

What makes them happy?

Exploring the relationship between outdoor play environment at schools and children's wellbeing in Toronto, Canada

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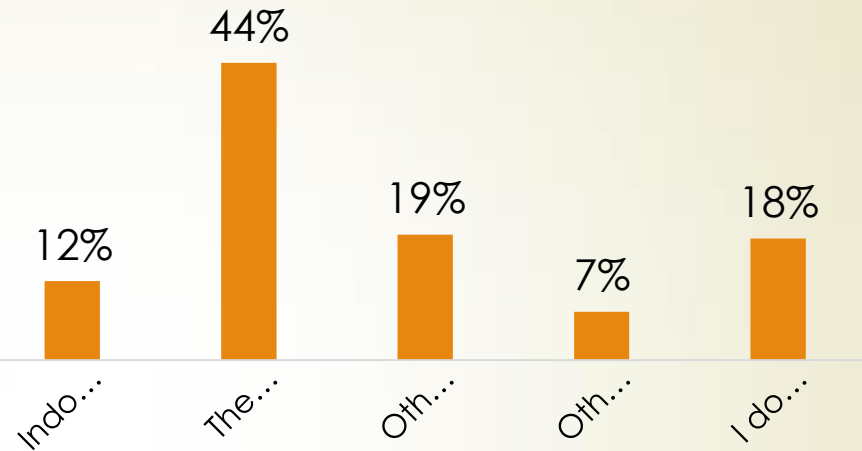
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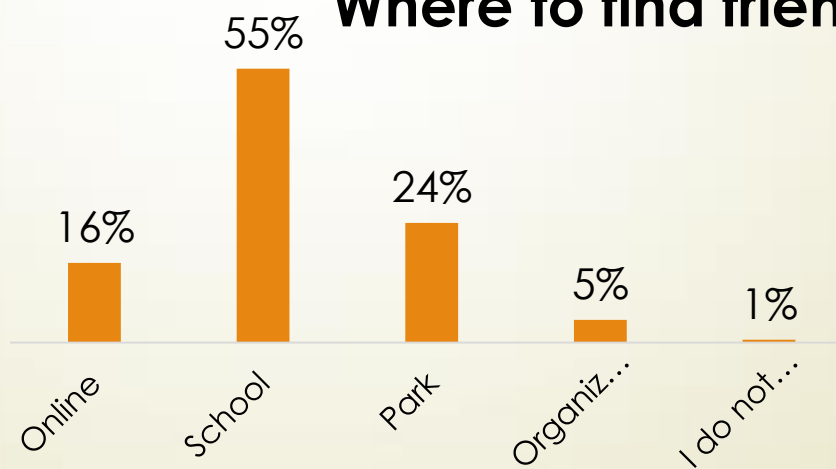
School is important for a child's social development



