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ICIS

THE CONTENT AND CONTEXT OF INFANT MEDIA EXPOSURE IS DIFFERENTIALLY ASSOCIATED WITH DEVELOPMENTAL OUTCOMES

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Introduction
High levels of screen time have been negatively associated with attention, inhibitory control and language development issues. However, the content and context of media exposure are a better predictor of outcomes than overall amount (1). Examination of associations of early media use during infancy is warranted

Aim
The present study aimed to evaluate whether media exposure in 8-month-old infants was related to their communicative and cognitive development, as measured by mother-report questionnaires.

Method
Participants 187 infants (95 girls) at 8 months of age

Questionnaires
• Questionnaire on family digital media exposure, adapted from (2)
• *Developmental Profile (DP-3)* (3)
• *MacArthur-Bates Communicative Development Inventory (MCDI-SF)* (4)
• *Infant Behavior Questionnaire Revised – Short Form* (5)

Measures of digital media exposure
• **Music and paper books (infant)**: Time infants spent looking to paperbooks, listening to an adult reading and listening to music on a typical day in the last two weeks
• **Digital books (infant)**: Time infants spent looking to electronic books and listening to audiobooks on a typical day in the last two weeks
• **DM in Routines (mother)**: Likelihood of parents' use of digital media (DM) during everyday child routines
• **Reading time (mother)**: Time the mother spent reading (either paper of electronic books) on a typical day
• **Digital media (mother)**: Time the mother was engaged on digital media (either PC, TV, Tablet or Smartphone) on a typical day
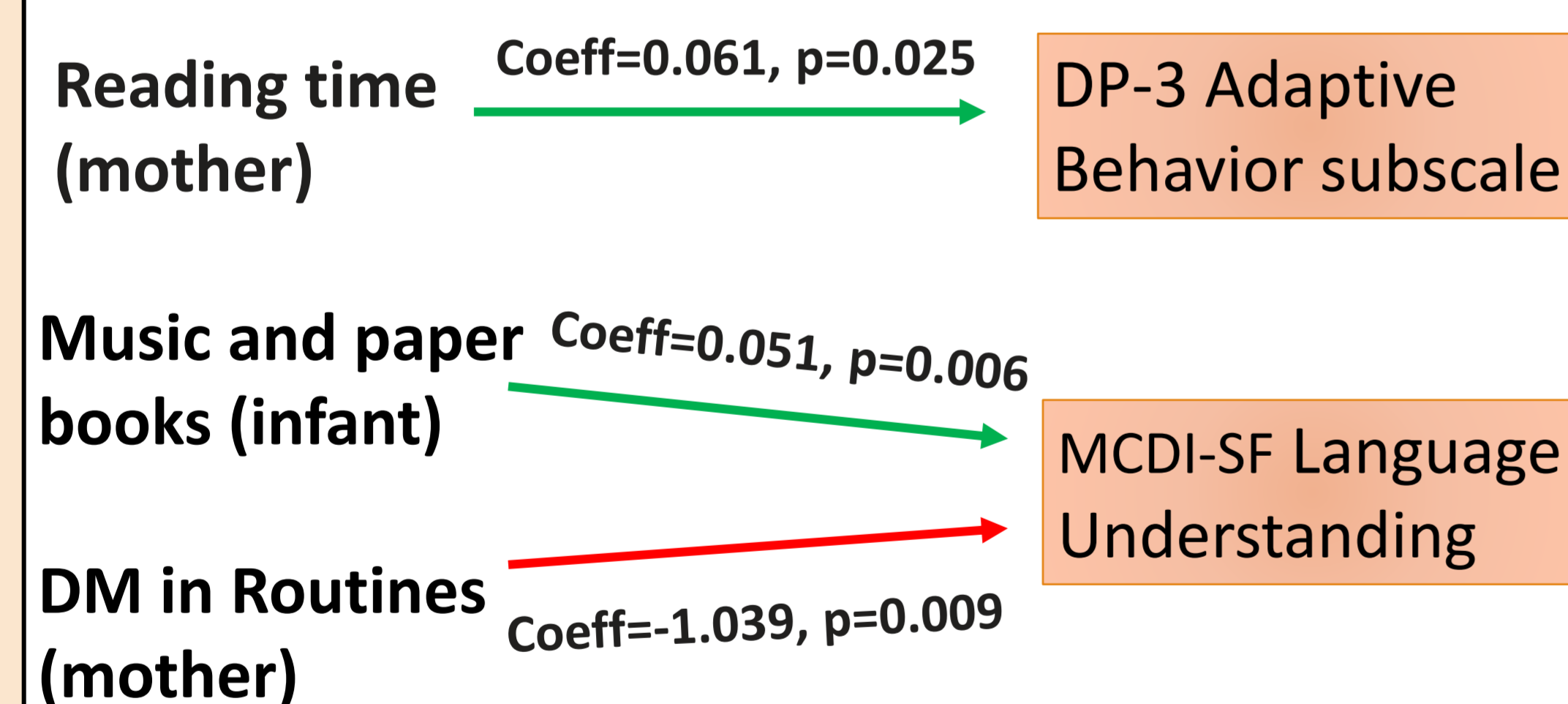
Statistical analyses
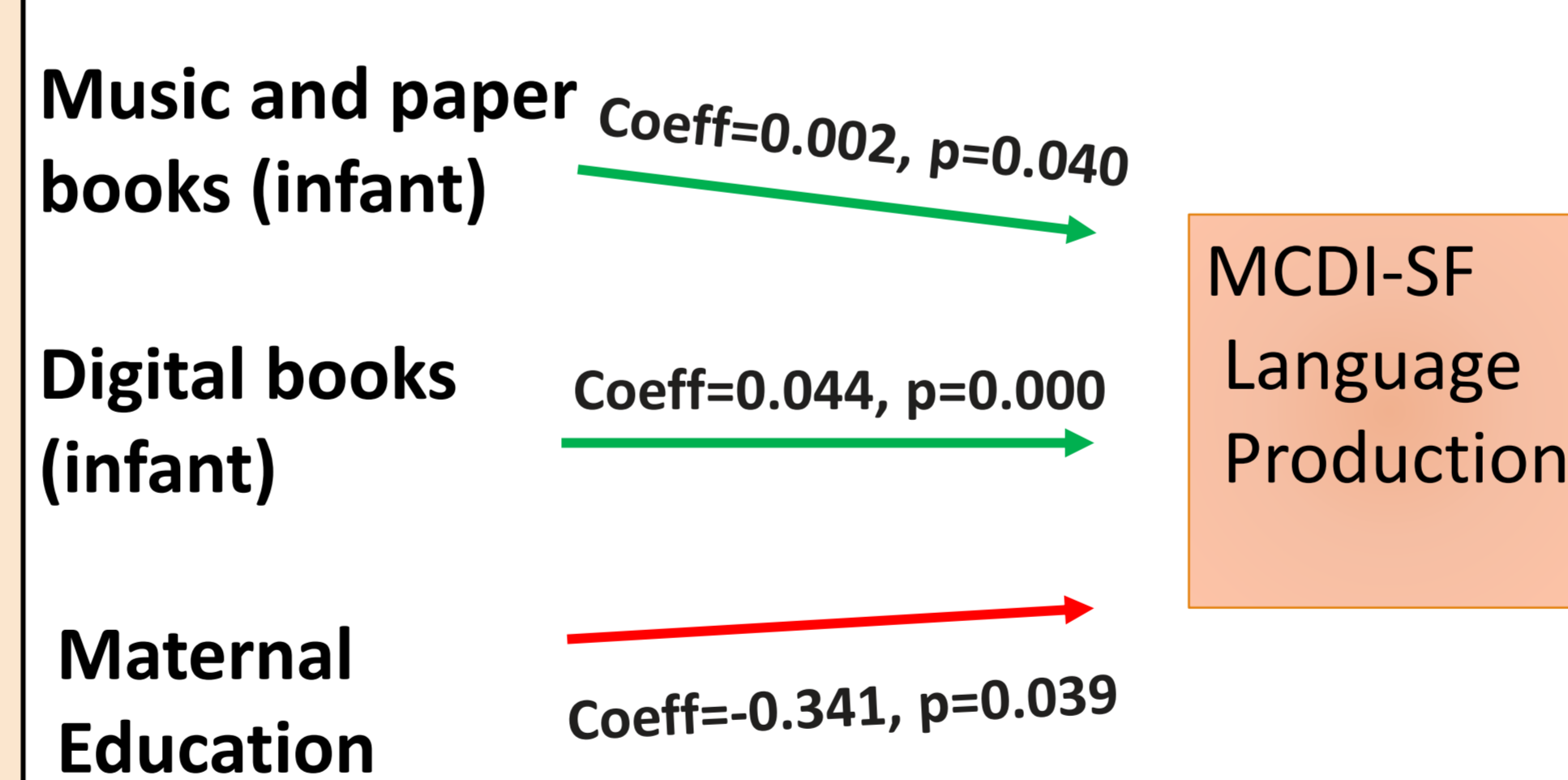We used multiple linear regression to assess the relationship between:
- standardized scores of the DP-3 and (i) measures related to digital media exposure and (ii) variables potentially related to the infant development;
- measures of the MacArthur-Bates communicative development inventory (MCDI-SF) and (i) measures related to digital media exposure and (ii) variables potentially related to the infant development.
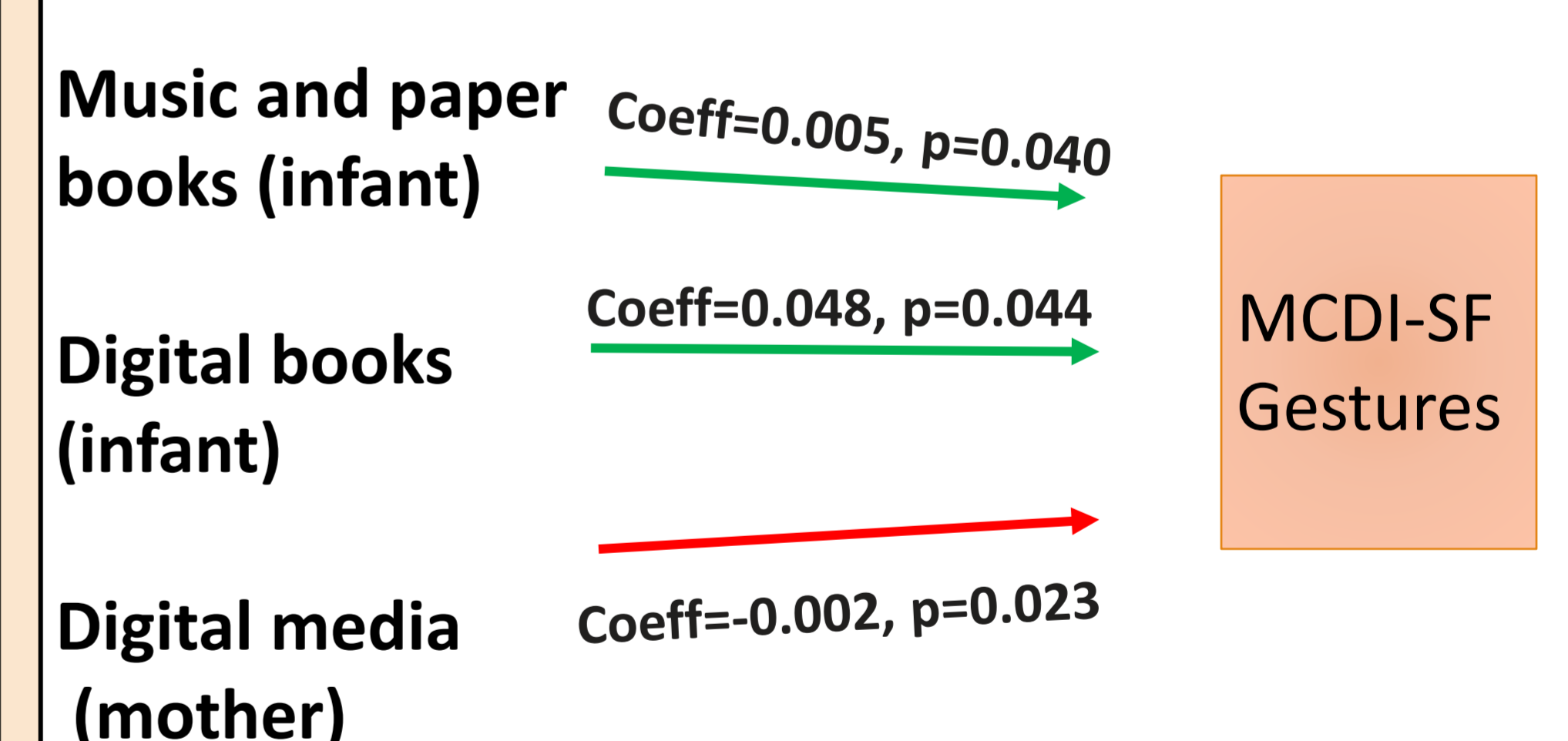
Results

