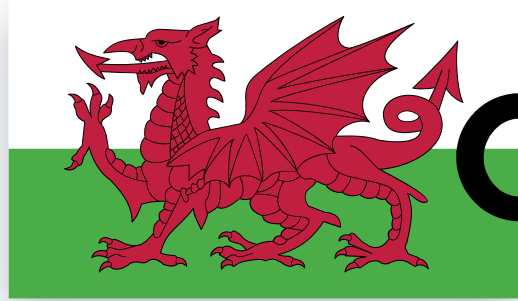


GROWING UP IN WALES

A longitudinal cohort
spanning from birth to
age 11.

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GROWING UP IN WALES



BORN IN WALES

HAPPEN



**Expectant
Parents**

Parents

Dads

Nursery Network

**The HAPPEN
Survey**

**0-18
Months**

**18 Months-
3 Years**

WHAT IS BORN IN WALES?

A longitudinal birth cohort study that follows the health and wellbeing of children born in Wales

Objective: To understand how various factors impact child health, development, and wellbeing from pregnancy and through childhood

Methodology: Recurring surveys (health behaviours, development, family dynamics, education etc.) and routinely collected data



WHY IS BORN IN WALES IMPORTANT?



The findings from this cohort provide insights that can inform public health policy, improve healthcare delivery, and guide interventions aimed at improving child outcomes.

Long-Term Insights:

By following children over time, we can better understand the long-term effects of early life experiences on health, mental wellbeing, and development.

Data-Driven Decisions:

The data generated supports evidence-based policy decisions that aim to create healthier environments for children in Wales.

BORN IN WALES DATA

Survey Data:

Over 4,100 survey responses from expectant parents and parents for enriched personal responses and linkage to the data spine.

Qualitative data about stress, wellbeing, support and services

Routinely-Collected Data:

Descriptive information from 2011 to 2023 has been gathered from the National Community Child Health Database (NCCHD) in SAIL. This comprehensive dataset comprises over 400,000 child electronic records and will increase by 30,000 new births annually.





The SAIL Databank is a Wales-wide research resource focused on improving health, well-being and services



It is a databank of anonymised data about the population of Wales and is world recognised



SAIL is committed to working with researchers, the NHS and other health-related stakeholders to conduct projects that lead to enhanced patient care, public benefit and improvements in health and well-being

BORN IN WALES DATA



| | |
|--|---|
| <p>National Community Child Health Database (NCCH)</p> <p>Breastfeeding duration, birth weight, gestation, blood test results, maternal smoking, hearing/vision tests, Health visitor assessment of family resilience, domestic violence, speech and language skills, flying start services.</p> | <p>Maternal Indicators Dataset (MIDS)</p> <p>Maternal data at initial assessment including age, smoking, weight, mental health condition, previous births, Labour and birth data including Apgar Score, birth outcome (c-section, assisted delivery, presentation e.g. transverse), birth weight, intention to breastfeed</p> |
| <p>Education Wales (EDUW)</p> <p>Attainment (foundation phase, key stage 1 and 2), free school meal, attendance, special educational needs, education other than school, ethnicity, age, gender, local authority</p> | <p>Children Receiving Care and Support Census (CRCS)</p> <p>On child protection register, abuse type, disability, ethnicity, autism, parental capacity, dental health, mental health</p> |
| <p>Welsh Longitudinal General Practice Dataset (WLGP) – Welsh Primary Care</p> <p>Diagnosis, medications, symptoms and procedures.</p> | <p>Health & Attainment of Pupils in Primary Education (HAPPEN)</p> <p>Wellbeing, physical activity, diet, Me and My Feelings questionnaire (behavioural difficulty, emotional difficulty), garden, safety of area, hours of sleep, teeth brushing, ability to swim, ability to ride a bike.</p> |

BORN IN WALES RECENT FINDINGS

International Journal of Population Data Science (2024) 9:209

International Journal of
Population Data Science

Journal Website: www.ijpds.org

Mother and Infant Research Electronic Data Analysis (MIREDA): A protocol for creating a common data model for federated analysis of UK birth cohorts and the life course

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Abstract

Birth cohorts are valuable resources for studying early life, the determinants of health, disease, and development. They are essential for studying life course. Dynamic longitudinal electronic cohorts use routinely collected data, are live, and can reduce selection bias specifically associated with direct recruitment in traditional birth cohorts. However, they are limited to health and administrative data and may lack contextual information.

