



Neighbourhood Safety and Outdoor Play in Early Childhood: Evidence from Growing Up in Ireland

Suzanne M. Egan & Jennifer Pope

Twitter: [@Suzanne_M_Egan](#) & [@JSturley_Pope](#)

Cognition, Development and Learning Lab
Mary Immaculate College, Limerick

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The Importance of Play

- United Nations Convention on the Rights of the Child (UNCRC), children have the right to play (UNCRC, 1989 Article 31)
- Playful opportunities are essential for healthy growth, development and overall well-being (Pellegrini and Smith, 1998).
- Play gives independence, control, opportunities to challenge and take risks (Tovey, 2011)
- Importance of outdoor play has been well-documented (Bento and Dias, 2017).
- Supports physical, cognitive and socioemotional development

CLINICAL REPORT | Guidance for the Clinician in Rendering Pediatric Care

American Academy
of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

The Power of Play: A Pediatric Role in Enhancing Development in Young Children

Michael Yogman, MD, FAAP,* Andrew Garner, MD, PhD, FAAP,† Jeffrey Hutchinson, MD, FAAP,‡
Kathy Hirsh-Pasek, PhD,§ Roberta Michnick Golinkoff, PhD,¶ COMMITTEE ON PSYCHOSOCIAL
ASPECTS OF CHILD AND FAMILY HEALTH, COUNCIL ON COMMUNICATIONS AND MEDIA

Children need to develop a variety of skill sets to optimize their development and manage toxic stress. Research demonstrates that developmentally appropriate play with parents and peers is a singular opportunity to promote the social-emotional, cognitive, language, and self-regulation skills that build executive function and a prosocial brain. Furthermore, play supports the formation of the safe, stable, and nurturing relationships with all caregivers that children need to thrive.

Play is not frivolous: it enhances brain structure and function and promotes executive function (ie, the process of learning, rather than the content), which allow us to pursue goals and ignore distractions.

When play and safe, stable, nurturing relationships are missing in a child's life, toxic stress can disrupt the development of executive function and the

abstract

FREE

*Department of Pediatrics, Harvard Medical School, Harvard University and Mount Auburn Hospital, Cambridge, Massachusetts; †Department of Pediatrics, School of Medicine, Case Western Reserve University and University Hospitals Medical Practices, Cleveland, Ohio; ‡Department of Pediatrics, E. Edward Hebert School of Medicine, Uniformed Services University, Bethesda, Maryland; §Department of Psychology, Brookings Institution and Temple University, Philadelphia, Pennsylvania; and ¶School of Education, University of Delaware, Newark, Delaware

Dr. Yogman prepared the first draft of this report and took the lead in reconciling the numerous edits, contributions, and suggestions from the other authors. Drs. Garner, Hutchinson, Hirsh-Pasek, and Golinkoff made significant contributions to the manuscript by revising multiple drafts and responding to all reviewer concerns, and all authors

THE CHECKUP

Let Kids Play

Doctors should prescribe playtime for young children, the American Academy of Pediatrics says.



Outdoor play – Physical Development

- Opportunities to move more freely
- Significantly more active outdoors than indoors (Engelen, et al., 2015)
- Parents identified playing outside with friends/neighbours as the most successful method to increase the amount of physical activity their child gets (Safefood, 2017)
- Explore and engage with natural materials and resources (Fjortoft, 2001)



Outdoor play – Cognitive & Socioemotional Development

- Social interaction and cooperation vary across activities and games:
 - communication
 - reciprocal role-taking
 - reading play signals
 - taking turns (Pellegrini, 1987)
- Cognitive demands:
 - imagination
 - rules
 - keeping score
 - sequences of steps (Veiga et al., 2017)



Research and Policy on Outdoor Play in Ireland

- Little evidence of GUI data being used to examine *'play itself, separate to sport, exercise and leisure'* (Lynch, 2017)
- Lack of policy in Ireland to support engagement with outdoors in children (Lynch, 2017)
- Lack of data to guide policy (Lynch, 2017)
- What GUI data is available on outdoor play?
- What can it tell us?