Multiple linear regressions

Reading time (mother) → Coeff=0.061, p=0.025 → DP-3 Adaptive Behavior subscale

Music and paper books (infant) → Coeff=0.051, p=0.006 → MCDI-SF Language Understanding

DM in Routines (mother) → Coeff=-1.039, p=0.009 → MCDI-SF Language Understanding

Multiple linear regressions

Music and paper books (infant) → Coeff=0.002, p=0.040 → MCDI-SF Language Production

Digital books (infant) → Coeff=0.044, p=0.000 → MCDI-SF Language Production

Maternal Education → Coeff=-0.341, p=0.039 → MCDI-SF Language Production

Multiple linear regressions

Music and paper books (infant) → Coeff=0.005, p=0.040 → MCDI-SF Gestures

Digital books (infant) → Coeff=0.048, p=0.044 → MCDI-SF Gestures

Digital media (mother) → Coeff=-0.002, p=0.023 → MCDI-SF Gestures

Discussion
The results extend and strengthen prior findings to younger infants in Italy. Time dedicated to reading books with infant (either electronic or paper book) and time spent by mothers reading themselves (either paper of electronic books) are positively associated with the infant's cognitive and communicative development, whereas the parent's tendency to use digital media during childhood routines, as well as high level of maternal absorption with digital media, are detrimental for infant's communicative and linguistic skills.

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