The MIREDA (Mother and Infant Research Electronic Data Analysis) partnership creates a UK-wide birth cohort by aligning existing electronic birth cohorts to have the same structure, content, and vocabularies, enabling UK-wide federated analyses.

Objectives

1) Create a core dynamic, live UK-wide electronic birth cohort with approximately 500,000 new births per year using a common data model (CDM).
2) Provide data linkage and automation for long-term follow-up of births from the Clinical Practice Research Datalink (CPRD), MIMoPREDICT and the 'Born in' initiatives of Bradford, Wales, Scotland, and South London for comparable analyses.

Methods

We will establish core data content and collate linkable data. A suite of extraction, transformation, and load (ETL) tools will be used to transform data for each birth cohort into the CDM. Transformed datasets will remain within each cohort's treated research environment (TRE). Metadata will be uploaded for the public to the Health Data Research (HDRUK) Innovation Gateway. We will develop a single online data access request for researchers. A cohort profile will be developed for researchers to reference the resource.

Ethics

Each cohort has approval from their TRE through compliance with their project application

WHAT IS HAPPEN?

HAPPEN brings together education, health and research in line with the new curriculum proposals for health and wellbeing in Wales.

Headteachers told us...

Increasing need to meet literacy and numeracy targets – 'core business', felt overburdened with initiatives', importance of health and wellbeing – emerging Curriculum for Wales, called for a better understanding of school needs, greater autonomy and involvement for schools, advocated for a more collaborative approach to improving school health

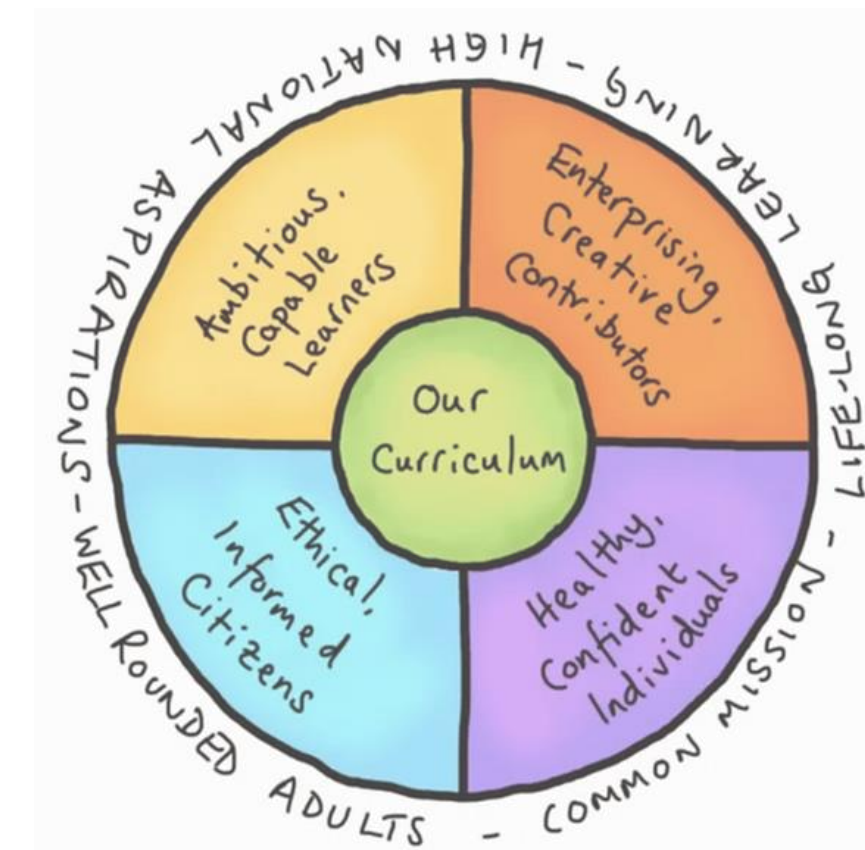


WHY IS HAPPEN IMPORTANT?

