

Loose Parts and Symbolic Transformation in Parent-Child Play

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LOOSE PARTS

- Natural or manufactured materials that are not toys, but can be used for play.
- Loose parts play can uniquely combine various materials simultaneously.



LOOSE PARTS PLAY RESEARCH

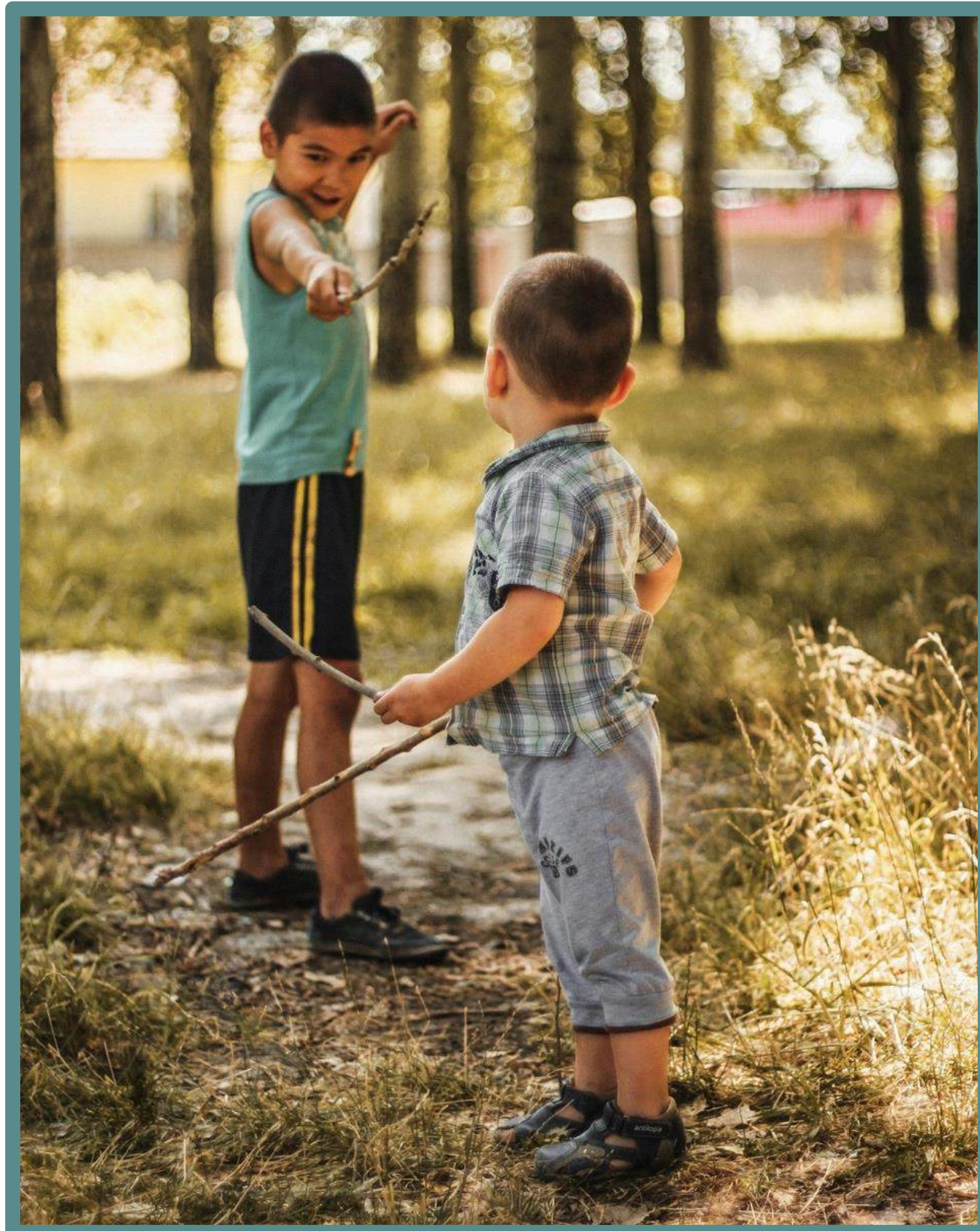
Developmental benefits of playing with various toys are well documented, and loose parts play is widely endorsed for development, but the cognitive impact of it remains largely under-researched.



Existing Research:

- Older children
- Outdoor play
- Physical outcomes

SYMBOLIC TRANSFORMATION



- A cognitive process that enables children to represent abstract ideas through objects.
- Some play materials encourage more frequent symbolic transformations than others.