Findings from GUI data - Egan & Pope 2018

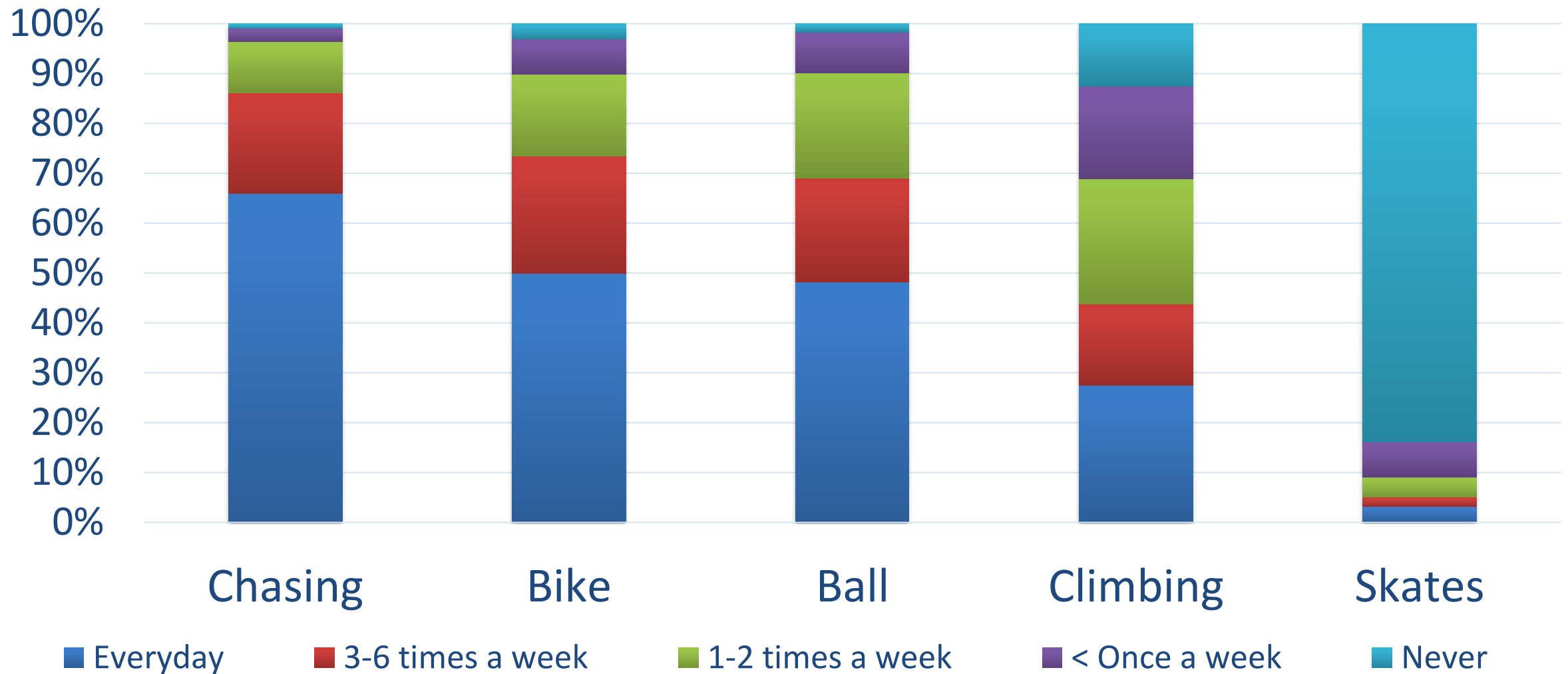
- **Wave 3 of data – Age 5**
- 9001 families
- Response of the primary caregiver to a series of questions



- **Outdoor play: How often...**
 - Plays chasing
 - Plays with a ball
 - Rides a bike, tricycle or scooter
 - Climbs on trees, climbing frames, wall bars, etc
 - Skates

