

# External Daycare Effects on Small Children

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# 1 Starting point

In October 2017, Prof. Guy Bodenmann was publicly warning, in an interview for *Tages Anzeiger*, against the negative effects of daycare attendance by children younger than two to three years of age. The reason behind this cautionary note was that early daycare attendance might endanger the security of the child's bond with the main caregivers. Only after building a secure bond with the parents is it recommended that the child ventures out in order to acquire social skills. However, Prof. Bodenmann also points to the fact that early daycare's impact is highly dependent upon variables such as the quality of the institution, the design of the familiarisation phase, or the amount of time that the child spends in daycare (Kedves, 2017).

In response to the warnings by Prof. Bodenmann, paediatrician Oskar Jenni noted that it is the quality of the daycare institution that matters the most, rather than whether the child is attending early daycare or not. Good daycare conditions can successfully replace the family environment, without threatening the quality of the child's affective connections. Parents should make sure that the daycare staff is attentive, can read the signals that the child is sending, is available and reliable. It is thus advisable that a caretaker is responsible for no more than three children under the age of two, or no more than four older children. Even though some studies have shown that daycare children have higher levels of stress hormones than the children taken care of at home, it has also been found that activities in the daycare can trigger superior development of linguistic skills, cognitive abilities and socially appropriate behaviour (Hagmann-Bula, 2017).

In fact, in a handout presented at the conference 'Bindung: was die Welt zusammenhält', organized by Prof. Bodenmann the University of Zurich in August 2017, Grossmann & Grossmann (2017), although discussing parents' roles in more detail, they oftentimes mention together both family and educators as the people who are responsible for and capable of caring for small children, by sheltering them from stress and facilitating their exploration of the world (Grossmann & Grossmann, 2017).

Given the fact that there were public discussions on whether there should be external daycare for small children or not, EQUAL felt obliged to provide ETH members with the recent findings on this topic in order to enable parents of small children to make appropriate decisions. ETH Zurich essentially provides external daycare via KiHZ (Kinderbetreuung im Hochschulraum Zürich) and KIKRI. Both institutions are typically highly ranked in daycare quality assessments so that we do not see any reason for institutional concern related to external daycare for small children.

# 2 Recommendations by the Swiss authorities

In their Orientation Framework for Early Childhood Formation, Care, and Education in Switzerland (*Orientierungsrahmen für frühkindliche Bildung, Betreuung und Erziehung in der Schweiz*), Wustmann Seiler & Simoni (2016) include pedagogic action, above all in playing groups and kindergarten, as one of the three fundamental elements in the orientation framework's structure (alongside education basics and insights into early development). In this context, pedagogic action refers to the responsibility of adults to encourage educational

processes, design learning environments, and to maintain education and training partnerships. The authors emphasise that early childhood educational processes take place in the mutual exchange between the child and his or her social environment. Learning is thus a process of co-construction, resulting from social interaction with adults, as well as with other children. And this observation also holds for young, not yet speaking children, since co-construction happens both verbally and non-verbally (Wustmann Seiler & Simoni, 2016). In this context, early daycare would benefit the child by providing her with an intellectually stimulating environment.

## 3 Empirical studies

Most investigations of early daycare attendance effects undertaken in Switzerland, Germany and Austria inquire into possible implications for children's later cognitive abilities. A particular emphasis is laid upon vocabulary development, especially in the case of children with immigrant background.

In a study focusing on 1200 children under the age of three attending institutionalised daycare in Germany, Klein & Sonntag (2017) don't find any correlation between the time a child spent in daycare before the age of three and later cognitive abilities. However, when observing German children separately from those of immigrant descent, it appears that the duration of early childcare positively influences the range of German language vocabulary of children coming from multilingual families. Klein & Sonntag (2017) thus conclude that early institutionalised childcare might reduce early ethnic educational inequality.

Similarly, in a 2012 National Study on Learning, Care and Education in Early Childhood (*Nationale Untersuchung zur Bildung, Betreuung und Erziehung in der frühen Kindheit*) which focused on 377 German children up to three years of age, Tietze et al. (2012) found that the children's level of education and development is more closely correlated with family characteristics rather than with the quality of the daycare institution. If anything, the characteristics of extra-familial care appear to relate more closely to children's later educational and development levels when measured around four years of age, whereas in the case of two-year-olds the correlation is not statistically significant. In fact, there appears to be no difference in the level of education and development between the two-year-olds attending daycare and those cared for exclusively by the family. However, on some specific dimensions, early entry into daycare appears to be beneficial to the child. While controlling for the pedagogical quality of both the family and the daycare institution, Tietze et al. (2012) show that early daycare correlates with high communication and everyday skills. By the time they reach the age of four, children who entered the daycare system earlier have a richer vocabulary and are less likely to be described by their parents as having a problematic behaviour (Tietze et al., 2012).

In a study conducted in Austria on 62 children between the age of 4 and 6, Baumeister et al. (2014) found that children who have previously attended daycare had significantly higher cognitive abilities compared to those who have not attended a daycare institution (10 additional IQ points), as well as superior social-emotional and motor development. In addition, it appears that daycare attendance is particularly beneficial to children with a disadvantaged background. On the other hand, daycare attendance tended to correlate also with behaviour problems, as evaluated by kindergarten teachers. However, the positive effect of early daycare attendance on cognitive abilities appears to diminish over time. When analysing a sample of 118 fourth

graders, Baumeister et al. (2014), found a slight difference in cognitive abilities between those having attended and those not having attended daycare, yet the effect is moderated by the parents' education level and their educational behaviour, family structure and immigration background. Once again, attending daycare appears to be correlated with negative ratings by teachers on the social behaviour and learning behaviour dimensions (Baumeister et al., 2014).

### 4 Conclusions

The findings generally indicate either a slight positive effect of daycare attendance on later level of cognitive skills, or no significant impact. Nonetheless, early daycare appears to be particularly beneficial to children of immigrant, or otherwise disadvantaged background.

Overall, the results of the studies that have been conducted in German speaking countries generally follow the same pattern as the findings of similar analyses undertaken all over the Western world. After conducting a large-scale meta-analysis covering numerous books, databases, online portals, the websites of large longitudinal studies and of education ministries, research reports and recent editions of relevant journals (e.g. *Child Development*, *Early Childhood Research Quarterly*), Anders (2013) concluded that most studies report insignificant effects of centre-based care in the first three years of a child's life on later socio-emotional development, and positive effects on cognitive and language development. The benefits for children from educationally disadvantaged families appear to be particularly evident (Anders, 2013).

ETH Zurich offers external daycare via KiHZ and Kikri. Both institutions have a clear focus on the quality of daycare and participate in quality assessment on a regular basis. The respective rankings (PädQUIS® gGmbH, 2017a, 2017b, 2017c) are always above average and should encourage ETH parents of small children to think about using these facilities for external daycare.

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