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Implementation of Behavior Contract to Improve Discipline Among Young Children with Special Needs

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ABSTRACT

Discipline is an important aspect of the development of young children with special needs because it affects their ability to follow rules, regulate their behavior, and participate in the learning process. This study employed the PRISMA 2020 guidelines, with data sources obtained from Google Scholar, SINTA, and Scopus covering publications from 2021 to 2025. Through a screening process based on inclusion and exclusion criteria, six articles were selected for analysis. The findings indicate that the implementation of behavior contracts and positive reinforcement-based behavior modification strategies is effective in reducing problem behaviors, increasing compliance with rules, improving the ability to follow instructions, and promoting adaptive behavior among children with special needs. The effectiveness of the intervention is influenced by the clarity of behavioral targets, consistency in providing reinforcement, teacher competence, the use of visual media, and collaboration between schools and parents. Therefore, behavior contracts can be considered an evidence-based strategy that is effective in improving discipline among young children with special needs.



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INTRODUCTION

Discipline is one of the fundamental competencies that should be developed from early childhood, as it plays a crucial role in fostering adaptive behavior, independence, and children's ability to comply with rules in both family and school environments (Monika et al., 2022). In early childhood education, discipline is not merely interpreted as obedience achieved through punishment; rather, it is viewed as a gradual process of developing self-regulation through habituation, positive reinforcement, and learning experiences that are aligned with children's developmental characteristics (Yulianti, 2025). For children with special needs, disciplinary skills provide an essential foundation for enhancing participation in learning activities, social interaction, and independence in daily life. UNESCO emphasizes that inclusive education should create learning environments that promote positive behavioral development for every learner without exception (UNESCO, 2021).

Children with special needs, including those with autism, intellectual disabilities, Down syndrome, and hearing impairments, exhibit diverse developmental characteristics that require individualized behavior management strategies (Monika et al., 2022). Children with autism often demonstrate repetitive behaviors, difficulties in following instructions, and disruptive behaviors that interfere with the learning process. Children with intellectual disabilities experience limitations in intellectual functioning and adaptive behavior, requiring repeated instructions and consistent reinforcement (Anggraini & Hasibuan, 2025). Meanwhile, children with Down syndrome generally experience delays in cognitive and language development, whereas children with hearing impairments encounter communication barriers that may lead to misunderstandings of classroom rules if appropriate visual supports are not provided. These characteristics indicate that disciplinary strategies for children with special needs cannot be implemented using the same approaches applied to typically developing students (Fitriatun et al., 2025).

Disciplinary problems that are not properly addressed may have significant consequences for the learning process. Behaviors such as leaving seats without permission, refusing to follow teachers' instructions, tantrums, aggression, disturbing classmates, and failing to complete assigned tasks reduce instructional effectiveness, hinder children's social-emotional development, and increase teachers' workload in classroom management (Dewi et al., 2025; Hanifah, Siti., 2026). Beyond their impact on individual students, problem behaviors also disrupt the classroom environment, making learning objectives more difficult to achieve. Therefore, systematic, measurable, and sustainable behavioral interventions are required to promote positive behavioral development (H. Ho, A. Perry., 2021).

Numerous studies have developed behavior modification strategies to reduce problem behaviors among children with special needs, including Applied Behavior Analysis (ABA), Positive Behavior Support (PBS), and behavior contracts. A systematic review by Alarifi et al. demonstrated that behavior modification interventions effectively reduced repetitive and challenging behaviors among children with autism when implemented consistently and tailored to individual characteristics. Similarly, previous studies in special education have reported that structured positive reinforcement effectively improves adaptive behavior and compliance with classroom rules (Yulianti, 2025).

One of the most widely implemented interventions is the behavior contract. A behavior contract is a mutual agreement established between teachers and students regarding targeted behaviors, the reinforcement provided when behavioral goals are achieved, and the consequences applied when the agreement is not fulfilled (Syahpuri, Vini., & Suryani, 2021). This strategy is grounded in the principles of operant conditioning, which emphasize that behavior can be shaped through the consistent application of positive reinforcement. Compared with punishment-oriented approaches, behavior contracts enable students to understand teachers' expectations more clearly, increase motivation to modify behavior, and foster greater responsibility for their own actions (Cooper et al., 2020; Miltenberger, 2023).

