Ongoing reforms of ECEC in Germany and the contributions of longitudinal research

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1. Background information on German ECEC

2. Expansion of ECEC for Underthrees

3. National Educational Panel Study (NEPS)

4. Discussion
1. Background information on German ECEC
Features of the German ECEC system

- Integrated system for ISCED 0.1 and 0.2

- Governance of ECEC:
  - minor role of Federal government
  - 16 German States: definition of tasks & standards, financing
  - Communities: responsibility for local supply
    - public ECEC services
    - ECEC services of private (non-profit) providers
  - strong rights of parents (‘family-supporting’)
States and Communities as main levels of ECEC governance

Proportion of Underthrees in Family daycare by community, 2013

Source: Official statistics; own calculations.
Concepts of a child-centered, play-based pedagogy

Reform pedagogy

Froebel, Montessori, Waldorff, Reggio, Forrest Kindergarten

Situation approach

Real-life experiences and contexts, Peer-group, Participation, Opening of groups

Education embedded in day-life activities

universal (non-selective), continuously (not focussed on pre-school year), holistic, immersive learning processes; dialogue & action
<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>industrial revolution</td>
<td>first institutions for retaining children</td>
</tr>
<tr>
<td>1840</td>
<td>1st Kindergarten founded by Froebel</td>
</tr>
<tr>
<td>1920, Weimar republic</td>
<td>Kindergarten part of Welfare system</td>
</tr>
<tr>
<td>1946-1989, GDR</td>
<td>Kindergarten as part of educational system</td>
</tr>
<tr>
<td>1993, West Germany</td>
<td>Legal claim for Kindergarten (3-6 yrs.)</td>
</tr>
<tr>
<td>2013</td>
<td>Legal claim for 1- and 2-year-olds</td>
</tr>
</tbody>
</table>
2. Expansion of ECEC for Underthrees
High ECEC Participation of 3-to-5-year old children in Germany (2008)

OECD average = 77%

Source: OECD Education database; Canada, National Longitudinal Survey of Children and Youth (2006); Korea: Korean Institute of Child Care and Education; Eurostat (2008) for non-OECD
Low ECEC Participation of Underthrees in Germany (2008)

OECD average = 30%

Source: OECD Education database; Canada, National Longitudinal Survey of Children and Youth (2006); Korea: Korean Institute of Child Care and Education; Eurostat (2008) for non-OECD
Human Brain Development

Synapse Formation Dependent on Early Experiences

Sensory Pathways (Vision, Hearing)

Language

Higher Cognitive Function

Age

Conception

Birth

(Months)

(Years)

In his life Mr Borsig had made many mistakes.
He therefore decided to start again right from the beginning.
Milestones of the Expansion

- ECEC summit, Berlin, 2.4.2007: Implementation of a 'demand covering supply' for Underthrees
- 1.8.2013: Legal claim for children aged 12 month

Core features

- Expansion of ECEC for 1- and 2-year olds
- strong financial investments of the federal government (until 2014: 5.4 billion Euro)
- legally fixed monitoring of the ECEC system
Increase of ECEC Participation for Underthrees (2006-2014) from 13.6 to 32.3 percent

Source: Official statistics; own calculations

<table>
<thead>
<tr>
<th>Year</th>
<th>Under 1 year olds</th>
<th>1 year olds</th>
<th>2 year olds</th>
<th>Under 1 year olds</th>
<th>1 year olds</th>
<th>2 year olds</th>
</tr>
</thead>
<tbody>
<tr>
<td>'06</td>
<td>1.5</td>
<td>1.7</td>
<td>2.3</td>
<td>6.8</td>
<td>5.5</td>
<td>4.6</td>
</tr>
<tr>
<td>'08</td>
<td>5.4</td>
<td>9.5</td>
<td>20.7</td>
<td>34.8</td>
<td>34.8</td>
<td>27.0</td>
</tr>
<tr>
<td>'10</td>
<td>15.8</td>
<td>15.8</td>
<td>27.0</td>
<td>43.4</td>
<td>34.8</td>
<td>27.0</td>
</tr>
<tr>
<td>'12</td>
<td>16.7</td>
<td>16.7</td>
<td>27.0</td>
<td>53.1</td>
<td>43.4</td>
<td>34.8</td>
</tr>
<tr>
<td>'14</td>
<td>25.2</td>
<td>25.2</td>
<td>27.0</td>
<td>65.1</td>
<td>53.1</td>
<td>43.4</td>
</tr>
</tbody>
</table>

West Germany

East Germany

Total

Centre-based care

Family daycare

Total
LBS Family Study „Transition to Parenthood“

Prof. Dr. Wassilios E. Fthenakis
Prof. Dr. Bernhard Kalicki
Prof. Dr. Anette Engfer
Dr. Gabriele Peitz
Angelika Dittmann-Bölte
Bettina Weitz

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www.lbswest.de
**LBS Family Study „Transition to parenthood“**

**Design and sample**

<table>
<thead>
<tr>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
<th>T7</th>
<th>T8</th>
<th>T9</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pregnancy</td>
<td>8 Weeks</td>
<td>4 Months</td>
<td>1 ½ Years</td>
<td>3 Years</td>
<td>4 ¼ Years</td>
<td>5 ½ Years</td>
<td>7 Years</td>
<td>9 Years</td>
</tr>
</tbody>
</table>

**First Child**

|    |          |          |          |          |          |          |          |          | 91    |

**Second Child**

|    |          |          |          |          |          |          |          |          | 84    |

**T1: N = 175 parental couples**

**T9: N = 109 complete data sets**
Increase of Conflict

- **Women**
- **Men**

**Graph:**
- **X-axis:** Time (T1 to T9)
- **Y-axis:** Conflict Level
- **Legend:**
  - Red circles: Women
  - Blue squares: Men

**Observations:**
- The conflict level for both women and men increases over time.
- Women tend to have a higher conflict level than men.