A child is shown from the side, wearing a colorful striped apron with a large gold bow at the back. They are standing at a white toy kitchen counter. On the counter, there is a pink pot with a blue lid, a green apple on a blue plate, and various other toy kitchen items like a spoon and a fork. The background is a white wall with small red triangles. The text "RESEARCH QUESTION" is overlaid in white capital letters on the upper part of the image.

RESEARCH QUESTION

How does material type influence children's symbolic transformation during play?

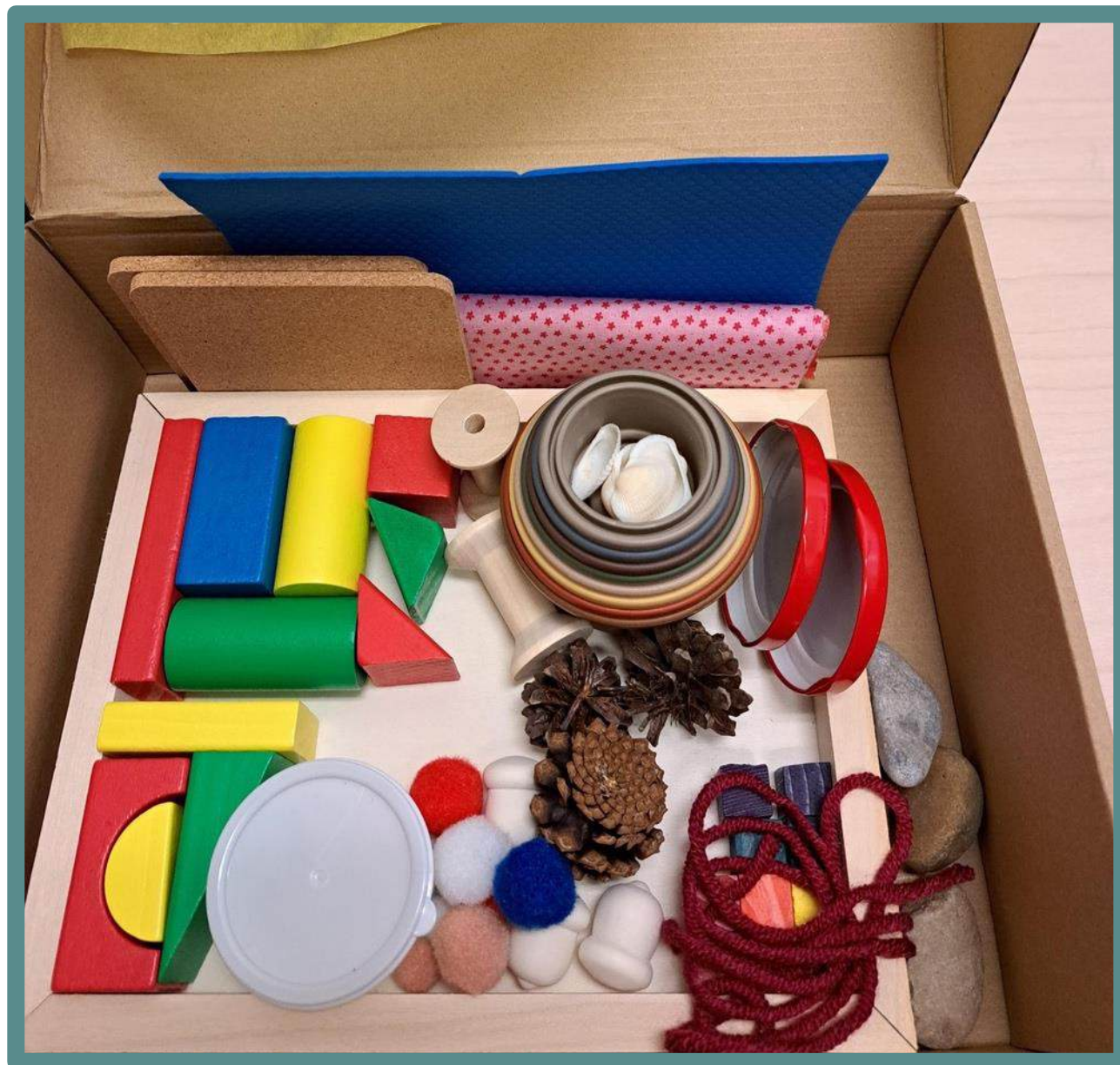
PARTICIPANTS

- 76 parent-child dyads
- 3-6 years old
- Recruited from non-profit organizations and private daycares
- Dyads were randomly assigned to one of two conditions

