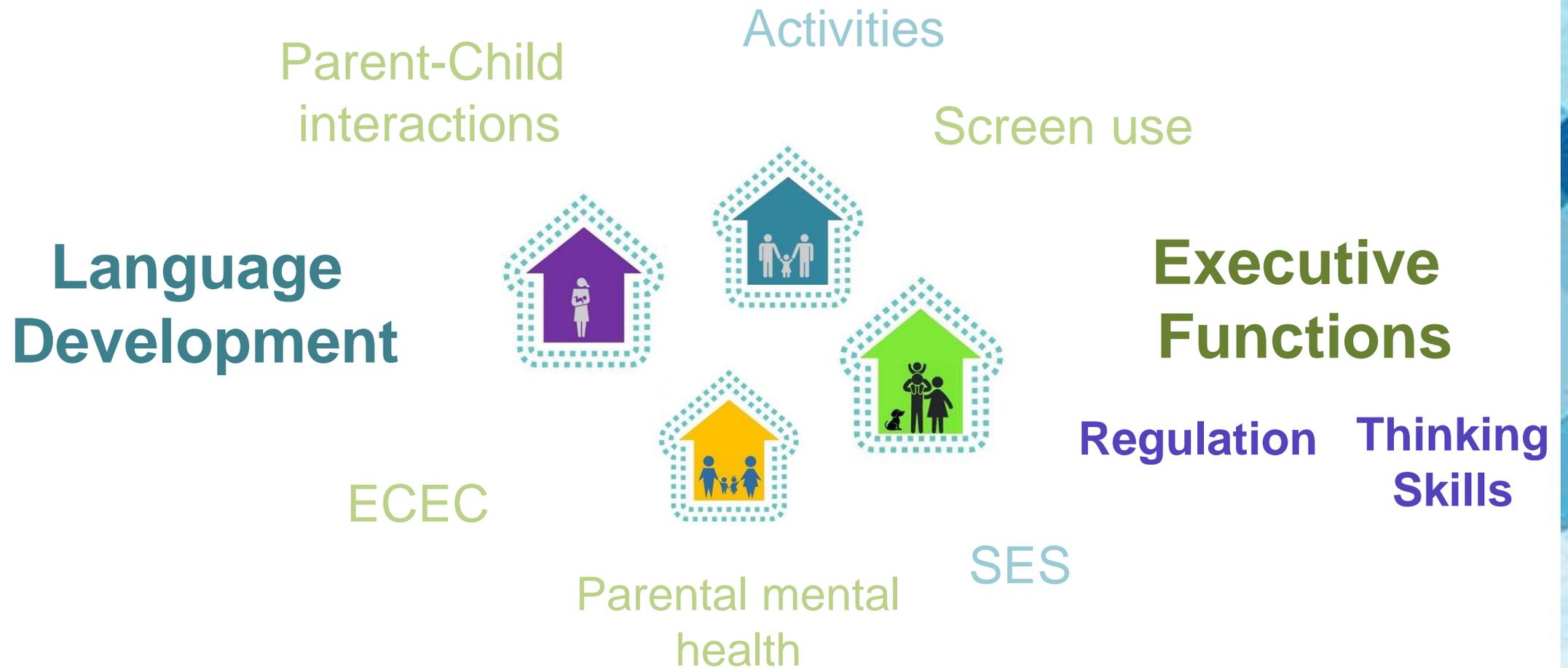


Lessons from Lockdown:

**Children's Cognitive Development during COVID-19
Implications for the Present and the Future**

Dr Nayeli Gonzalez-Gomez

The Social Distancing and Development Study (SDDS)



The Social Distancing and Development Study (SDDS)

