

PSYC 587

Token System Competency

Zhen Lin

3093843780

Purpose

The purpose of this competency was to use a token system to train my 5-year-old client to stay in the classroom without his grandma beside. “Token reinforcement system is an interconnected set of continues that specifies the relations between token production, accumulation, and exchange (Hackenberg, 2009, p.259).” A token system is often used to bridge delay between the target responses and back up reinforcement delivery; it also helps wait training. The client described in this competency is high functioning, however, his registered behavior technician (RBT) reported that the session can only be conducted when his grandma sat inside the clinical room. Once the client noticed that his grandma left the room, the client would scream, cry (5 minutes or longer), and escape to find his grandma. Staying in the room without caregivers is the most basic ability which prepares the children to go to school, or hanging out with friends. The individuals who can not stay alone without caregivers will struggle with social interaction with other people and further skill acquisition with other educators. The token system in this competency is to 1) increase the duration of time the client stays in the clinic room with the therapist, 2) decrease his tantrum behaviors without grandma around.

Format

The token system started when the client walked into the clinical room. It was set up in the daily ABA therapy sessions from Monday to Friday (4-6 pm). The RBT set up a count down alarm for brief time segments. Every segment the client stayed with the therapist without grandma beside him, he earned a point. Once the client accumulated three points, he was allowed to exchange a back-up reinforcer (find his grandmother for a hug). The token system ends at the end of each therapy session; the client should re-accumulate his points in the next session.

Target behavior

In this competency, the target behavior is “stay independently”. “Stay independently” is operationally defined as the client stays with the RBT without his caregiver (grandma) around during the session in the clinical room.

Baseline data

The baseline data was collected in the first two sessions. The average duration of time the client stayed alone in the clinical room with the therapist is 2 minutes. The frequency of showing the target behavior is 0% during those two sessions. The client’s grandma sat outside of the clinical room. During the baseline, no blocking or tokens gave to the client; the technician accompanied the client to find his grandma when the client said the key sentence — “Where is my grandma?”.

Tokens

In this competency, three yellow magnets were used as tokens. Every time the client earns a token, he is given a chance to place it on a small whiteboard. Due to his severe tantrum behavior

(e.g., crying and screaming for 5 minutes) which showed in the assessment, he will not lose any tokens if he fails to display the target behavior.

Back-up reinforcers

The back-up reinforcer in this competency is a 60 seconds break in which he could go find his grandmother.

Reinforcement schedule

In the first half-hour session, a countdown alarm in a cellphone was set up for every 1 minute. The time segments of the countdown alarm would be extended to 3 minutes, 5 minutes and 8 minutes each 30 minutes ($4 * 30 \text{ mins} = \text{a two-hour session}$). The therapist placed the alarm in front of the client on the training table. Each time it vibrated and the client showed the target behavior, the therapist gave a yellow magnet (the token) to the client; then he placed it on the whiteboard. The client was blocked immediately when he tried to escape; the therapist reminded the client of the countdown alarm by pointing to the alarm clock or count down with him.

Ratio of token exchange for reinforcers

Once three magnets were earned (which means staying independently for $1*3$, $3*3$, $5*3$, $8*3$ minutes), the client earned his back-up reinforcer (find his grandmother for 60 seconds).

Time and place to exchange tokens for back-up reinforcers

Exchange was completed immediately after three magnet tokens had been earned in the clinical room during the session.

Next steps

The requirement of the target behavior will be increased in the following sessions after level 1 training (this competency).

Level 2: The interval duration of the countdown clock will be increased to 3,5, 10, 15 minutes.

Level 3: The number of tokens needed before exchange for back-up reinforcers will be increased to 5 yellow magnets (use the time fragments of level 2).

Level 4: The client will lose a token if he shows tantrum behavior of crying or escaping for grandmother.

The treatment team will increase the intensity of Discrete Trial Teaching during the sessions and fade the tokens over time. The tokens will be faded by teaching the client to use an alternative response when he wants to find his grandmother (e.g., politely ask “Could I go to find my grandmother?”).

Reference

Hackenberg T. D. (2009). Token reinforcement: a review and analysis. *Journal of the experimental analysis of behavior*, 91(2), 257–286. doi:10.1901/jeab.2009.91-257