The Curriculum for Wales, rolled out from September 2022, aims to have more autonomous, school-level curriculum design and implementation. There are four purposes and instead of 'narrow' subject areas there are six Areas of Learning Experience (AoLE).

HAPPEN compliments the Health and Wellbeing AoLE which focuses on physical health and development, mental health and emotional/social wellbeing.

It presents the opportunity for pupils to learn and make informed decisions about their health and wellbeing. It allows schools to make individual changes to health and wellbeing plans and can evaluate practice and intervention.



HAPPEN DATA



Pupils in Years 4-6 complete an online health and wellbeing survey.

It collects a range of information about typical health behaviours (e.g., physical activity, nutrition, sleep, wellbeing, safety and local area) in line with priorities of schools, children and stakeholders.

Schools receive a report tailored to the new CfW.

This presents school level averages compared to national averages to identify and priorities aspects within the school report.

Create an e-cohort for larger scale research and evaluation.

Over 650 schools and 45,000+ children involved in HAPPEN.

Larger scale research and evaluation

Build e-cohort

Identify research priorities

Co-produce survey

Feedback findings via report

HAPPEN RECENT FINDINGS

Health literacy in the CfW

CHILI Hub

Four ways children say their well-being can be improved

Published: November 13, 2018 12:11pm GMT



Children who have afternoon school breaks are fitter but need a supportive environment

Published: August 28, 2019 11:18am BST

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Afternoon breaks were once a common feature of nearly all primary school timetables. But, as schools have sought to dedicate more time to teaching and learning, and limit poor behaviour, these short play times have been cut down and, in many cases, eliminated altogether.

But research has shown that play is important for a child's development – and now a new analysis from our ongoing research project has found that removing afternoon break time could be detrimental to pupils' physical well-being.

Changes in self-reported health and wellbeing outcomes in 36,951 primary school children from 2014 to 2022 in Wales: an analysis using annual survey data

[Johanna Einhorn](#)¹, [Michaela James](#)^{1,*}, [Natasha Kennedy](#)¹, [Emily Marchant](#)², [Sinead Brophy](#)¹

Curriculum-based outdoor learning for children aged 9-11: A qualitative analysis of pupils' and teachers' views

[Emily Marchant](#)¹, [Charlotte Todd](#)¹, [Roxanne Cooksey](#)², [Samuel Dredge](#)³, [Hope Jones](#)⁴, [David Reynolds](#)⁵, [Gareth Stratton](#)⁶, [Russell Dwyer](#)⁷, [Ronan Lyons](#)⁸, [Sinead Brophy](#)⁹

The Daily Mile: Whole-school recommendations for implementation and sustainability. A mixed-methods study

[Emily Marchant](#)¹, [Charlotte Todd](#), [Gareth Stratton](#), [Sinead Brophy](#)

The Effect COVID Has Had on the Wants and Needs of Children in Terms of Play: Text Mining the Qualitative Response of the Happen Primary School Survey with 20,000 Children in Wales, UK between 2016 and 2021

[Michaela James](#)¹, [Mustafa Rasheed](#)¹, [Amrita Bandyopadhyay](#)¹, [Marianne Mannello](#)², [Emily Marchant](#)¹, [Sinead Brophy](#)¹