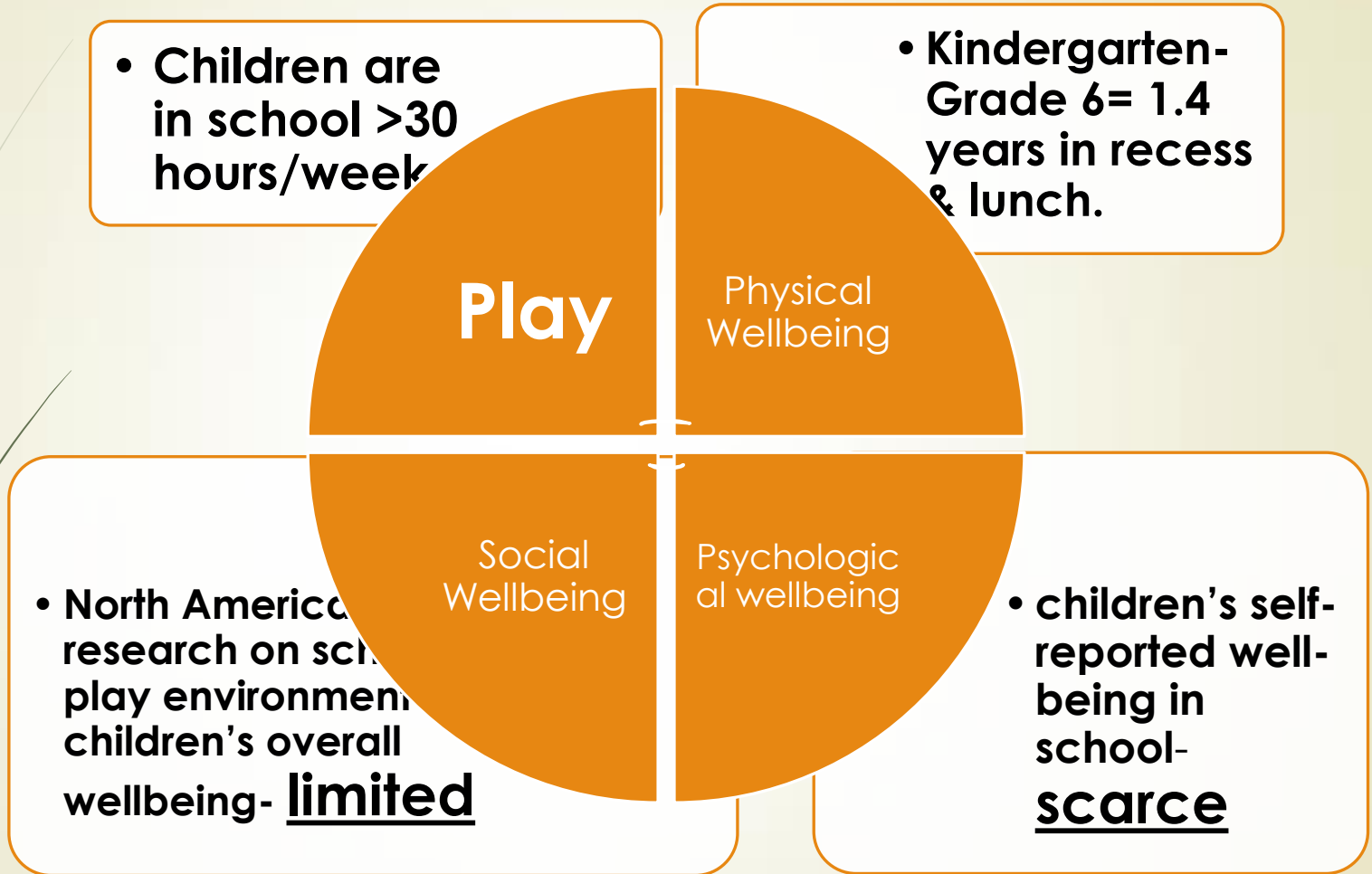
Favourite places to play



Where to find friends

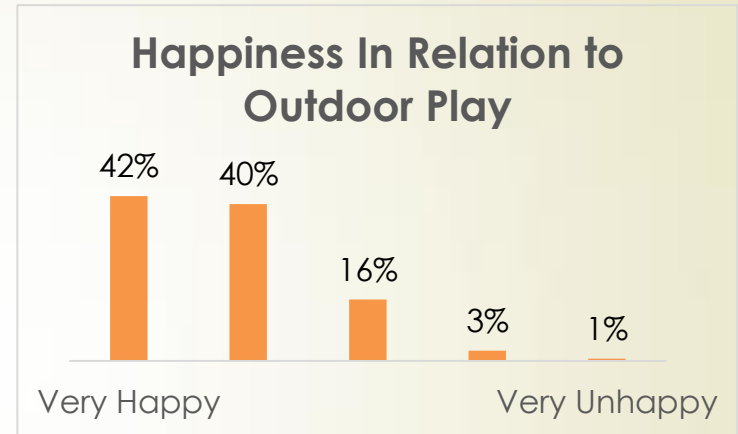


Exploring children's play in school environment is important



Perception of Wellbeing: **COMPLICATED**

- How happy are you when you play outdoors at your school?
Circle the face that best describes you



Happiness Subjective Wellbeing

Seligman's (2011) comprehensive and robust model proposed five different elements to explain happiness: **Pleasure, Engagement, Relationships, Meaning and Accomplishment.**

Research Objective:

To explore the statistical association between school's play environment and children's subjective wellbeing.

Findings will help understand the importance of play related policy and interventions in improving children's health and wellbeing.



