and meaningful for the person involved. Rewards that are not motivating will fail to strengthen behavior. It's essential to offer rewards that are realistic, achievable, and have enough value to reinforce behavior.
- **Tiered Rewards**: Consider having a range of rewards with different token costs, from small, frequent rewards (e.g., a piece of candy) to larger, less frequent rewards (e.g., a special outing or extra free time). This can maintain motivation over time.
- **Flexibility**: Ensure the reward system is flexible enough to account for individual preferences or changes in motivation.

5. Clear Rules and Expectations

- Transparency: Make sure all participants understand how the system works. This includes how tokens are earned, how many are needed for rewards, and any rules for exchanging them.
- **Fairness**: The system should be applied consistently to all participants to avoid confusion and resentment. Ensure that everyone has an equal chance to earn tokens and that the system is perceived as fair.

6. Monitoring and Adjusting the System

- **Tracking Progress**: Keep track of token accumulation and behavior change over time. This helps identify patterns and allows you to see what's working and what isn't.
- **Adjustments**: If certain behaviors are not improving or tokens are not motivating the person, consider revising the system. It's important to remain flexible and adapt based on feedback and progress.

7. Avoiding Overuse

- **Token Overload**: Be cautious of overusing tokens for every small behavior, as this can create a reliance on external rewards and reduce intrinsic motivation. It's important to balance token reinforcement with efforts to encourage internal motivation for desirable behaviors.
- **Gradual Fading**: Over time, it's important to phase out the token economy, transitioning from external rewards to more intrinsic motivation. This helps ensure that the behaviors become self-sustaining and are not dependent on the token system forever.

8. Behavioral Problems and Negative Reinforcement

- **Punishment Systems**: Token economies should focus on rewarding positive behaviors, rather than punishing negative behaviors. While tokens can sometimes be withheld as a form of negative reinforcement, it's better to emphasize reinforcement for good behaviors instead of focusing solely on punishment for bad ones.
- **Behavioral Shifts**: Ensure that the target behaviors being reinforced are aligned with long-term goals. For example, focusing solely on short-term rewards might not always lead to lasting behavioral change if the underlying motivations are not considered.

3. Implementing a token economy

- To create a successful token economy, it's essential to follow a structured approach. Start by selecting engaging and age-appropriate tokens. For children, this could be tokens featuring their favorite characters, while older individuals might prefer more sophisticated items like chips or poker cards.
- Next, identify a small number of target behaviors to focus on, ensuring these behaviors are clear and specific. This clarity helps participants understand exactly what actions will earn them tokens. Always pair token dispensing with social praise to boost motivation.
- Choose valuable backup reinforcers. These should be items or activities that the individual finds rewarding, such as toys, games, or special privileges. It's vital that these reinforcers maintain their motivational value over time.
- Establish an initial low token-to-reinforcer ratio. This means you should allow participants to earn tokens easily at first, helping them become familiar with the system. As they adapt, you can gradually increase the requirements to maintain their interest and challenge.
- Finally, field test the system. Implement the token economy in a real-world setting to evaluate its effectiveness. This trial will help identify any adjustments that may be necessary to improve outcomes and engagement.

Choosing tokens and reinforcers

• Ensuring that your tokens and backup reinforcers resonate with participants can significantly enhance the effectiveness of a token economy. Select tokens that are visually appealing and meaningful to the individuals you are working with. The more relevant the tokens and rewards are, the more motivated the participants will be to earn them.

Setting up and testing the system

• Setting up a token economy system involves creating a visible token board that displays the tokens earned, and defining clear guidelines for how they can be exchanged for backup reinforcers. Regular monitoring and flexibility to make adjustments based on participant feedback and progress tracking are crucial for maintaining motivation and achieving desired behavior changes.

Additional Resources:

- https://kpu.pressbooks.pub/psychmethods4e/chapter/practical-considerations/
- https://digitalshowcase.lynchburg.edu/lc-journal-of-special-education/vol8/iss1/8/
- https://kpu.pressbooks.pub/psychmethods4e/chapter/practical-considerations/

Practice Questions:

- Define Token currency.
- Explain the basic cycle of token currency.
- How to implement a token economy?

4. Applications of token economy

Classroom Settings

- Token economy is frequently used in classroom settings to encourage positive behavior. Teachers might use a token system to reinforce good behavior, such as completing homework, participating in class discussions, or being kind to other students.
- For example, a teacher might give each student a certain number of tokens at the beginning of the week. Throughout the week, students can earn additional tokens for demonstrating positive behaviors. At the end of the week, students can exchange their tokens for rewards such as extra free time, access to special activities, or small prizes.
- The use of token economy in classrooms has been shown to improve student behavior and engagement. By providing tangible rewards for positive behaviors, students are motivated to continue exhibiting these behaviors in the future.
- Additionally, token economy allows teachers to focus on rewarding positive behaviors rather than punishing negative ones, creating a more supportive and encouraging classroom environment.