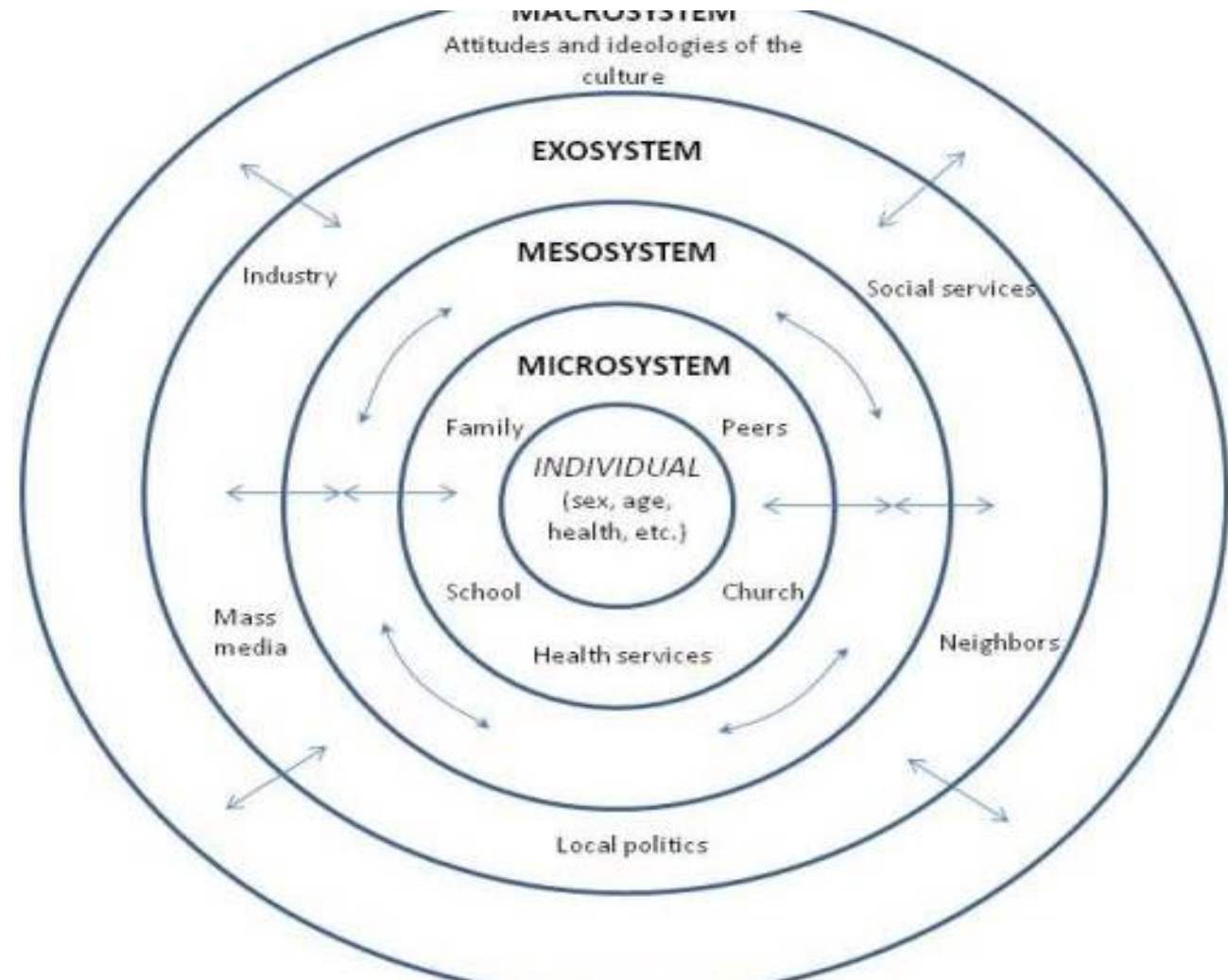


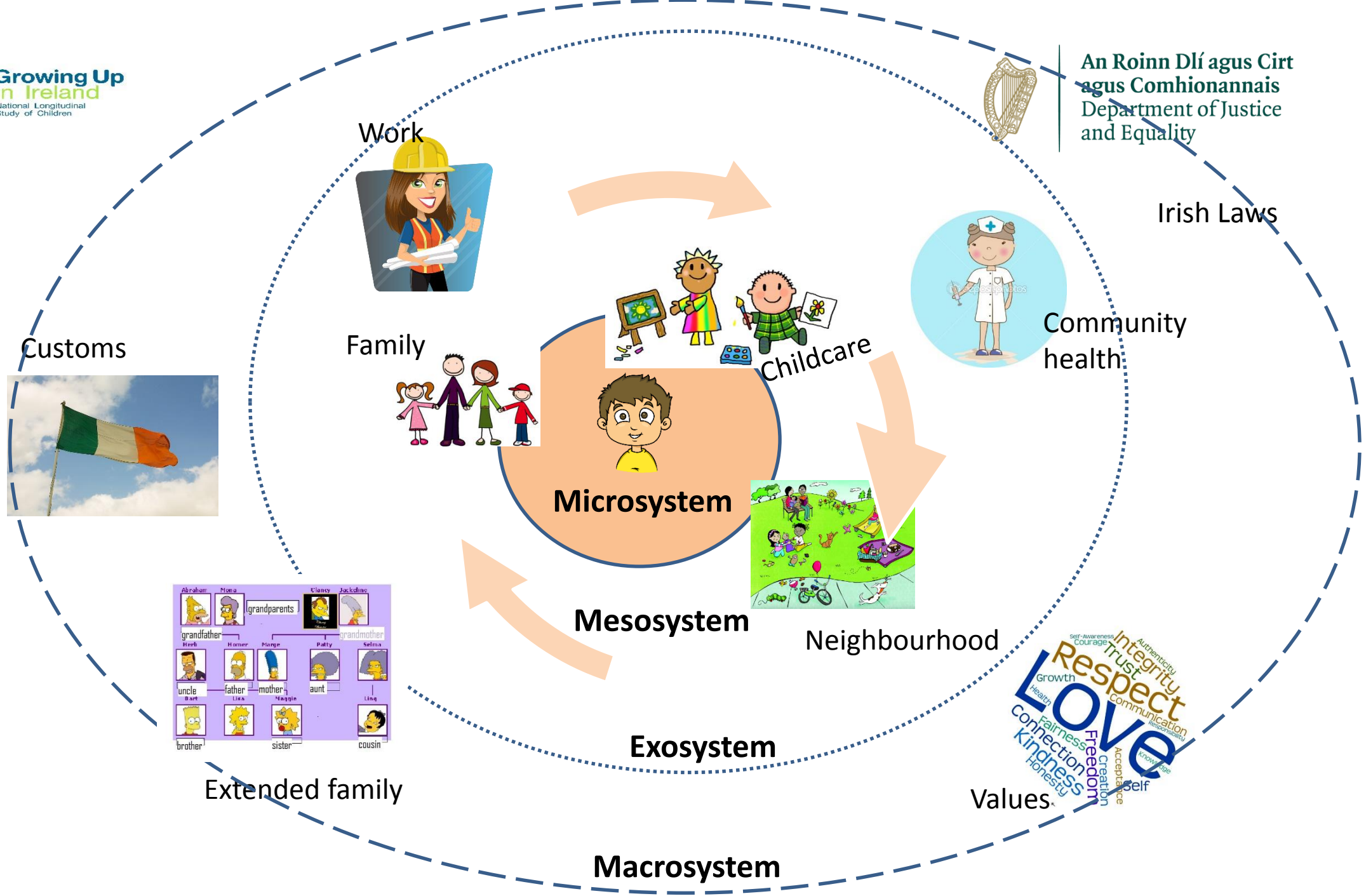
5 year old outdoor play



Bronfenbrenner and Ecological Systems Theory

- Children play in neighbourhoods
 - Play spaces
 - Traffic
 - Speed limits
 - Connections to neighbours
 - Antisocial behaviour
- Other factors
 - Amount of time child spends at home
 - Working hours of parents
 - Income level of family





