## What About The Children?

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## RESEARCH SUMMARY

## Toddlers' stress during transition to childcare

K Nystad, MB Drugli, S Lydersen, R Lekhal, ES Buoen (2021) *European Early Childhood Education Research Journal*, 29:2 157-182

Increasing numbers of toddlers are enrolled in childcare arrangements, with 80% of 1-and 2-year-olds in Norway attending childcare. Childcare early in life has provoked debates about the effect on children's development and attachment relationships. Although research cannot link early childcare to systematically adverse outcomes\_the process of entering childcare may be a demanding one for toddlers, with parents' role in the transition process being examined recently in Norway.

Nystad et al, in their study, define 'Toddlers' as aged between 1-2 years. Toddlers can find the transition from home to childcare particularly hard. In childcare they will meet new adults and other children in a new and unfamiliar environment, whilst spending significant amounts of time away from their parents who provide their emotional regulation. Many children have been shown to show signs of struggle in their first few weeks in childcare. Good transitions to childcare are important for children's wellbeing and their development, although there is little quantitative research about how toddlers react to transitions.

By measuring levels of the stress hormone, cortisol, it may be possible to gain an indication of children's experience of childcare and allow practices to be adjusted better to meet children's needs.

Nystad et al conducted a study on a subsample of a large Norwegian childcare study called 'Thrive by Three'. In 2017 childcare centres from seven areas of eastern and central parts of Norway were enrolled in a randomised controlled design with an intervention group receiving a quality enhancement program. Four to five of the centres from each municipality were sampled. Saliva samples were collected from children during their first few weeks in childcare at three different time points through the day.

Starting childcare is most children's first major transition. Toddlers may not be emotionally and cognitively mature enough to regulate their feelings when separated from their parents and may find adjusting to a new environment difficult. Some studies have noted signs of distress during transition and the tendency of staff to overlook children's silent struggles when transitioning. Some toddlers, however, have been observed navigating transitions without signs of greater distress. A gradual acclimatisation with high involvement from parents has been shown to ease transition, as well as having a primary key person among the caregivers.

Although transitions require adjustments and can lead to some feelings of insecurity, they can also provide opportunities for gaining new competences and relationships if they are done well. The transition from family care to a childcare centre can be helped by a parent entering the new system with the child, as a bridge-builder. A good connection between the two systems is of great importance for the child. If a parent is

present and interacts positively with both the child and carer new social relationships and greater security will be formed. The key person approach builds on attachment theory. Special relationships with people that a child has formed an attachment helps them regulate their feelings and develop emotional competences, essential for healthy brain development. A key-person approach can establish close relationships in childcare, giving children a safe haven and opportunities for meaningful interactions.

Cortisol is the main product of one of the body's major stress systems, with levels varying through the day. Levels are highest in the morning and decline steadily through the day. Cortisol levels may rise if we perceive a situation to be overly demanding and socially threatening and may be an indicator of stress. Therefore, measuring cortisol may be a suitable method for evaluating children's experiences of childcare.

Research shows toddlers show higher levels of cortisol when in childcare than when at home, with the transition to childcare producing particularly high cortisol levels. Although cortisol levels in childcare are not as excessively high as the levels of stress produced from neglect, for example, prolonged elevations of cortisol can have negative effects such as a weakening of the immune system, inhibited cognitive development, and greater sensitivity to stress later in life. As yet, little is known about this comparatively milder form of stress and its effect on children's development. Learning can involve a balanced stress reaction, with activation of stress levels followed by stress regulation showing a sign of a learning process. This so called 'positive stress' may be important for children's development and for establishing a healthy stress response system.

A Norwegian study, called 'Thrive by Three' investigated childcare provision for the youngest children. The majority of toddlers in Norway attend childcare, with most spending up to or more than 41 hours in childcare each week. On first starting in the childcare setting, they are accompanied by a parent on the first few days to aid transition.

Cortisol levels naturally fluctuate throughout the day, with levels being highest in the morning and then gradually declining through the day. This pattern is established from an early age. However, cortisol levels rise if a situation is perceived to be overly demanding or threatening. Elevated cortisol levels may be a sign of stress. On starting childcare toddlers showed only slightly elevated levels of cortisol on days where their parents were also present. However, they showed distinctly elevated levels of cortisol on the afternoons of separation. The absence of parents seemed to elicit distress, particularly on the second afternoon. Cortisol levels were still elevated after four to six weeks in childcare, while children may have still been in the process of adapting to childcare. This might indicate that children find childcare challenging. Flexible parental leave during the first weeks in childcare could help children's transition to childcare.

Evening cortisol levels were distinctly lower than afternoon levels on all days, suggesting that children experienced relief when they were at home after childcare. Children's cortisol levels varied according to age, with children over 14 months showing slightly higher cortisol levels in afternoons. This could be due to older children having been left alone sooner or parents not having kept as close to them as to younger toddlers. Afternoon levels of cortisol did not vary much by age during separation, suggesting children can find the absence of parents quite challenging,

regardless of their age. Also, the influence of transition practices on cortisol elevations, such as the number of days parents spend in childcare, primary contact approach, and cooperation between childcare and home should be investigated. Further studies should also explore the effect of age at childcare entry on cortisol levels a couple of months after transition.

Toddlers showed different evening levels according to their age. Those younger than 14 months had higher cortisol levels in the evening, with it being possible that younger toddlers did not unwind as much and were more tense after childcare than older children.

Spending more time with parents in childcare and having shorter days during the separation phase could help to facilitate children's transition. Parents should also try to provide soothing attention for their children in the evening after childcare. Caregivers in childcare settings also need to be attentive to toddlers during their first few months and focus on silent cues of discomfort. Childcare settings should provide calm afternoons and prioritise children's familiarisation with caregivers as well as their surroundings and routines. More flexible leave for parents could allow them to help toddlers to adjust more easily to the childcare setting.

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