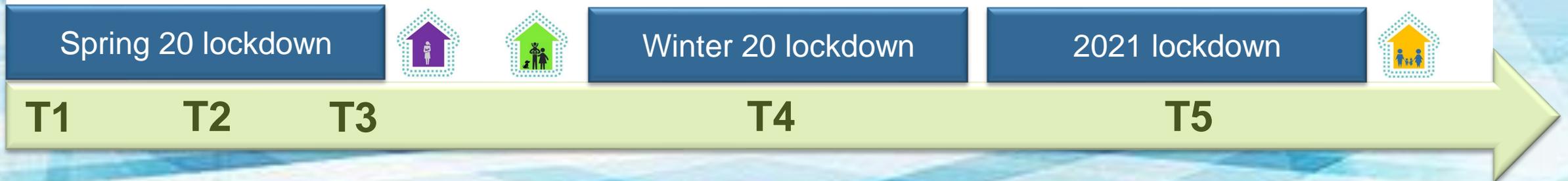
Participants:

- 892 families with 8-to-36-month-olds

(M_{age} = 19m 20d; 452 girls)

- 532 completed T1/T2 + T3
- 251 completed + T4
- 345 completed + T5

- Family's Background:** Demographic questionnaire
- Language:** Oxford CDI + Ages and Stages
- Executive Functions:** Early Executive Functions Questionnaire + Brief-P
- ECEC**
- Mental Health:** Depression Anxiety Stress Scale
- Parent-child interactions:** 10 min recordings
- Home Activities**





Activities during Lockdown

Activities during Lockdown

- Increase in time   doing indoor/outdoor activities



- Increase in screen time



- Social gradients: **During the Spring Lockdown**

Lower-SES -Enriching Activities + Screen time



**Does it
matter?**

Activities and Cognitive Development

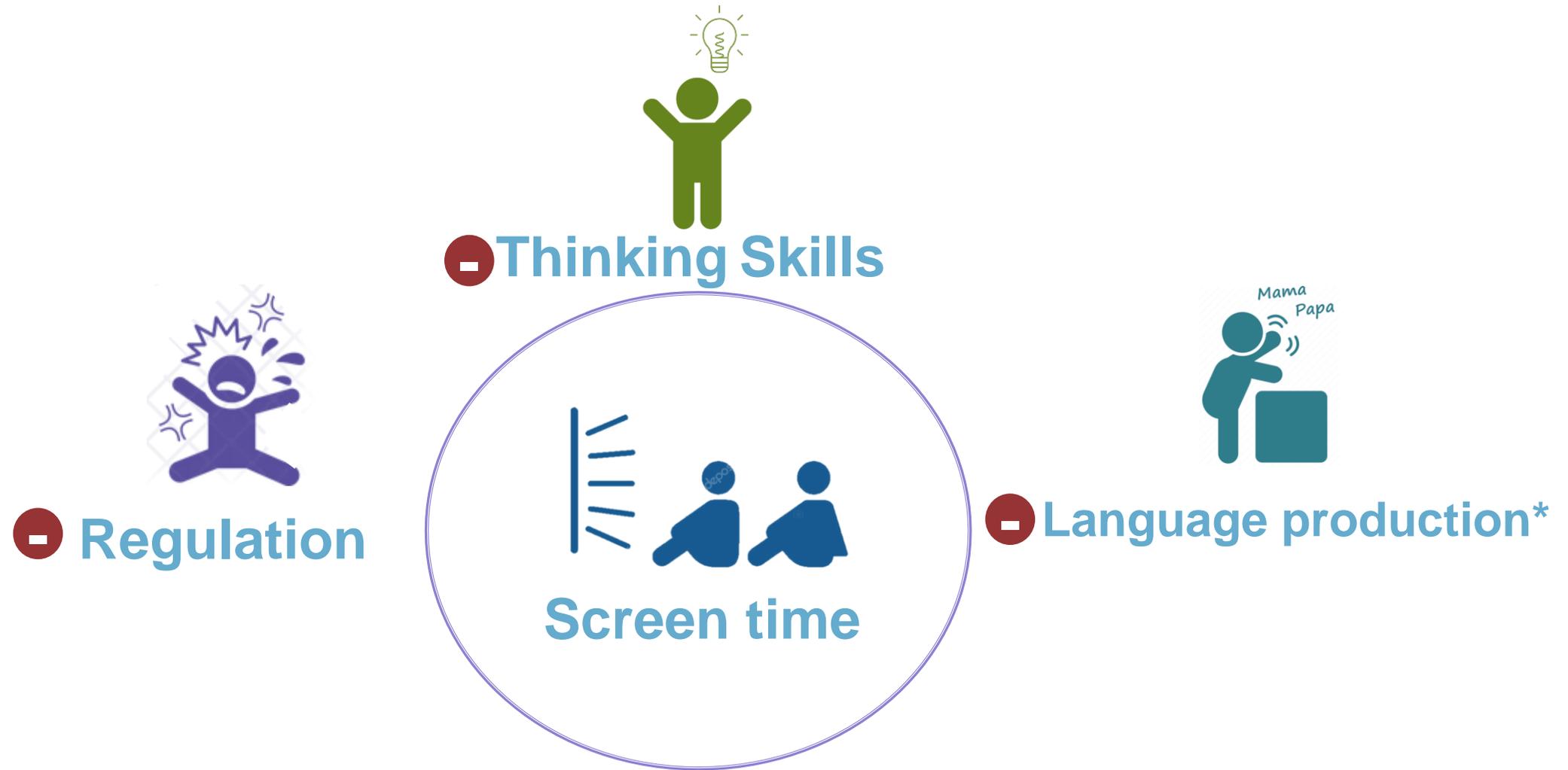
Enriching activities time  Linked to  Language production