Customs



Work



Family



Microsystem



Childcare



Community health

Irish Laws

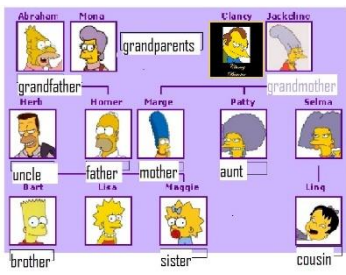
Mesosystem

Neighbourhood



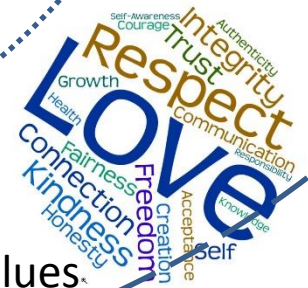
Exosystem

Extended family



Macrosystem

Values



Neighbourhood Environment & Outdoor Play

- Parental-perceived neighborhood safety significantly associated with encouraging outdoor physical activity (Nicksic et al. 2018).
- Positive association with children's outdoor play if mothers perceived that 'the neighbourhood is a good place to bring up children' (Xu et al., 2017)
- Neighbourhood environment is associated with children's sedentary behaviour outside school hours (Veitch et al., 2011)
- Greater parental satisfaction with nearby play spaces associated with less screen time (Veitch et al., 2011) and more hours of outdoor play (Tolbert Kimbro et al., 2011)

Findings from GUI data - Neighbourhood Environment

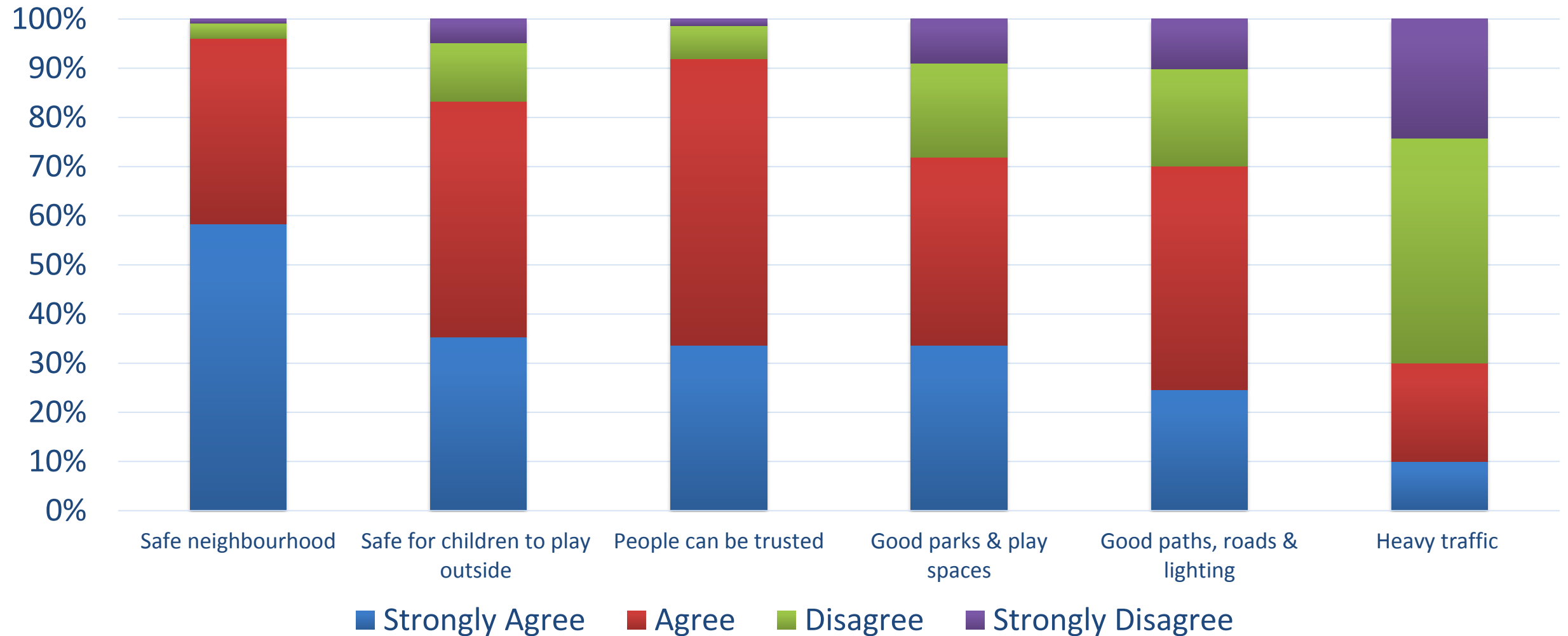
- **Safety**
 - It is safe for children to play outside during the day
 - There is heavy traffic on my street or road
- **Social Cohesion**
 - People around here are willing to help their neighbours
 - Most people in your neighbourhood can be trusted
- **Antisocial behaviours (how common?)**
 - People being drunk or taking drugs in public
 - Vandalism and deliberate damage to property
- **Facilities**
 - There are good parks, playgrounds and play spaces
 - There is access to basic services such as banks, medical clinics