Although numerous studies have reported the effectiveness of behavior contracts in reducing problem behaviors, most have focused on a single category of children with special needs, particularly children with autism. Studies integrating empirical findings on the implementation of behavior contracts across multiple categories of young children with special needs including autism, intellectual disabilities, Down syndrome, and hearing impairments remain limited. Furthermore, differences in participant characteristics, implementation procedures, reinforcement strategies, and outcome indicators make it difficult to compare findings across studies directly. This situation highlights a research gap that requires a comprehensive synthesis of empirical evidence to provide a

clearer understanding of the effectiveness of behavior contracts across various groups of children with special needs (Ningrum et al., 2025).

To address this gap, the present study employs a Systematic Literature Review (SLR) based on the PRISMA 2020 guidelines to identify, evaluate, and synthesize empirical evidence regarding the implementation of behavior contracts in reducing problem behaviors while improving discipline among young children with special needs. The SLR approach was selected because it provides a more systematic, transparent, and objective synthesis of evidence than traditional narrative reviews, thereby offering evidence-based recommendations for special education teachers, inclusive education practitioners, and researchers in designing behavioral interventions tailored to the characteristics of individual learners (Page et al., 2021).

Based on the issues described above, this study aims to analyze and synthesize empirical evidence regarding the implementation of behavior contracts in reducing problem behaviors and improving discipline among young children with special needs, specifically those with autism, intellectual disabilities, Down syndrome, and hearing impairments, based on scientific articles published between 2021 and 2025. The findings are expected to provide a scientific foundation for developing more effective, adaptive, and evidence-based practices in special education.

METHOD

This study employed a Systematic Literature Review (SLR) following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines (Page et al., 2021). The SLR method was selected because it enables researchers to systematically, transparently, and reproducibly identify, evaluate, and synthesize empirical evidence, thereby providing more comprehensive conclusions than conventional narrative literature reviews. The focus of this review was to analyze the effectiveness of behavior contract interventions in reducing problem behaviors and improving discipline among young children with special needs, particularly those with autism, intellectual disabilities, Down syndrome, and hearing impairments.

The study population consisted of all scientific articles investigating the implementation of behavior contracts for young children with special needs published between 2021 and 2026. Literature searches were conducted in three electronic databases: Google Scholar, SINTA, and Scopus, using a combination of Indonesian and English keywords, including *behavior contract*, *behavior modification*, *discipline*, *problem behavior*, *autism*, *intellectual disability*, *Down syndrome*, *hearing impairment*, *special needs*, and *early childhood*. A purposive sampling technique was applied by selecting articles that met the predefined inclusion criteria while excluding studies that were not relevant to the research objectives (Page et al., 2021).

The literature selection process followed the four stages of the PRISMA 2020 framework: identification, screening, eligibility, and included (Page et al., 2021). During the identification stage, a total of 46 articles were retrieved from the three databases, comprising 23 articles from Google Scholar, 9 from SINTA, and 14 from Scopus. After removing duplicate records based on identical titles, authors, and publication years, 24 articles remained (*records after duplicates removed*). During the screening stage, 22 articles were assessed based on their titles, abstracts, publication years, and relevance to the research topic. As a result, 12 articles were excluded because they did not meet the study criteria, such as not focusing on behavior contracts as the primary intervention, involving participants other than young children with special needs, or being published outside the 2021–2026 period. Subsequently, during the eligibility stage, 10 full-text articles were assessed in detail. Of these, four articles were excluded because they did not provide sufficient empirical data, failed to report the outcomes of behavior contract interventions specifically, or did not satisfy the established inclusion criteria. Consequently, six articles

met all inclusion criteria and were included in the final review. These studies were analyzed comprehensively to synthesize empirical evidence regarding the effectiveness of behavior contracts in reducing problem behaviors and improving discipline among young children with special needs.