Key Outcomes

Subjective Wellbeing Index

Positive Emotion

- Strong & active
- Not afraid to take risk
- Happy most of the times
- Really like school

Engagement

- Easily concentrate in classroom
- Enjoy trying new things

Relationship

- Have good friends in school
- Enjoy meeting new people

Achievement

- Most things I do turn well
- Feel good about myself

Potential indicators

Socio-demographic Indicators

- Age
- Gender
- School location
- Household composition: single parent H/H & H/H with siblings

Parental encouragement towards outdoor play

- Parents always to sometimes encourage or play with child

School Play Environment

- Allowed to play alone or with friends
- Adults help to have a great play time
- Play in school yard all year long
- Plenty of things to play with/ make up a game/ build something
- Very exciting outdoor play
- Feel safe while playing

Methodology:

- Questionnaire Survey
Survey: Summer 2016
Six elementary public schools in Toronto (*urban, suburban, ethnic & mixed neighbourhood schools*)

Grades 4, 5, & 6

n=**352**

School play environment: 6 question

Self reported subjective wellbeing: 10 question

- Ethics approval from TDSB and Ryerson REB
- *Research supported by Ryerson University*
- *Co- Authors: Raktim Mitra, Associate Professor, School of Urban & Regional Planning, Ryerson University*
Brenda Simon, Director of Play Programs, Earth Day Canada

Data Analysis

- Subjective wellbeing outcomes were measured based on unweighted average of relevant survey questions.
- The average values for each outcome were grouped into ordered categories.
- Three broad types of influences were explored: Socio-demographic indicators, parental encouragement towards outdoor play and school play environment
- Ordered logistic regression (or proportional odds) model was estimated to statistical association between school's play environment and children's subjective wellbeing.

Results

Key Indicators	Model 1 Positive Emotions OR (95% CI)	Model 2 Engagement OR (95% CI)	Model 3 Accomplishment OR (95% CI)	Model 4 Relationship OR (95% CI)
Parental encouragement towards outdoor play	2.42 (1.44-4.08)	1.68 (0.95-2.98)	1.02 (0.67-1.83)	2.58 (1.44-4.66)
Allowed to play alone or with friends	0.98 (0.63-1.52)	0.70 (-.42-1.15)	0.80 (0.48-1.33)	0.67 (0.41-1.12)
Adults help to have a great play time	1.18 (0.75-1.87)	0.88 (0.52-1.48)	0.85 (0.50-1.45)	0.80 (0.47-1.37)
Play in school yard all year long	1.14 (0.75-1.74)	1.07 (0.66-1.72)	1.32 (0.81-1.45)	1.11 (0.68-1.83)
Plenty of things to play with/ make up a game/ build something	1.21 (0.77-1.90)	1.74 (1.03-2.93)	1.76 (1.05-2.96)	1.17 (0.69-1.98)
Very exciting outdoor play	1.53 (0.96-2.45)	1.66 (0.97-2.86)	2.36 (1.37-4.11)	0.95 (0.54-1.64)
Feel safe while playing	1.52 (0.99-2.35)	1.11 (0.68-1.82)	1.61 (0.98-2.66)	1.66 (1.00-2.75)
Model Fit				
Residual Deviance	781.04	483.51	470.26	464.42
AIC	811.04	511.51	498.26	492.42

Note: All models are adjusted for variations in grade/age, gender, single parent households and households with siblings.

Odds Ratios that are **bold** are significant at $\alpha=0.05$; ORs that are **bold italics** showed a weak association with wellbeing indicators at $\alpha=0.10$.

Results

Key Indicators	Model 5 Overall SW OR (95% CI)
Parental encouragement towards outdoor play	2.08 (1.19-3.66)
Allowed to play alone or with friends	0.78 (0.49-1.26)
Adults help to have a great play time	1.34 (0.82-2.19)
Play in school yard all year long	1.07 (0.68-1.70)
Plenty of things to play with/ make up a game/ build something	1.55 (0.95-2.51)
Very exciting outdoor play	2.03 (1.23-3.37)
Feel safe while playing	1.36 (0.85-2.17)
Model Fit	
Residual Deviance	551.22
AIC	579.22

Note: All models are adjusted for variations in grade/age, gender, single parent households and households with siblings.

Odds Ratios that are **bold** are significant at $\alpha=0.05$; ORs that are **bold italics** showed a weak association with wellbeing indicators at $\alpha=0.10$.

Implications

Model results indicate the importance of the following in improving a child's wellbeing.

- **Parental encouragement towards outdoor play:**
 - **Plenty of things to play with/ make up a game/ build something**
 - **Very exciting outdoor play**
 - **Feel safe while playing**
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- **In Toronto Earth Day Canada is piloting the Outdoor Play and Learning (OPAL) Project to improve play environments in school.**

Thank you

For More Information

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