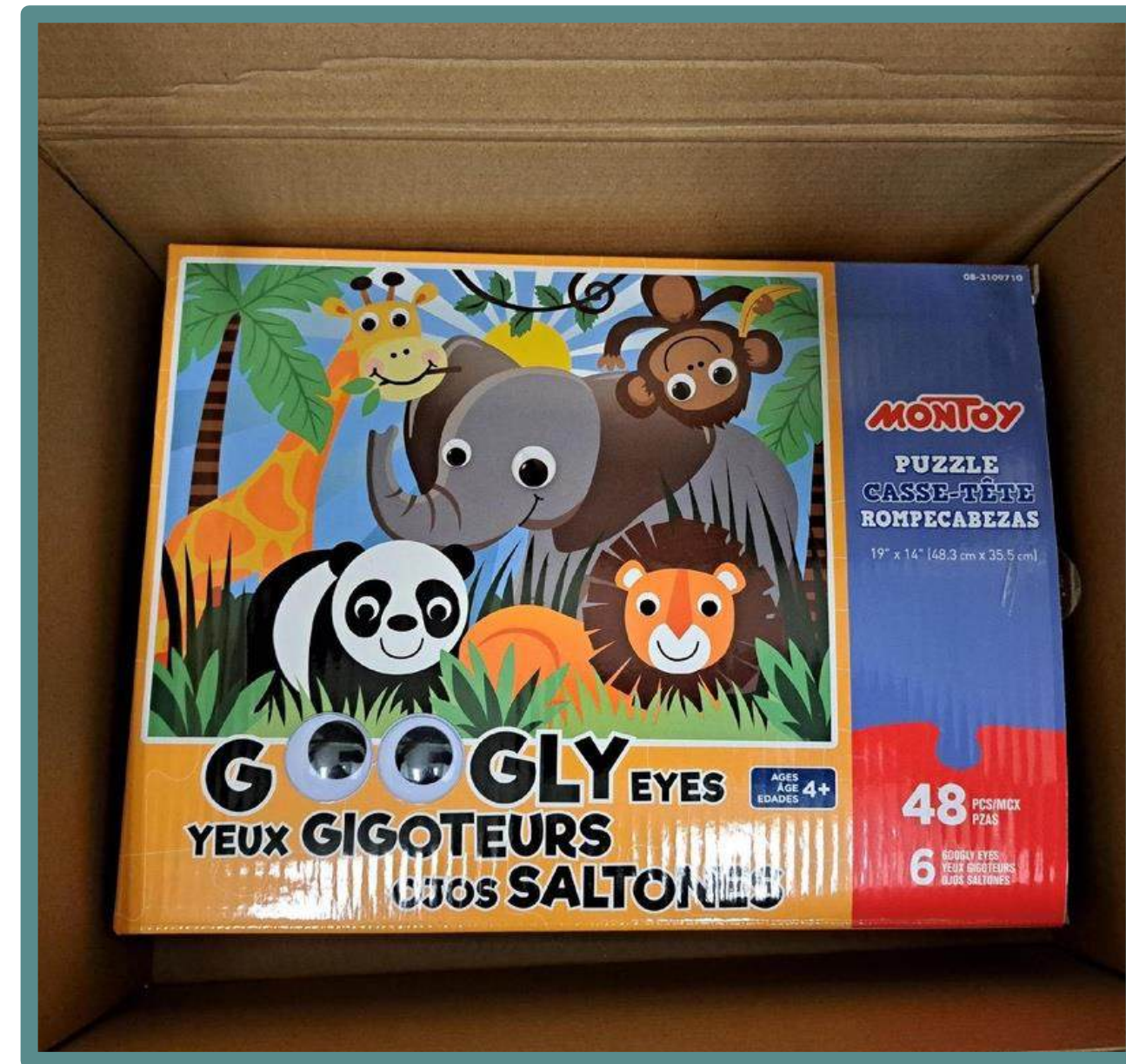


PLAY CONDITIONS & MATERIALS

Loose parts



Jigsaw puzzle



COGNITIVE MEASURES



Cognitive Development

- Wechsler Preschool and Primary Scale of Intelligence (WPPSI-IV CAN)

Executive Function

- Head-Toes-Knees-Shoulders Task (HTKS Task)