Therapy Sessions

- Token economy is a popular therapeutic technique used in therapy sessions to reinforce positive behaviors in patients. This approach is particularly effective for individuals who struggle with mental health issues such as depression, anxiety, and addiction.
- In a token economy-based therapy session, patients are given tokens or other rewards for engaging in positive behaviors such as attending therapy sessions regularly, completing homework assignments, or participating actively in group

- discussions. These tokens can be exchanged for privileges like access to electronic devices, extended visitation hours, or other desirable items.
- Token economy-based therapy has proven to be an effective method of reinforcing positive behaviors in patients. By providing tangible rewards for good behavior, this approach motivates individuals to continue exhibiting those behaviors outside of the therapy session. Additionally, it creates a more supportive and encouraging environment that fosters personal growth and development.

Home Environment

- Token economy is not limited to clinical or educational settings. It can also be applied in the home environment to improve behavior and foster positive habits among family members.
- For example, parents might use a token system to encourage their children to complete household chores, practice good hygiene, or exhibit respectful behavior towards others.
- Tokens can be awarded for completing tasks such as doing the dishes, making the bed, or helping with younger siblings. These tokens can then be exchanged for rewards such as extra screen time, a favorite snack, or a special outing.
- Using token economy in the home environment can help establish a sense of structure and routine while promoting positive behaviors. Parents can use this technique to reinforce good habits that will benefit their children throughout their lives. Additionally, it creates a more positive and encouraging family dynamic that fosters healthy communication and mutual respect.

5. Advantages of a token economy

Token economy systems offer several benefits, particularly in the realms of behavior modification and skill reinforcement. By understanding these benefits, we can appreciate the effectiveness and versatility of this approach.

Behavior Modification

- Token economies are rooted in the principles of operant conditioning, which involve reinforcing desired behaviors through positive reinforcement. In this system, tokens serve as tangible representations of reinforcement, and individuals can accumulate and exchange these tokens for rewards. This structure provides a clear and structured approach to reinforce desired behaviors and discourage unwanted behaviors.
- The use of tokens as rewards allows for immediate reinforcement, making it easier to strengthen and shape specific behaviors. Tokens can be tailored to the individual's preferences and motivate individuals to engage in desired actions. This, in turn, increases the likelihood of consistent and positive behavior change.

Skill Reinforcement

• Token economies can also be effectively utilized for skill reinforcement in various settings, including schools, homes, summer camps, and inpatient programs. The flexibility of this approach makes it suitable for reinforcing a

- wide range of skills, such as academics, communication, self-help, and prosocial behavior.
- By using tokens to reinforce skill acquisition, individuals are motivated to
 engage in and practice these skills. The exchange of tokens for desired rewards
 creates a meaningful incentive, further enhancing the reinforcement process.
 This approach can help individuals develop and maintain new skills, ultimately
 leading to increased independence and success in various aspects of life.
- Token economies work on the concept of assigning value to the tokens, much like the world economy, where money represents a token allowing the purchase of desired items. The value of tokens in this system depends on the individual's perceived effort and the reinforcement they are working towards.
- By implementing a token economy system, individuals can benefit from the structure, motivation, and reinforcement it provides. It offers a powerful tool to facilitate behavior modification and skill reinforcement, contributing to positive behavioral outcomes and personal growth.

Disadvantages of a token economy

Implementing a token economy system can bring about positive changes in behavior and skill development. However, it is important to be aware of potential challenges that may arise when using this system. Two key challenges are fading rewards and generalization issues.

Fading Rewards

- One challenge with the token economy system is the fading of rewards. Initially, tokens are used as external reinforcements to motivate individuals to engage in desired behaviors. Over time, the goal is to fade the use of tokens and transition to internal motivation. However, individuals may become reliant on the token system, making it challenging for them to perform the target behavior once the rewards are removed [5]. This can hinder the development of intrinsic motivation, which is essential for long-term behavior change.
- To address this challenge, it is important to gradually reduce the dependence on tokens as individuals become more proficient in the desired behaviors. This process, known as fading, involves gradually decreasing the frequency or magnitude of token rewards while still reinforcing the target behavior. By gradually transitioning from external rewards to internal satisfaction, individuals can develop a sense of intrinsic motivation and independence.

Generalization Issues

- Another challenge of the token economy system is the potential for generalization issues. Generalization refers to the ability to apply learned behaviors in different settings and situations. In the context of the token economy, individuals may become overly reliant on tokens and rewards, making it challenging for them to perform expected behaviors in settings where tokens are not used for reinforcement [5]. This can limit the transfer of skills acquired within the token economy system to real-life situations.
- To promote generalization, it is important to gradually fade the use of tokens in various settings. This can be achieved by gradually reducing the reliance on tokens and reinforcing the desired behaviors in natural contexts. By providing opportunities for individuals to practice and demonstrate the target behaviors in different settings without relying on tokens, generalization can be encouraged.

• It is essential to address these challenges by carefully monitoring and adjusting the token economy system. By gradually fading the rewards and promoting generalization, individuals can develop intrinsic motivation and apply the acquired skills in real-life situations.

6. Behavioral Contract

Behavioral contracting involves a written document stating goals and the reward or other outcome for meeting (or failing to meet) the stated goals. Usually, guidelines for goal writing include keeping the goal realistic (usually small), measurable, observable (recordable), and on a proposed timeline. The other part of the contract involves rewards for achieving the goals that are agreed upon and sometimes facilitated by another party. A monetary reward or cost is a common consequence in many behavioral contracts for physical activity. Often, the consequence is the loss of money already put forth for this purpose by the participant. Contracts have many benefits to the practitioner in that they have inherent flexibility and can be written to state appropriate goals for any individual. Furthermore, the contract can incorporate a number of health goals with consequences that are individualized to incorporate meaningful outcomes for the unique participant. An additional benefit of contracts is that they can be mediated by a number of people other than a professional, including a significant other or a family member.

Additional Resources:

- https://www.discoveryaba.com/aba-therapy/token-economy
- https://www.brighterstridesaba.com/blog/token-economy
- https://www.sciencedirect.com/topics/nursing-and-health-professions/behavior-contracting

Practice Questions:

- What are the applications of token economy?
- Distinguish between advantages and disadvantages of token economy
- Explain behavioral contract.

7. Components of a behavioral contract

Specific Behavior(s) to be Changed:

- Clearly define the target behavior(s) that the contract aims to address. These should be observable, measurable, and specific.
- Example: "Complete all homework assignments on time" or "Practice self-control in meetings."

Positive Reinforcements/Rewards:

- Outline what rewards or incentives the individual will receive if the desired behavior is successfully demonstrated.
- Example: "Earn 30 minutes of extra playtime each day homework is completed on time."

Consequences for Non-compliance:

- Define the consequences if the agreed-upon behaviors are not followed.
- Example: "If homework is not completed by the deadline, the individual will lose 15 minutes of playtime."

Duration and Timeline:

- Specify the time frame for the contract (e.g., how long the contract lasts, review periods, or deadlines for achieving the behavior change).
- Example: "This contract will be in effect for one month, with progress checks every week."

Monitoring and Tracking:

- Explain how the progress will be tracked, who will monitor it, and how feedback will be provided.
- Example: "Behavior will be monitored by a teacher or supervisor, and progress will be reviewed weekly."

Roles and Responsibilities:

- Clarify the roles and responsibilities of each party involved in the contract (e.g., the individual, parents, teachers, or managers).
- Example: "The individual will submit homework on time, and the teacher will provide feedback."

Signatures and Agreement:

- Ensure that all parties involved sign the contract to show their commitment and understanding of the terms.
- Example: The individual, teacher, and parent all sign the contract.

Review and Modification Clause:

- Include a provision that allows for periodic reviews of the contract and modifications if necessary.
- Example: "At the end of each week, the contract will be reviewed, and adjustments will be made if required."

8. Introduction to third wave therapies

The "first wave" of behavioral therapies were characterized by behaviorism (i.e., operant conditioning, classical conditioning). Albert Ellis and Aaron Beck pioneered the "second wave" of behavioral therapies with cognitive behavioral therapy (CBT), which integrated a person's thoughts and beliefs in understanding and changing behavior and emotional experiences such as depression.

"Third wave" cognitive behavioral therapies are a group of emerging approaches to psychotherapy that represent an evolution and extension of traditional cognitive behavioral treatment approaches.

Third wave therapies prioritize the holistic promotion of psychological and behavioral processes associated with health and well-being over the reduction or elimination of psychological and emotional symptoms, although that typically is a "side-benefit." Concepts such as metacognition, acceptance, mindfulness, personal values, and spirituality are frequently incorporated into what might otherwise be considered traditional behavioral interventions.

Rather than focusing on the content of a person's thoughts and internal experiences, third wave behavioral therapists are instead more focused on the context, processes, and functions of how a person relates to internal experiences (i.e., thoughts, urges, sensations). Many of the strategies and interventions utilized in third wave cognitive behavioral therapies complement traditional cognitive behavioral interventions such as exposure therapy (e.g., systematic desensitization) and behavioral activation.