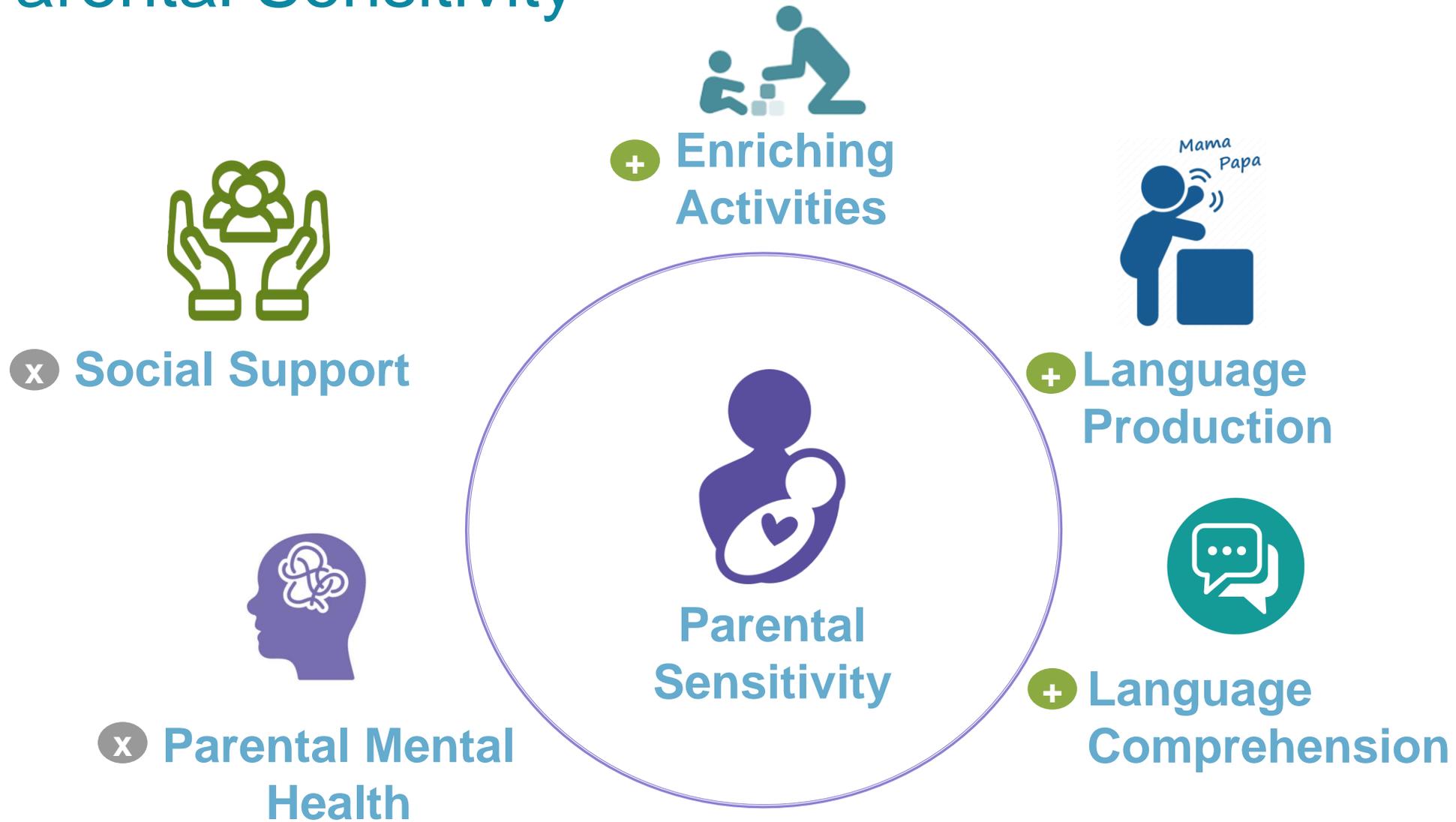
Enriching activities time  Linked to  Thinking Skills



