History of Childcare & Age of Cessation of Napping in Preschool Aged Children

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Introduction:
• Early sleep patterns are characterised by a gradual consolidation of night sleep and a subsequent reduction in day-time napping.
• Normative data suggest that most children will cease napping prior to age four, but there remains considerable variation in the age of napping cessation.
• Twins studies suggest a strong effect of shared environmental factors (79% by age 4 year) on day-time sleep patterns in young children.
• One potential, and previously unexplored, predictor of napping cessation may be exposure to childcare services.
• Across developed nations more than two-thirds (77%) of children aged 3-5 years attend child care services.
• Obligatory sleep periods remain a feature of many childcare environments right through to the time children enter school.

Aim
• To examine whether childcare attendance is a predictor of age of napping cessation in preschool aged children.

Method:
Sample
• Data were collected from N = 1285 participating in a longitudinal study.
• Parents reported napping patterns, demographics, and history of childcare on standardized measures.

Analyses
• Analyses were conducted to examine the relationship between age of napping cessation, child & family factors, and childcare attendance for N=749 children aged 4-6 years (M=61 months, 52% male) who had ceased napping.
• A two stage hierarchical multiple regression analysis was performed with age of napping cessation as the dependent variable.
• In Step 1 family SES (income and parent education) and child gender were entered; and
• In Step 2 average hours of centre-based childcare per week (up to and including the year the study child turned age 4) was entered.

Results
Rates of Napping
• 66% of the children in the study had ceased napping (Figure 1).
• Non-napping children were significantly older (p<.001; mean diff.: 4.1 months), were attending fewer hours of centre-based childcare at the time of the study (p<.001) and had spent fewer hours in centre-based childcare before age 4 (p<.001) than had children still napping (Figure 2).
• No significant differences were found between groups for family income, parent education or gender.

Age of Napping Cessation
• Average age of cessation of napping was 3.0 years; SD=11 months, ranging from 11 months to 6 years.

Relationship with Gender, SES and Childcare History
• There was a significant difference in the age of napping cessation between genders, with boys on average ceasing napping later (M=37.2, SD=11.2) than girls did (M= 35.1, SD=10.8), p<.05.
• A significant association was also found between family income and age of napping cessation; the higher the family income the earlier the cessation of napping (p<.01).
• No significant associations was found between parental education and age of napping cessation (p=.30).
• A significant positive association was found between mean hours in centre-based childcare prior to age 4 years and age of napping cessation (r=.15, p<.001).
• After controlling for the effects gender and SES, hours in centre-based childcare prior to age 4 predicted a small, but significant amount of the variance in napping cessation (β = .14, p<.001).

The higher the average hours of centre-based childcare a child experienced by age 4-years, the later the cessation of day-time napping

Conclusions and Future Directions:
• This study is the first to demonstrate a relationship between history of childcare attendance and age of cessation of napping.
• Increased time in childcare is associated with later cessation of napping in preschool aged children.
• Further studies are needed to examine which components of the childcare environment may influence day-time sleep patterns in young children.

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