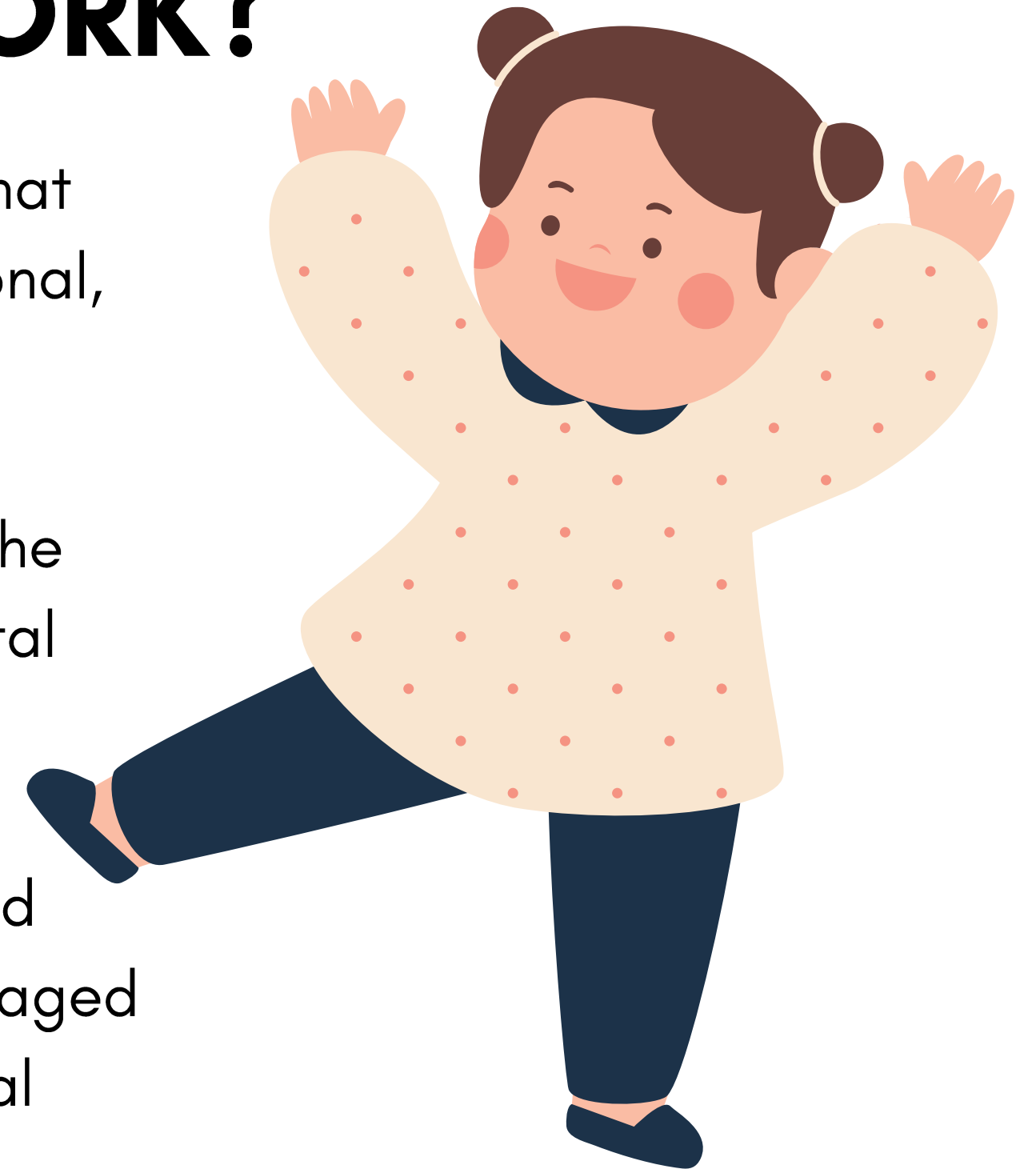
UPFSM Evaluation

WHAT IS THE NURSERY NETWORK?