Activities and Cognitive Development



Parental Sensitivity



Parental Mental Health

- Increase in levels of Anxiety, Stress and Depression
- Changes in mental health were not evenly distributed across the population (Pierce et al., 2020)
- Social gradients

Parental Mental Health and Cognitive Development



boys



Regulation



Regulation &
Thinking Skills

Depression
Anxiety



Regulation

Depression
Anxiety
Stress



Regulation &
Thinking Skills

Spring 20

Across 2020

What happens in the home in the first 3 years of life matters for early cognitive development

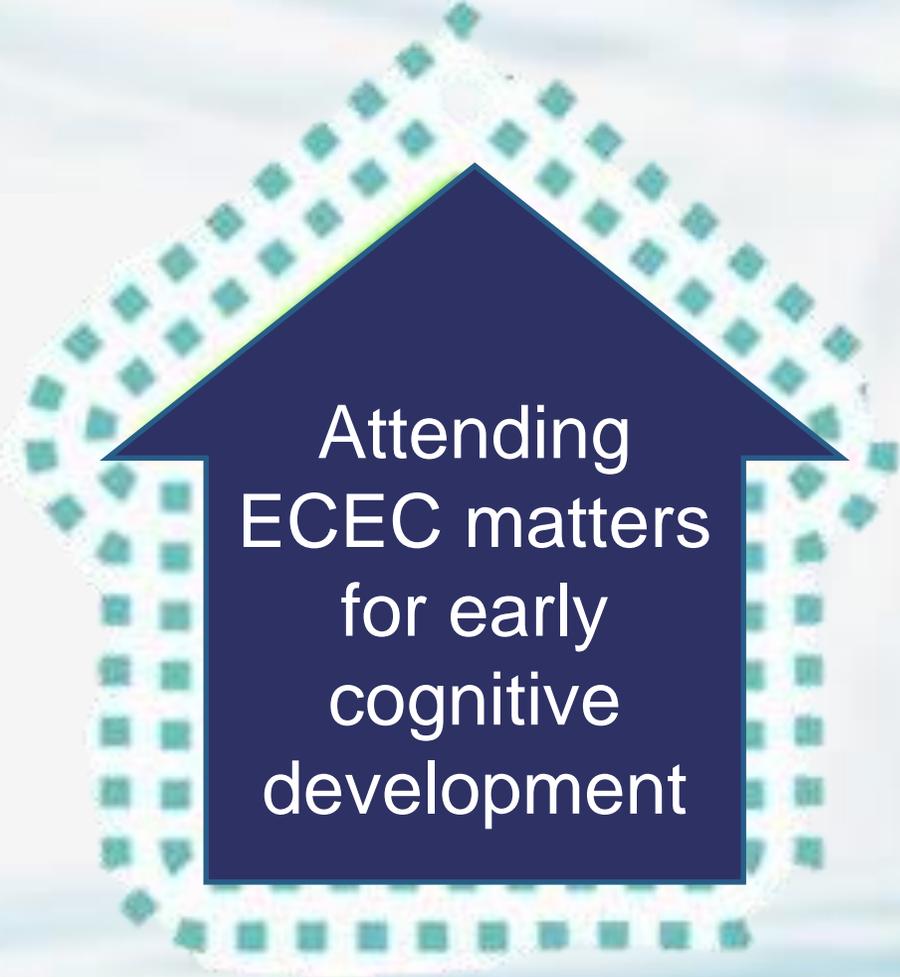




ECEC during the Pandemic



+children from Lower-SES backgrounds



Attending
ECEC matters
for early
cognitive
development

Lessons from COVID

1. Parental engagement in enriching activities boosts language and thinking skills.
2. High screen use affects regulation, thinking skills and vocabulary.
3. Parental sensitivity is important for language development.
4. Poor parental mental health can affect regulation and thinking skills.
5. ECEC boosts thinking skills and personal-social growth.
6. ECEC benefits less advantaged children's vocabulary, communication, and problem-solving.

An easy solution?

Parents should spend more quality time with their children

Children should attend ECEC as early as possible → + vulnerable children



Workshops for parents and practitioners



Barriers identified by parents

- Time
- Mess/damage
- Multiple children
- Effort/hassle
- Takes longer if child involved
- Weather
- Distractions
- Covid constraints
- Child getting dirty/wet

Practicality



- Child interest/attention span
- Child age/ability
- Child's ability to follow instructions
- Child gets angry/fussy