**Comparisons:**
- **First Child**
  - Women's conflict level is generally higher than men's.
- **Second Child**
  - Similar trend observed, with women having a higher conflict level than men.
Decline of Positive Communication

First Child

Second Child

Women

Men
Decline of Intimacy & Sexuality

First Child

Second Child

Women

Men
Labor-force Participation during the Transition to Parenthood

![Bar chart showing working hours for women and men with first and second child.](chart.png)
Relocation of Income
(First Child group)

Personal Net Income (Euro per month)

Before Pregnancy
Relocation of Income
(First Child group)

After 1½ years

Personal Net Income (Euro per month)
Personal Net Income (Euro per month)

Relocation of Income

(First Child group)

After 4¼ years
Relocation of Income
(First Child group)

After 5½ years

Personal Net Income (Euro per month)
Relocation of Income
(First Child group)

Personal Net Income (Euro per month)

After 7 years
Relocation of Income
(First Child group)

After 9¼ years

Personal Net Income (Euro per month)
Patterns of Labor-force Participation

Wife & Mother

Before and after 18 months with no occupation.
Patterns of Labor-force Participation

before after 18 months
Wife & Mother
Career & Family

with occupation

with occupation

before after 18 months
Wife & Mother
Career & Family

with occupation
Patterns of Labor-force Participation

- Wife & Mother
- Career & Family
- Return to job

<table>
<thead>
<tr>
<th>Before</th>
<th>After 18 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>no occupation</td>
<td>with occupation</td>
</tr>
</tbody>
</table>
Patterns of Labor-force Participation

- Wife & Mother
- Career & Family
- Return to job
- Exit

with occupation

no occupation

before

after 18 months
Development of Maternal Depression by Pattern of Labor-force Participation

Before and after 4 months and 18 months:

- Wife & Mother

Depression (CES-D)
Development of Maternal Depression by Pattern of Labor-force Participation

Depression (CED-D)

- Wife & Mother
- Career & Family

before after 4 months after 18 months
Development of Maternal Depression by Pattern of Labor-force Participation

- **Wife & Mother**
- **Career & Family**
- **Return to job**
Development of Maternal Depression by Pattern of Labor-force Participation

Depression (CED-D)

- Blue: Wife & Mother
- Green: Career & Family
- Yellow: Return to job
- Red: Exit

Before, after 4 months, after 18 months
3. National Educational Panel Study (NEPS)
The National Educational Panel Study (NEPS): Theoretical framework
The National Educational Panel Study (NEPS): Sequential design
The National Educational Panel Study (NEPS): Sample sizes

<table>
<thead>
<tr>
<th>Starting Cohorts</th>
<th>Sampling</th>
<th>Units(^a)</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC1: Early childhood</td>
<td>Individual sample</td>
<td>3,481</td>
<td>Children, mother, childminder</td>
</tr>
<tr>
<td>SC2: Kindergarten</td>
<td>Institutional sample</td>
<td>3,007</td>
<td>Children, parents, educator, head</td>
</tr>
<tr>
<td>SC2: Kindergarten</td>
<td>Elementary school</td>
<td>Institutional sample</td>
<td>6,342</td>
</tr>
<tr>
<td>SC3: Grade 5</td>
<td>Institutional sample</td>
<td>6,112</td>
<td>Students, parents, teacher, principal</td>
</tr>
<tr>
<td>SC3: Grade 7</td>
<td></td>
<td>2,205</td>
<td></td>
</tr>
<tr>
<td>SC4: Grade 9</td>
<td>Institutional sample</td>
<td>16,425</td>
<td>Students, parents, teacher, principal</td>
</tr>
<tr>
<td>SC4: Grade 9</td>
<td></td>
<td></td>
<td>Students, parents, teacher, principal</td>
</tr>
<tr>
<td>SC5: Students in higher education</td>
<td>Institutional sample</td>
<td>17,910</td>
<td>College students</td>
</tr>
<tr>
<td>SC6: Adult education and lifelong</td>
<td>Individual sample</td>
<td>13,576</td>
<td>Adults</td>
</tr>
<tr>
<td>SC6: Adult education and lifelong</td>
<td></td>
<td>5,208</td>
<td></td>
</tr>
<tr>
<td>Wave 3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. \(^a\)Unless indicated otherwise, values refer to gross panel sample of the first survey wave.
The National Educational Panel Study (NEPS)

Fig. 1: Geographical distribution of institutes and universities participating in the National Educational Panel Study
4. Discussion

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**Conditions of conditions**
- Legal claim to ECEC
- Curriculum framework
- Funding regulations
- Qualification criteria

**(structural) conditions**
- Participation rate
- Staff-child ratio
- Group composition
- Qualification of staff

**Pedagogical process quality**
- Interaction density
- Responsivity of staff
- Joint attention
- Scaffolding

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**Explicative knowledge**
Operative knowledge

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Descriptive knowledge

Explicative knowledge
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