

EFFECTS OF IMPLEMENTING APPLIED BEHAVIORAL ANALYSIS TECHNIQUES IN HELPING CHILDREN WITH DYSLEXIA

DYSLEXIA AND ABA



Individuals with dyslexia often struggle to recognize common words and tend to confuse words with similar shapes, sounds, or meanings. In Hong Kong, the prevalence of dyslexia is estimated to be between 9.7% and 12.6% (Chan et al., 2007). To address the challenges faced by dyslexia children, Applied Behavior Analysis (ABA) — a psychological and educational approach grounded in the principles of behavior — can be implemented. ABA aims to improve individual behaviors and facilitate the acquisition of new skills, thereby enhancing the learning and developmental conditions of dyslexia children (BCBA, 2025).



MAIN STRATEGIES OF ABA

POSITIVE REINFORCEMENT

The presentation of favorable stimuli to increase the likelihood of a desired behavior (Doggett & Koegel, 2013)

TASK ANALYSIS

Breaking down complex tasks into simpler, sequential steps that can be taught as a behavioral chain (Phillips & Vollmer, 2012)

GENERALIZATION

Emphasis on the occurrence of desired behaviors in conditions different from those present during training, and the goal to generalize desirable behaviors across time, settings, and stimuli (Stokes & Baer, 1977)

OBSERVATIONS FROM INTERNSHIP



PRAISES AS SOCIAL REINFORCERS

The student smiled and became more proactive in answering questions and sharing his opinions after praises.



BREAKING DOWN LITERACY TASKS

Teachers taught unfamiliar words using radicals, images, and phonetic symbols, and consolidated the knowledge with games.



KNOWLEDGE GENERALIZATION

The word recognition methods learned in the first lesson were trained in subsequent lessons and across various contexts, such as newspapers, fiction, and textbooks.

BENEFITS OF APPLYING ABA STRATEGIES

ENHANCED MOTIVATION AND CONFIDENCE

Adopting positive reinforcement strategies can encourage their improvement and validate their efforts by providing reinforcers when they demonstrate hard work during the learning process (Yacoub, 2024).



PERSONALIZED LEARNING STRATEGIES

Task analysis facilitates personalized learning strategies tailored to each individual's needs (Mastermind, 2025), enhancing learning efficiency and reducing feeling of distress associated with complex tasks.



IMPROVED RULE-BASED LEARNING

Generalization is effective for children with dyslexia to enhance their rule-based learning. Practicing rules in various situations enables them to identify words and sentence meanings across different contexts.

FUTURE PRACTICES

GOVERNMENT

Promote a public-private partnership model, and conduct education and publicity campaigns on ABA

SCHOOL

Optimize teaching arrangements by incorporating ABA strategies (E.g., positive reinforcement)

PARENTS

Observe children's behavioral performance, initiate and actively participate in training activities

CHALLENGE FACED BY ABA IN HONG KONG

DIFFICULTY IN IMPLEMENTATION

- Teaching strategies in integrated schools
- Limited platforms for ABA services
- Huge burden for families due to the high frequency of interventions and the long duration

INADEQUATE EDUCATION AND AWARENESS

- Insufficient understanding of ABA leading to miss of opportunities
- Inability to provide cooperation and support to children's need in daily life