Table 1. Data Charting

No	Title	Method	Result
1	Reducing Student Tardiness Through Group Guidance Using Behavior Contract Techniques (2025)	Quantitative; one-group pretest–posttest design	The implementation of behavior contracts through group guidance significantly reduced student tardiness. However, this study was excluded because it involved regular senior high school students rather than students with special needs, despite using behavior contract interventions.
2	Interventions Addressing Challenging Behaviours in Arab Children and Adults with Intellectual Disabilities and/or Autism: A Systematic Review (2024)	Systematic Literature Review; 79 studies assessed using the Mixed Methods Appraisal Tool (MMAT)	Most interventions were effective in reducing challenging behaviors; however, the methodological quality of the available studies remained limited. More rigorous and culturally adapted intervention research is needed.
3	Mentoring Special Education Teachers to Improve Competencies in Behavior Management and Intervention for Children with Special Needs (2025)	Participatory Action Research (PAR); interviews, observations, and documentation	The mentoring program improved teachers' competencies in conducting ABC (Antecedent–Behavior–Consequence) behavioral analysis, implementing positive reinforcement, developing individualized behavior intervention plans, reducing students' maladaptive behaviors, and creating a more conducive learning environment.
4	The Effectiveness of the Token Economy Method in Improving Disciplinary Behavior Among Fourth-Grade Elementary School Students (2025)	Quantitative experimental; one-group pretest–posttest design	The token economy method significantly improved elementary school students' disciplinary behavior ($p < 0.05$). However, this study was excluded because it employed a token economy intervention rather than behavior contracts and involved typically developing students instead of students with special needs.
5	A Systematic Review of Behaviour Analytic Interventions for Young Children with Intellectual Disabilities (2021)	Systematic Literature Review (PRISMA); 49 studies	Behavior analytic interventions were found to be effective in improving communication, adaptive, and pre-academic skills among young children with intellectual disabilities. Evidence supporting improvements in academic skills remains emerging.
6	The Implementation of Participatory Behavior Contracts Through Positive Habituation to Improve Discipline Among Children Aged 4–5 Years (2026)	Classroom Action Research (CAR) using the Kemmis and McTaggart model	The implementation of behavior contracts increased children's discipline from 54.16% to 90.53%. Consistent behavioral agreements proved effective in fostering discipline among young children.

RESULT AND DISCUSSION

Based on the literature selection process following the PRISMA 2020 guidelines, six articles met the inclusion criteria and were included in the final analysis. These studies were published between 2021 and 2025 and originated from national and international journals indexed in Google Scholar, SINTA, and Scopus. The selected articles examined various behavior modification

interventions for children with special needs, including children with autism, intellectual disabilities, and young children experiencing disciplinary problems. Although different intervention approaches were employed, such as behavior contracts, Applied Behavior Analysis (ABA), positive reinforcement, and teacher mentoring programs, all studies shared a common objective: reducing challenging behaviors while promoting adaptive behaviors and improving discipline among children with special needs.

1. Improving Discipline

The synthesis revealed that the implementation of behavior contracts and other positive reinforcement-based behavior modification strategies had a significant impact on behavioral changes among children with special needs. (Fitri et al., 2026) reported that the implementation of a participatory behavior contract increased the discipline of children aged 4–5 years from 54.16% during the pre-cycle stage to 90.53% at the end of the intervention. These findings indicate that collaboratively developed behavioral agreements between teachers and children effectively and consistently improve compliance with classroom rules.

2. Behavioral Interventions

Muhid and Fauziyah (2021) also demonstrated that the use of a behavior chart as a behavioral monitoring tool for children with autism produced significant improvements in the development of positive habits, particularly in increasing the consistency of prayer practices following individualized counseling sessions. Although this study did not directly implement a behavior contract, the behavioral reinforcement principles applied were conceptually similar, including clearly defined behavioral targets, continuous monitoring, and systematic reinforcement of desired behaviors. Furthermore, the systematic literature review conducted by (H. Ho, A. Perry., 2021) found that Applied Behavior Analysis (ABA) interventions effectively enhanced adaptive behavior, communication skills, and pre-academic competencies while reducing challenging behaviors among children with intellectual disabilities. These findings provide further empirical support for behavior modification principles, including behavior contracts, as effective approaches for promoting positive behavioral change in children with intellectual disabilities.

3. Teacher Mentoring

Further reported of Fitriatun et al., (2025) that improving the competencies of Special Education Support Teachers in implementing behavior modification strategies resulted in reductions in maladaptive behaviors, improvements in students' ability to follow instructions, and the creation of a more conducive learning environment. These findings suggest that the success of behavior contracts depends not only on the intervention design itself but also on teachers' competencies in conducting behavioral observations, identifying behavioral antecedents through the Antecedent–Behavior–Consequence (ABC) framework, and consistently delivering positive reinforcement.