- Active child

Child ability, interest and personality



- Risk of injury/harm/illness

Safety and health concerns



- Space
- Access to facilities
- Access to resources
- Cost
- Transport

Resources: space, money, access, materials



- Lack of ideas
- Lack of confidence
- Lack of U/knowledge
- Lack of skill

Ideas, knowledge and expectations



- Boring / not enjoyable for parent
- Parent personality
- Prefer child-led activities

Motivation, interest, and personal preference



- Parent mood/mental health
- Physical disability / physical health
- Too tired/too much effort

Parental wellbeing



- Additional language
- Concerns about appropriateness

Culture and language



Barriers identified by practitioners

- Lack of knowledge
- Lack of Confidence
- Lack of Ideas/knowing what to do
 - Lack of Experience
 - Expectations 'proper' outcome
 - Cultural/social pressure
 - Lack of skills
 - Parent takes over

Ideas, knowledge and expectations



- Access to resources
- Space
 - Access to facilities
 - Cost
 - Access to facilities
 - Internet access
 - Lack of transport

Resources: space, money, access, materials



- Other demands on time
- Mess/damage
- Weather
- Multiple kids
- Distracted by devices
- Not wanting to disturb others
- Routine
- Libraries closed
- Groups closed

Practicality



- Mental health
 - Physical disability / physical health
 - Cognitive ability
 - Energy

Mental, physical or cognitive constraints



- Lack of Motivation /interest
- Hassle
- Personality/traits

Motivation, interest and personal preference



- English as an additional language
- Low literacy

Literacy or language



- Perceptions of child interest/attention level
- Child disability
- Child age/ability