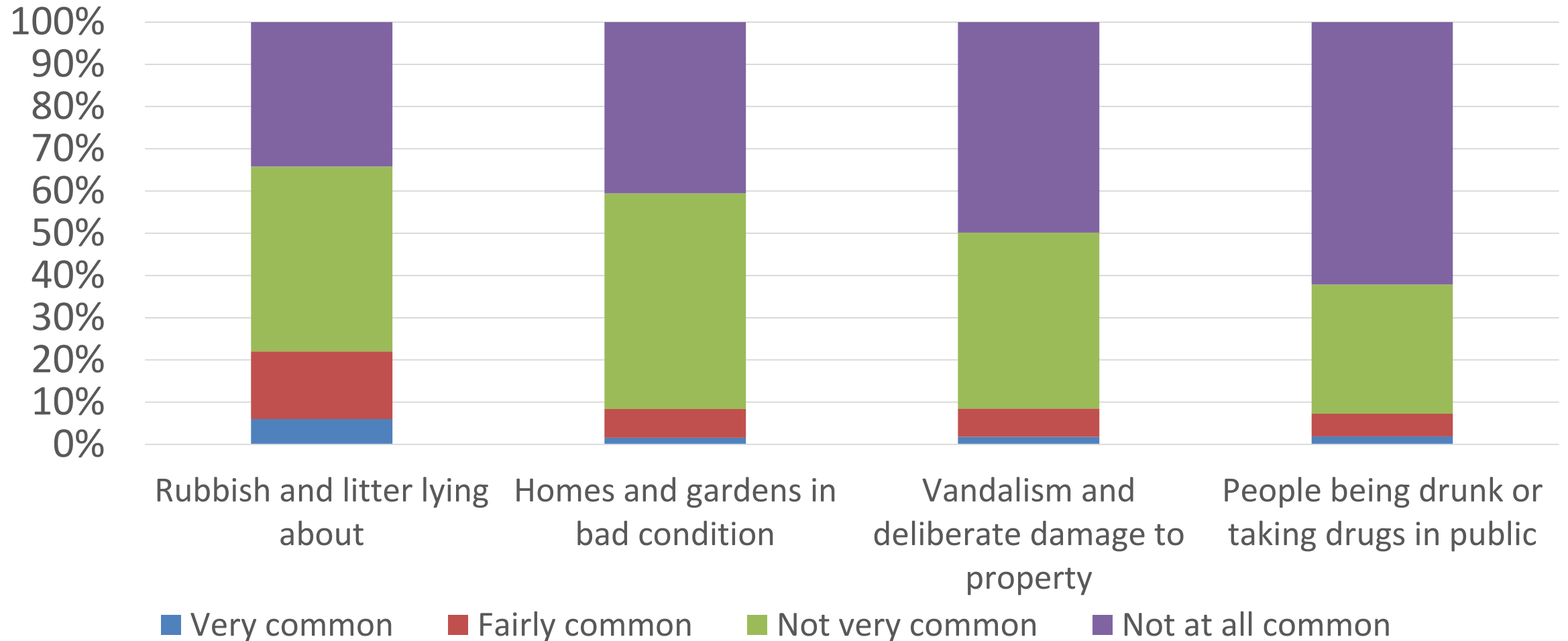
What are neighbourhoods like for young children in Ireland?