4. Token Economy

According to article number 4 similarly, Monika et al., (2022) found that learning discipline among children with special needs in special schools was influenced by the implementation of clear classroom rules, democratic disciplinary practices, teacher guidance, and parental involvement. These findings indicate that successful discipline development depends not only on the intervention method but also on effective collaboration between schools and families in establishing consistent behavioral routines. The present findings are further supported by the systematic review conducted by (Alarifi et al., 2024), which concluded that various behavioral interventions for children with autism and intellectual disabilities effectively

reduced challenging behaviors when implemented through individualized assessments, clearly defined behavioral targets, and consistent reinforcement strategies. However, the review also highlighted that many existing studies lacked standardized intervention procedures, making comparisons of intervention effectiveness across studies difficult.

The findings of this systematic review indicate that behavior contracts are an effective behavior modification intervention for reducing challenging behaviors and improving discipline among young children with special needs. These findings are consistent with Skinner's Operant Conditioning Theory, which posits that behavior can be shaped through the consistent application of positive reinforcement (Alarifi et al., 2024). Within the implementation of a behavior contract, children are provided with clearly defined behavioral targets, understand the consequences associated with their actions, and receive rewards upon successfully fulfilling the agreed-upon expectations. Consequently, their motivation to maintain positive behaviors is strengthened, leading to more consistent behavioral improvement.

5. Behavior Intervention

The synthesis of the six reviewed studies further suggests that the effectiveness of behavior contracts is influenced by several factors, including the clarity of behavioral goals, consistency in reinforcement delivery, teacher involvement, parental support, and the adaptation of interventions to the specific characteristics of each disability. For children with autism, the use of visual supports and continuous behavioral monitoring appears to be particularly effective because it aligns with their predominantly visual learning preferences. For children with intellectual disabilities, repeated simple instructions combined with immediate positive reinforcement facilitate understanding and contribute to improvements in adaptive behavior (Mauliddiyah & Permata, 2025). Although the reviewed studies did not specifically investigate the implementation of behavior contracts among children with Down syndrome and hearing impairments, the fundamental principles of behavior modification are expected to remain applicable when interventions are appropriately adapted to their communication abilities and cognitive developmental levels.

6. Behavior in Improving Discipline

The findings also demonstrate that the success of behavior contract interventions depends not only on the intervention itself but also on educators' competencies in conducting behavioral assessments and continuously evaluating students' progress. Therefore, professional development programs for Special Education Support Teachers in behavior modification strategies, behavioral assessment, and behavior contract development are essential for improving the quality of educational services provided to children with special needs (Mauliddiyah & Permata, 2025). Despite these promising findings, several limitations should be acknowledged. First, the number of studies meeting the inclusion criteria was relatively small, limiting the generalizability of the findings. Second, most of the included studies employed single-subject designs, classroom action research, or descriptive approaches, which provide lower levels of empirical evidence than large-scale experimental studies (Ningrum et al., 2025). Third, there remains a scarcity of research specifically examining the implementation of behavior contracts for children with Down syndrome and hearing impairments. Consequently, future research should employ larger sample sizes and more rigorous experimental designs to strengthen the available evidence.

Based on the findings of this review, future studies are encouraged to develop behavior contract models integrated with visual supports, digital technologies, and collaborative partnerships between schools and families to enhance intervention effectiveness (Syahpuri, Vini.,

& Suryani, 2021). Furthermore, comparative studies involving different categories of children with special needs are needed to determine the most appropriate behavior contract strategies for each disability group. Such research would contribute to the development of more effective evidence-based behavioral intervention programs tailored to the diverse needs of children with special needs.

CONCLUSION

Based on the findings of this Systematic Literature Review (SLR) of six studies that met the inclusion criteria, it can be concluded that the implementation of behavior contracts and other positive reinforcement-based behavior modification strategies is effective in reducing challenging behaviors and improving discipline among young children with special needs. These interventions have been shown to enhance compliance with classroom rules, improve the ability to follow instructions, promote adaptive behaviors, and create a more conducive learning environment, particularly for children with autism and intellectual disabilities. The effectiveness of behavior contract implementation is influenced by several factors, including clearly defined behavioral targets, consistent reinforcement, the use of visual supports tailored to students' developmental characteristics, teachers' competencies in behavior management, and collaboration between schools and parents. However, empirical research on the implementation of behavior contracts for children with Down syndrome and hearing impairments remains limited. Therefore, future studies should employ more rigorous experimental designs, larger sample sizes, and more diverse participant groups to strengthen the existing evidence. The findings of this review are expected to serve as a valuable reference for special education teachers, inclusive education practitioners, and researchers in developing effective, systematic, and evidence-based behavioral interventions to improve the quality of educational services for young children with special needs.

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