Child abilities or interest



- Risk of injury/harm/illness
- Allergies

Safety and health

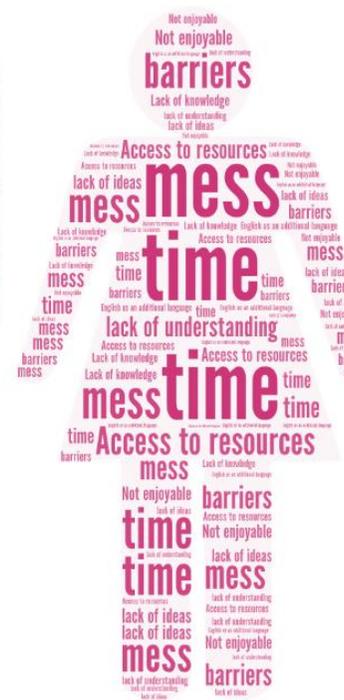


Access to resources English as an additional language

Lack of understanding

Lack of ideas

Mess



Time

Not enjoyable

Lack of knowledge

Outcome focused



Activity Packs

The colourful chalk, talk and walk pack



Look at the activity pack

Listen to audio recordings

The not-too-messy animal play pack



Look at the activity pack

Listen to audio recordings

The little explorer pack



Look at the activity pack

Listen to audio recordings

<https://babylab.brookes.ac.uk/research/social-distancing-and-development/activity-cards>

Lack of Resources



Lack of ideas, understanding and Knowledge

The little explorer pack

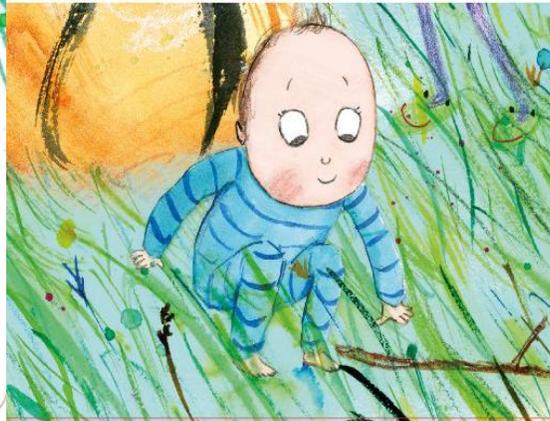


Illustrations by Laura Hughes from the book *Quick, Barney, Run!* written by Pip Jones, published by Faber, and gifted with this pack.

Nature detective

Go on a bug hunt and use the magnifying glass to examine any minibeasts you find. Piles of leaves, and under logs, are good bug-hunting spots.

Bug hunts are a great way to build your child's observation skills, boost their understanding of the natural world and expand their vocabulary.



Extend

Use the Insect spotter cards to help your child identify the creatures they find.



Adapt

Visit the insect collection at the Oxford University Museum of Natural History.



Oxford University Museum of Natural History,
Parks Road, Oxford, OX1 3PW



Lack of ideas, understanding and Knowledge

The colourful chalk, talk and walk pack

for 1- to 3-year-olds



Illustrations by Julia Woolf from the book *Calm Down, Zebra*, written by Lou Kuenzler, published by Faber, and gifted with this pack.

Chalk Rubbing

Bring some chalk and paper out on your next walk and make rubbings of the different textures you find. Tree bark, bricks, and manhole covers all have interesting textures. What others can your child find?



Practising mark making helps your child to develop the finger muscles they will need for writing. Describing the textures will introduce new words into your child's vocabulary.

Adapt

You can also do rubbings of things in the home: shoe soles, coins and buttons have interesting textures – but stay close to make sure nothing dangerous or unhygienic goes in your child's mouth.

Extend

Experiment with pushing hard or soft when making the rubbings. Talk about what difference it makes to the patterns that emerge.

Here are some textures we found around Oxford:



Lack of ideas, understanding and Knowledge

The not-too-messy animal play pack for 1- to 3-year-olds

Frozen Animal Rescue

Put a couple of animals in the ziplock bag, half fill it with water and then put it in the freezer overnight. The next day, remove the ice-block animals from the bag and put them in the tray. Let your child explore the frozen animals and help them figure out how to get them out of the ice.

Playing with melting ice is a fun sensory activity, that is great for developing observation and thinking skills too.



Adapt

Use yoghurt pots to make smaller blocks of ice, and add squash or food colouring to the water before freezing for different colour effects.

Extend

Experiment with leaving some ice block animals outside in the cold or sunlight, others by a warm radiator (in a tray or bowl to catch drips) and others in the fridge. Talk to your child about which melt first.



Illustrations by Polly Dunbar from the book *The Hug*, written by Eoin McLaughlin, published by Faber and gifted with this pack.