Safety and play spaces

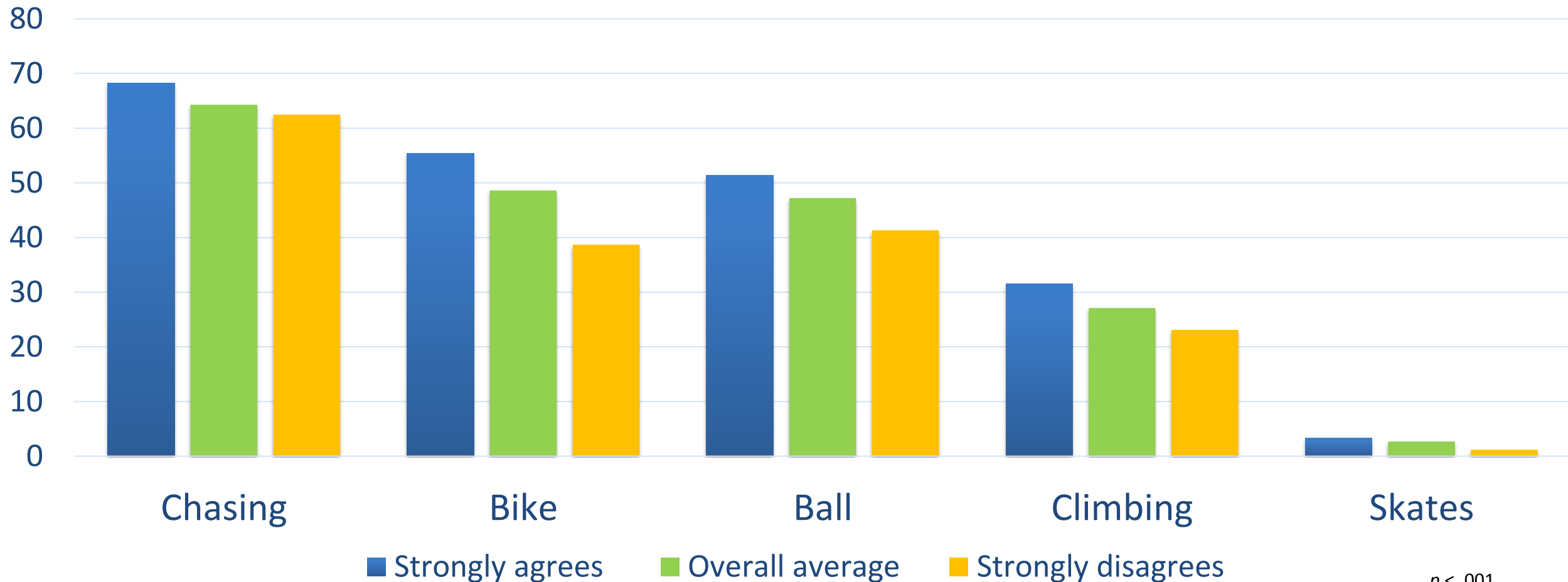


Antisocial Behaviour



Effect of safety on outdoor play – Egan & Pope 2018

Percentage engaged in daily activities - 'It is safe for children to play outside during the day'



$p < .001$

Aims of Study

- Previous research shows that both the physical environment and the social cohesion of neighborhoods impact on levels of outdoor play in children.



- The aim of this research was to investigate the effect of these factors on levels of outdoor play in young children in Ireland.
- Which neighbourhood factors predict levels of outdoor play?

Analysis

Block 1 - Safety: Safety, play outside, traffic, parental perception of safety

Block 2 – Social Cohesion: People, neighbourhood, trust, identity...

Block 3 - Antisocial Behaviour: Rubbish, drunk/drugs, vandalism

Block 4 – Facilities & Amenities: Paths, lighting, roads, parks, playgrounds, (shops, banks, transport, etc.)

Block 5 - Control factors: family, level of education, hours of work, income

Predicting Levels of Outdoor Play

- Neighbourhood factors significantly predicted levels of outdoor play in 5 year old children, $R^2_{adj} = .04$, $F(24,3378) = 6.93$, $p < .001$.
- Largest contributions to the final model made by:
 - people taking drugs or being drunk in public ($B = -.092$, $p < .001$)
 - how safe it is to play outside during the day ($B = -.088$, $p < .001$)
- Other contributory variables:
 - Sense of identity with the neighbourhood
 - Informed about local affairs
 - Neighbourhood as a place for bringing up children
 - Control variables: income, hours worked per week and ed of SCG



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Predicting Safety to Play Outside

- Neighbourhood factors significantly predicted ratings of how safe it is to play outside during the day, $R^2_{adj} = .31$, $F(23,3379) = 66.45$, $p < .001$.
- Largest contributions to the final model made by:
 - heavy traffic ($B = -.211$, $p < .001$)
 - people helping their neighbours ($B = .144$, $p < .001$)
 - neighbours can be trusted ($B = .115$, $p < .001$)
 - how safe the neighbourhood is ($B = .114$, $p < .001$)
- Other contributory variables:

<ul style="list-style-type: none"> – Affordable, regular transport – Drink and drugs in public – Access to basic shopping facilities 	<ul style="list-style-type: none"> - Neighbourhood as a place for bringing up children - Good paths, lights, roads - Control: income, ed of PCG & SCG
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Predicting Safety to Play Outside

- Percentage of variance accounted for by different factors

Block 1 – 23% - Safety: Neighbourhood as place to raise children, traffic, parental perception of safety...