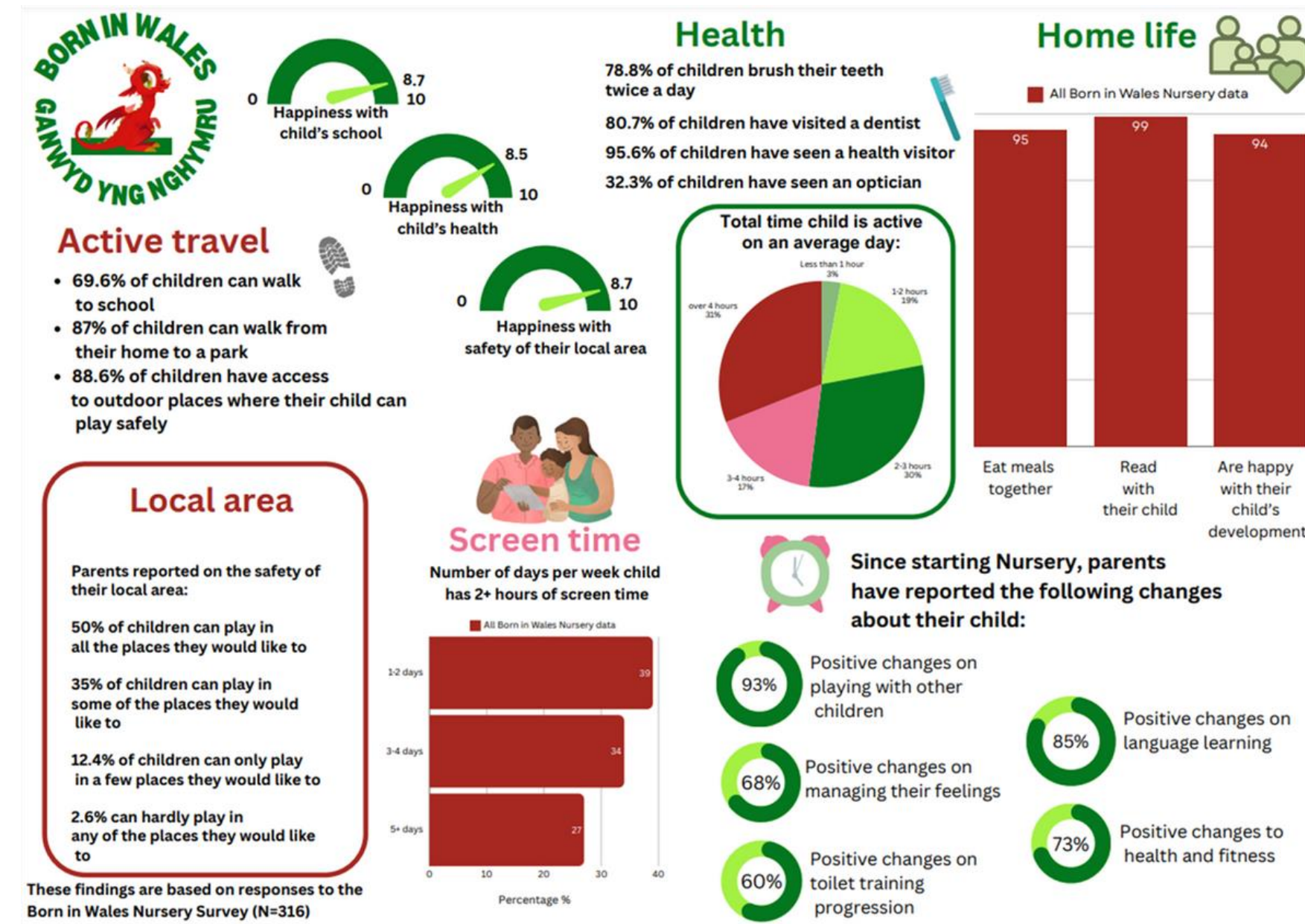
Early childhood is a critical period for brain development and what happens in the first few years of life influences cognitive, emotional, and physical health outcomes for the rest of a child's life.

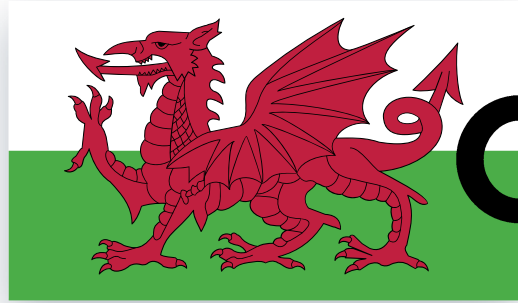
Early health and developmental challenges can affect not only the child but also the wellbeing of the entire family, including parental stress, mental health, and economic stability.

The Nursery Network is the missing link between Born in Wales and HAPPEN. Helping to understand the needs of parents of nursery-aged children helps in providing support that promotes parental mental health, reduces stress, and leads to more positive family dynamics,



NURSERY NETWORK DATA





GROWING UP IN WALES



Highlight key figures from our reports and findings on child health in Wales (e.g., percentage of children with poor mental health, rates of childhood obesity, etc.)

Current Challenges:

- Mental health concerns among children and adolescents
- Access to healthcare and educational inequalities
- Effects of poverty and family dynamics on children's wellbeing

Impact:

- Healthier children grow into healthier adults, benefiting families, communities, and society as a whole.
- Addressing these challenges early can lead to long-term benefits in social, educational, and economic outcomes.

GROWING UP IN WALES

A longitudinal cohort
spanning from birth to
age 11.

Dr Michaela James
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