Make sure your child is never left unattended with the bag.



Lack of Literacy and English as an additional language

Activity ideas

The colourful chalk, talk and walk pack



Look at the activity pack

Listen to audio recordings

The not-too-messy animal play pack



Look at the activity pack

Listen to audio recordings

The little explorer pack



Look at the activity pack

Listen to audio recordings

1) Illustrations by Julia Woolf from the book *Calm Down, Zebra*, written by Lou Kuenzler. 2) Illustrations by Polly Dunbar from the book *The Hug*, written by Eoin McLaughlin. 3) Illustrations by Laura Hughes from the book *Quick, Borneo, Run!* written by Pip Jones, all published and kindly provided by Faber.

faber

These activity packs are also available in:

Español

Français

Polski

Türkçe

اردو

Magyar

Português

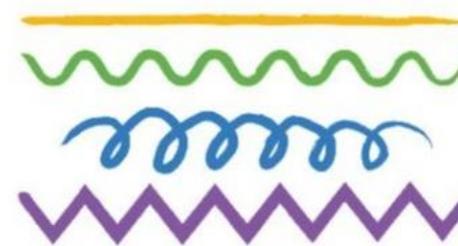
ਪੰਜਾਬੀ



El paquete colorido de pinta, habla y camina



Introducción



Líneas de aprendizaje



Piedras pintadas

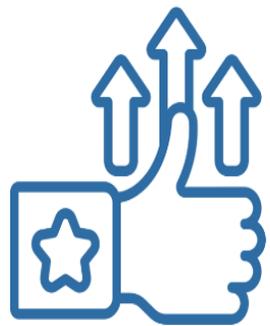


Parents' feedback

100% of caregivers found the packs appealing and the activity ideas fun.



100% of caregivers and **97%** of children enjoyed doing the activities.



100% of caregivers reported an increase in their confidence to support their child.



8 out of 10

caregivers found the packs useful to get ideas and to understand how these support their child's development



Packs encouraged **81%** of caregivers to spend more time with their child

Parents' feedback

Lots of laughs, lots of giggles. Messy, happy, messy, happy memories. My, my baby and my four year old joined in to make more fun

I stay at home with my child so we already spend a lot of time together. It has reassured me that we're doing well!

I found the explanations of why an activity was good for development helpful

It was super having such a lovely selection of fun ideas to do with simple things. The tape proved a big hit

I enjoyed that a lot, and think I will try and make sure that happens more often.



We enjoyed all the activities and we created some of our own from the resources that were in the box. It was such great fun. The pack gave me some new ideas I didn't see before. We will definitely keep on repeating all the activities, and the children absolutely loved the book that they got in the pack

Practitioners' feedback

**Built confidence
and a sense of
ownership**

Enjoyment

Extending play

**Recognising
the value of
play**

Stimulating ideas



**Strong
opportunities for
learning and
development**

Important considerations

- Significant challenges in gathering direct feedback from parents
- Practitioners play a key role as mediators





Researchers

Understand & Address

**Barriers
Knowledge Gaps**



Policymakers

How can we support parents to help their children to thrive?

**Inform
parents**

**Reduce
barriers**

**Provide
options**



Inform

Spread the message

playing, talking
and singing with
your child makes
a difference

Increase awareness

risks associated
with high screen
use in early
childhood

Reduce barriers

Ensure access

Resources
Space
Facilities

Address Lack of Knowledge

Ideas
Explanations
Options
Confidence

Provide options

Increase funding

community groups
who support the
parent-child
relationship or offer
affordable parent-
child activities

Increase funding

Early childcare and
education, and put in
measures to
encourage take-up

UK Research and Innovation's rapid response to COVID-19
(ES/V004085/1)

**Alexandra Hendry,
Catherine Davies,
Michelle McGillion**

Shannon Kong

**Diolch yn fawr
iawn!**

ngonzalez-gomez@brookes.ac.uk

<https://babylab.brookes.ac.uk/research/social-distancing-and-development>