9. Dialectical Behaviour therapy

Dialectical Behavior Therapy (DBT) is a structured therapy that focuses on teaching four core skills (mindfulness, acceptance & distress tolerance, emotional regulation, and interpersonal effectiveness) to help you create a good life for yourself.

DBT is a type of **cognitive behavioral therapy** (**CBT**). CBT focuses on helping people change unhelpful thought patterns. DBT takes those CBT ideas or challenging unhelpful thought patterns, but also adds additional elements like mindfulness, acceptance and distress tolerance, and interpersonal skills to give you more tools for dealing with hard situations. Dialectical (the D is DBT) meets opposites, and comes from the idea of combining two of those ideas - change and acceptance.

10. Meta cognitive therapy

Meta cognitive Therapy (MCT) is a recent development in understanding the causes of mental health problems and in treating them. The approach is based on a specific theory proposed by Wells and Matthews (1994), initially used to treat Generalised Anxiety and subsequently expanded as a general treatment approach (Wells, 1995, 2000). The approach is backed by scientific evidence from a wide range of studies. Metacognition is the aspect of cognition that controls mental processes and thinking. Most people have some direct conscious experience of metacognition. For instance, when unable to remember a name a person may feel sure that the name is stored in memory.

This gives rise to a metacognitive state that occurs as a strong feeling called the 'tipof the tongue-effect.• This is an example of metacognition working to inform the
person that an item of information is somewhere in memory even though the person is
unable to remember it. Metacognition can even go further by retrieving this name and
pushing into consciousness often when least expected. Although we are aware of
some metacognition operating like in this example, most of the metacognitions that
control our thinking and conscious experience operate in the background.

One of the features of psychological disorders such as anxiety or depression is that thinking becomes difficult to control and biased in particular ways that lead to a worsening and maintenance of emotional suffering. Many patients report that they feel that they have lost control over their thoughts and behaviours. Another important feature is that the persons thinking and attention becomes fixed in patterns of brooding and dwelling on the self and threatening information. Metacognitive therapy recognises this change in thinking patterns and believes it is very important. It gives it a name: the Cognitive-Attentional Syndrome (CAS).

This pattern consists of worry, rumination, fixation of attention on threat, and coping behaviours that the person believes are helpful but many of which backfire and keep emotional problems going. The CAS is controlled by metacognitions and it is necessary to remove the CAS by helping patients develop new ways of controlling their attention, new ways of relating to negative thoughts and beliefs, and by modifying metacognitive beliefs that give rise to unhelpful thinking patterns. This approach has been developed into specific ways of understanding and treating disorders such as generalised anxiety disorder, post-traumatic stress, obsessive-compulsive disorder, social anxiety, depression, and health-anxiety.

Additional Resources:

- https://www.3rdwavetherapy.com/about/what-is-third-wave-cognitive-behavioraltherapy/
- https://www.pent.ca.gov/pbis/tier2/behavior-contracts.aspx
- https://my.clevelandclinic.org/health/treatments/22838-dialectical-behavior-therapydbt
- https://www.sciencedirect.com/science/article/pii/S1077722921001371

Practice Questions:

- Explain the components of a behavioral contract.
- What is third wave therapies?
- Define dialectical behaviour therapy.
- Examine meta cognitive therapy.

Overview:

- Token currency are used as a method of strengthening a behaviour, or increasing its frequency, because the tokens are a way of "paying" children for completing tasks and the children can then use these tokens to buy desired activities or items.
- To create a successful token economy, it's essential to follow a structured approach. Start by selecting engaging and age-appropriate tokens. For children, this could be tokens featuring their favorite characters, while older individuals might prefer more sophisticated items like chips or poker cards.
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- elimination of psychological and emotional symptoms, although that typically is a "side-benefit." Concepts such as metacognition, acceptance, mindfulness, personal values, and spirituality are frequently incorporated into what might otherwise be considered traditional behavioral interventions.
- Behavioral contracting involves a written document stating goals and the reward or other outcome for meeting (or failing to meet) the stated goals. Usually, guidelines for goal writing include keeping the goal realistic (usually small), measurable, observable (recordable), and on a proposed timeline.
- Dialectical Behavior Therapy (DBT) is a structured therapy that focuses on teaching four core skills (mindfulness, acceptance & distress tolerance, emotional regulation, and interpersonal effectiveness) to help you create a good life for yourself.
- Metacognition can even go further by retrieving this name and pushing into consciousness often when least expected. Although we are aware of some metacognition operating like in this example, most of the metacognitions that control our thinking and conscious experience operate in the background.

References:

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- https://digitalshowcase.lynchburg.edu/lc-journal-of-special-education/vol8/iss1/8/
- https://www.discoveryaba.com/aba-therapy/token-economy
- https://www.3rdwavetherapy.com/about/what-is-third-wave-cognitive-behavioraltherapy/