DATA COLLECTION

- Play sessions were video-recorded
- Parents completed a questionnaire on the home learning environment
- Play sessions were coded in one-minute and 20-second segments





DATA CODING

Object Transformation

Trawick-Smith, 1990

1

Conventional use
of the object as
expected

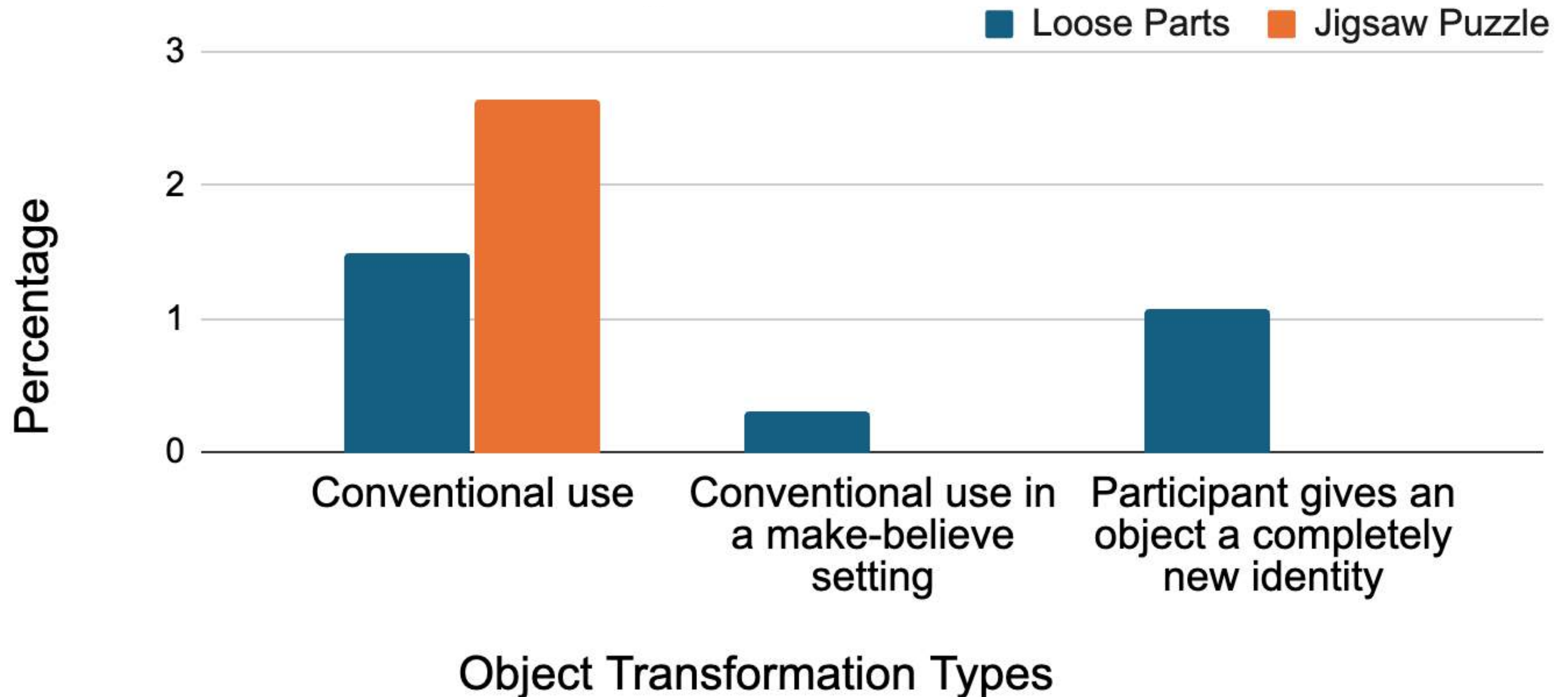
2

Conventional use
in a make-believe
setting

3

Participant gives an
object a completely
new identity

FREQUENCY ANALYSIS & PRELIMINARY RESULTS





PRELIMINARY RESULTS

1

Children playing with loose parts showed higher levels of symbolic transformation.

2

Children used the materials in conventional ways and assigned a new identity to objects most frequently.

DISCUSSION

- Providing parents with evidence for material selection
- Strengthening curriculum design in early childhood programs



GRATITUDE

- Community Organizations and Daycares
- Families and Children
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- Faculty of Health and Community Studies Fund
- CanPlay Lab RAs and Volunteers
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Thank you!

References



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