OCCUPATIONAL THERAPY
COLORADO STATE UNIVERSITY

DEVELOPMENT OF LEGO®-BASED THERAPY TO PROMOTE CONNECTION AND OCCUPATIONAL PARTICIPATION

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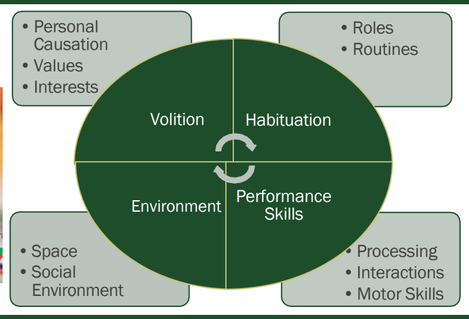
Background

Children with developmental delays often face barriers in social interaction, emotional regulation, and executive functioning, which can impact participation in daily occupations[7]. Traditional interventions may lack the naturalistic engagement required for peer-level social skill development[8].

LEGO®-Based Therapy is an evidence-based, collaborative play intervention that utilizes a highly structured "role-based" system to promote communication, joint attention, and problem-solving[7]. By leveraging a familiar, high-interest medium, this program aims to bridge the gap between clinical goals and meaningful, joyful play.

Theoretical Basis

Model of Human Occupation[6]



Goals & Objectives

Goal: To enhance social interaction, emotional regulation, and executive functioning in children with developmental delays through the implementation and evaluation of a LEGO®-based therapy program in a pediatric outpatient OT setting.

Objectives:

1. Conduct interviews, session observations, & an environmental scan
2. Develop LEGO®-Based Therapy Curriculum
3. Deliver a training session for practitioners
4. Implement LEGO®-Based Therapy
5. Evaluate program outcomes and feasibility

Activities

Weeks 1-2
- Complete environmental scan & revise literature review
- Observe therapy sessions & interview stakeholders

Weeks 3-6
- Develop educational binder for practitioners
- Create LEGO®-Based Therapy curriculum
- Integrate materials into staff education & training

Weeks 7-10
- Pilot curriculum in individual sessions & gather feedback
- Recruit 4-6 pediatric clients & finalize logistics for intervention delivery

Weeks 11-14
- Implement LEGO®-Based Therapy group sessions
- Collect post-intervention data (qualitative surveys and observations)
- Evaluate outcomes and program sustainability

Outcome Evaluation Methods

Clinical Outcomes: Quantitative self-report survey and analyze to measure growth in social-emotional regulation.
Feasibility: Staff self-report surveys and client/caregiver feedback synthesized to determine program acceptability and sustainability.

> "This LEGO® group was different compared to other LEGO® groups I have been in in the past. The ones in the past were more about free building and creativity, whereas this group was structured with roles." –Client #1

> "My goal for my child is to engage more in back-n-forth conversation with friends that includes him complimenting the ideas of others and them taking in feedback that could be perceived as critical or negative in a calm, introspective way." –Caregiver #1

Findings & Deliverables

1. The Flexibility Gap: 80% of clients have high motor endurance but struggle to with mental flexibility.
2. Collaborative Tension: 60% of caregivers report conflict resolution and reciprocity occur only "Rarely" or "Sometimes".
3. Scaffolded Resolution: Caregivers prioritize environments that offer scaffolded support for skill development.

Deliverables:

1. LEGO®-Based therapy curriculum
2. LEGO ® kits & materials

3. Parent education materials

Discussion & Conclusion

Key Insights for Clinical Practice:
- Navigating peer conflict and the role of facilitation
- Value of group-based interventions
- Naturalistic interventions maximize carryover

In conclusion, the LEGO®-based therapy program effectively targeted social-emotional regulation and executive functioning by prioritizing peer interactions. While the roles initially increased frustration, they provided a necessary environment for practicing the exact skills (mental flexibility and conflict resolution) caregivers identified as the highest areas of need.

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References: