Love to Play

Evaluation of a Play-Based Preschool Recreation Program and Space Preliminary Research Findings



Optimal play and learning environments support healthy development of children.



Summary

The goal of this project was to explore how play-based learning shapes children's play behaviours and impacts health and health equity.

Participating Preschool Programs and Spaces

Ardrossan Recreation Complex Kinsmen Leisure Centre Strathcona Olympiette Centre

Study Parts

Part 1: Semi-guided conversation with parents and instructors (pre- and post-interviews)

Part 2: Systematic inventory of the preschools' physical environments

Part 3: Video recordings to observe child play in action

Part 4: Getting children's own perspectives on the preschool spaces

Time Period

September 2014 - June 2015

Research Team and Stakeholders

University of Alberta: Dr. Candace Nykiforuk (Principal Investigator), Dr. Jeff Bisanz, Dr. Rebecca Gokiert, Dr. Ana P. Belon, and Place Research Lab Team

MacEwan University: Dr. Jane Hewes (Principal Investigator) and Anne Groove (Early Childhood Educator)

Strathcona County Recreation, Parks, and Culture

Alberta Recreation Parks Association

Funding Agencies

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Thank You!

The research team and community stakeholders would like to thank all children, parents, and instructors for participating in this project.















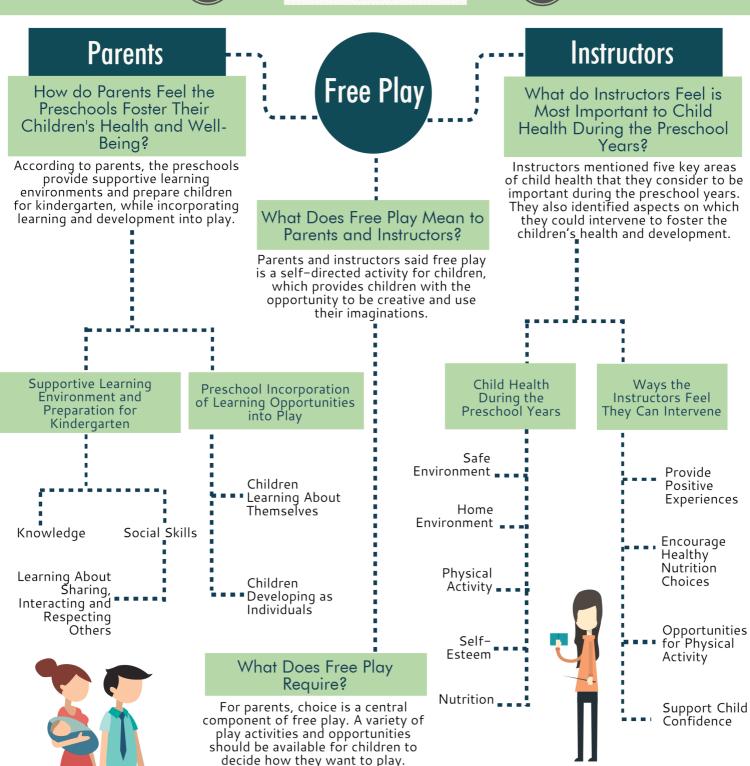


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What do Parents and Instructors

Think About Play-Based Programs and Preschool Environments?







Evaluation of the Indoor Preschool Spaces

What Does Your Preschool Space Tell You?

Did you know that the quality of early childcare physical environments plays an important role in children's cognitive, social, and emotional development?

With this in mind, the researchers used an audit tool called CPERS (Children's Physical Environments Rating Spaces)* to systematically evaluate the preschool spaces.

Part A: Planning Part B: Building as a Whole Interconnected areas Modified Open Space facilitating free-flow of activities Functional areas for **Home Bases** eating, sleeping, and toileting Part C: Children's Indoor Areas for reading and Spaces **Quiet Activity Areas** fine motor play Children's Physical **Environment Rating** Areas for gross motor, Scale Physical Activity Areas musical and fantasy play Areas for arts, crafts and **Messy Activity Areas** sciences Part D: Outdoor Areas

What does CPERS evaluate?

The CPERS tool is designed for assessing the quality of physical environments in childcare settings. The tool is divided into four parts (light blue boxes). Each part consists of several subscales (orange boxes). A short definition of each subscale is presented in the yellow boxes.

For the purposes of this project, only Part C: Children's Indoor Spaces was used.

The rating system is as follows: 0.0-1.00 = Poor

1.01-2.00 = Fair

2.01-3.00 = Good

3.01-4.00 = Excellent

Who did the evalution and when?