Block 2 – 5.1% - Social Cohesion: People, neighbourhood, trust, identity...

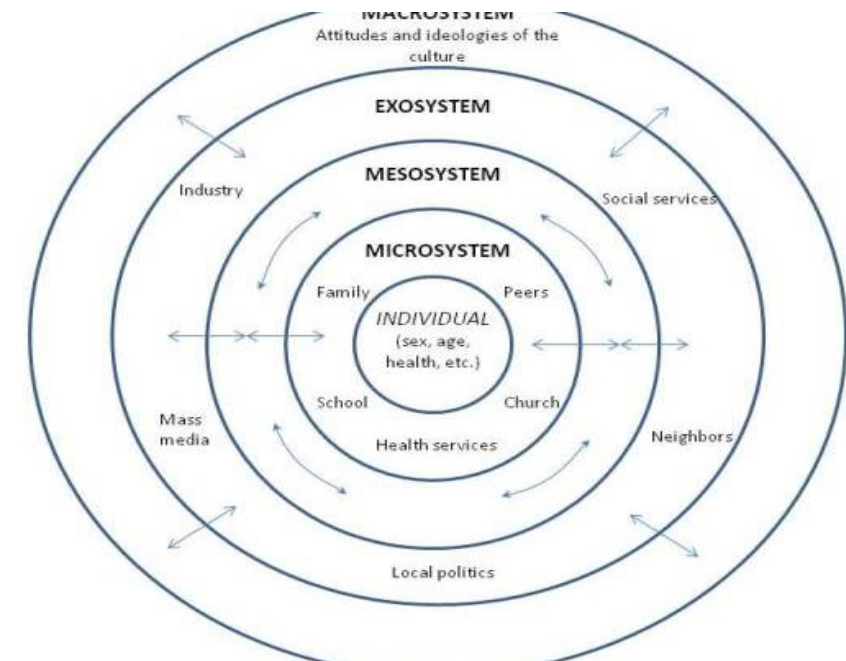
Block 3 - .03% - Antisocial Behaviour: Rubbish, drunk/drugs, vandalism..

Block 4 – .08% - Facilities & Amenities: paths, lighting, roads, parks, playgrounds, (shops, banks, transport, etc.)...

Block 5 – 1.5% - Control factors: family, level of education, hours of work, income deciles...

Social Cohesion

- ‘the glue that holds society together’ (Janmaat 2011, p. 61)
- ‘a state of affairs concerning both the vertical and horizontal interactions amongst members of society as characterized by a set of attitudes and norms that include trust, a sense of belonging and the willingness to participate and help, as well as their behavioural manifestations’. (Chan and Chan, 2006, p. 290)



Considerations

- Activities measured for outdoor play were limited in scope and may not capture all of the different activities children engage in when playing outside.
- Measured in days per week rather than time spent
- These were parent report measures rather than gathered through child observation/reporting.
- Subjectivity of self-reporting their perceptions of safety and other neighbourhood factors.

Conclusions

- Neighbourhood factors play a role in outdoor play in young children in Ireland
- Traffic and social cohesion important factors in parents perception of safety to play outdoors
- All Young Children in Ireland have the right to play
- Policy makers, local communities and parents need to consider how outdoor play can be encouraged and facilitated
- Considering the future: First 5...

Thank you

- Supported by MIC Seed Funding
- Thanks to all that families that so generously continue to contribute to the Growing Up in Ireland Study (www.growingup.ie)
- GUI Data is archived by the Irish Social Science Data Archive in UCD (www.ucd.ie/issda)



Cognition, Development and Learning Lab @MIC
Department of Psychology