In May 2015, three researchers completed an independent assessment of the indoor spaces using the CPERS tool at each of the three preschools facilities.

What did the researchers find out?

Which areas scored "Good" or "Excellent" in each preschool space?	Ardrossan Recreation Complex	Kinsmen Leisure Centre	Strathcona Olympiette Centre
Modified Open Space	✓	~	✓
Home Bases	~	~	~
Quiet Activity Areas		~	
hysical Activity Areas	✓	~	✓
Messy Activity Areas	✓	~	✓

^{*}Ardrossan Recreation Complex and Strathcona Olympiette Centre scored "Fair" in the subscale Quiet Activity Areas.

What was the final score for each preschool space?

Ardrossan Recreation Complex



Kinsmen Leisure Centre



Strathcona Olympiette Centre



So what?

Looking at each subscale and their respective dimensions, decision-makers can identify where each facility excels and where resources could be invested to enhance opportunities for child cognitive, social, emotional, and physical development.

^{*} Moore, G. T. (2010). The Children's Physical Environment Rating Scale (CPERS). Sydney, AUS: Environment, Behaviour & Society Research Group, University of Sydney

Video Observations



How Do Children Play in Preschool Environments?

Why Video-Record Preschool Children?

The researchers wanted to understand how children play in preschool environments. Video cameras were used to capture children playing naturally in their preschool spaces, without disrupting the regular activity of the room.

How Were Video Observations Collected?

Video observations of children occurred on a monthly basis from September 2014 to June 2015.

At each preschool, researchers recorded two 30-minute observations on the same day: one in the preschool room during the morning and one in the mini-gyms/Love to Play room during the afternoon.

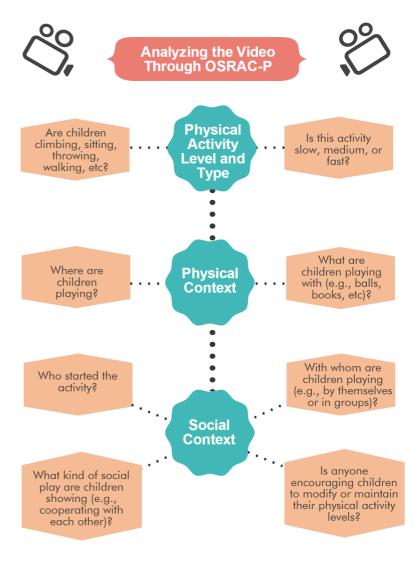
Video observations were taken from three wall-mounted cameras at a height and angle to give a "bird's eye" perspective.



75 hours of footage were collected across 150 videos

How Is the Video Data Being Analyzed?

A modified version of the Observational System for Recording Physical Activity in Children (OSRAC-P)* is being used to understand children's play behaviours. This tool assesses children's type and level of physical activity, as well as the play context, including physical and social environments.



What Has the Research Team Found So Far?



Preschool Environments:

Many play opportunities are available from which children can choose. Arts and crafts, block and toy manipulation, and pretend play are a few examples of children's play behaviours in the preschool programs.



Mini-gyms and Love to Play Room:

Children are very physically active in the mini-gyms at Kinsmen Leisure Centre and Strathcona Olympiette Centre, and the Love to Play room at Ardrossan Recreation Complex.

The preschoolers engage in a variety of gross motor activities (e.g., running, hopping, dancing, etc.), for which they use a variety of equipment (e.g., large blocks, balls, etc.).

^{*} Brown, W.H., Pfeiffer, K.A., McIve, K.L., Dowda, M., Almeida, M.J., & Pate, R.R. (2006). Assessing preschool children's physical activity: the Observational System for Recording Physical Activity in Children-Preschool version. Research Quarterly for Exercise and Sport, 77(2):167-76.



Children's Photo-Activities



What Did Children Say About Their Preschool Spaces?





Children were invited to take pictures of places and things they like to play with in the preschool spaces.

Why?

To understand how children perceive their preschool space and describe their play experiences.

When?

The photo-activities ran from February to June 2015.

Who?

15 children in Ardrossan Recreation Complex.

13 children in Kinsmen Leisure Centre.

13 children in Strathcona Olympiette Centre.



Children have time to explore and play with the photo cameras



Instructors read children's books about taking photos and playing



Children take photos of what and where they like to play at preschool



Instructors ask children to describe the photos and drawings



Children create a book using their photos, adding drawings and colour



* Photos were taken and shared by children with parental consent.

316 photos taken across all three sites (Average of 8 photos per child)



Instructors write children's ideas inside their photo books



Children present their photo books

