

Maternal Mental Health, Parent Infant Interactions and Infant Development in The Gambia

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Background

Due to poverty associated risk factors, one third of children in low- and middle-income countries do not reach developmental milestones at the appropriate age.

Stimulating interactions with caregivers are posited to promote infant cognitive and motor development.

On the other hand, factors such as maternal depression, which are highly prevalent among communities living in poverty, contribute to less engaging interactions.

The Brain Imaging in Global Health (BRIGHT) project is delivering longitudinal measures of brain and cognitive development from birth to 24 months in Gambian infants. Here we examine characteristics of early mother-infant interactions, maternal depression and infant cognitive development within this setting.



Method

- Participants consist of 219 mother-infant dyads. Mothers were first tested antenatally and followed up 7-14 days, 1m, 5m, 8m, 12m, 18m and 24m after the infant's birth. A subset of participants (N=102) were used in this analysis.
- Maternal depression was assessed antenatally using the Edinburgh Postnatal Depression Scale (EPDS). The scale has a cut-off of 10 for clinically relevant depression. It was translated into the local language, Mandinka, for use in The Gambia.
- A naturalistic play session was recorded when infants were 1-month old. This was coded using the Global Rating Scale (GRS) and examines **maternal sensitivity, intrusiveness, remoteness and depressive symptoms**.
- Infant cognitive and Gross Motor (GM) skills were assessed at 12-months using the Mullen Scales of Early Learning.

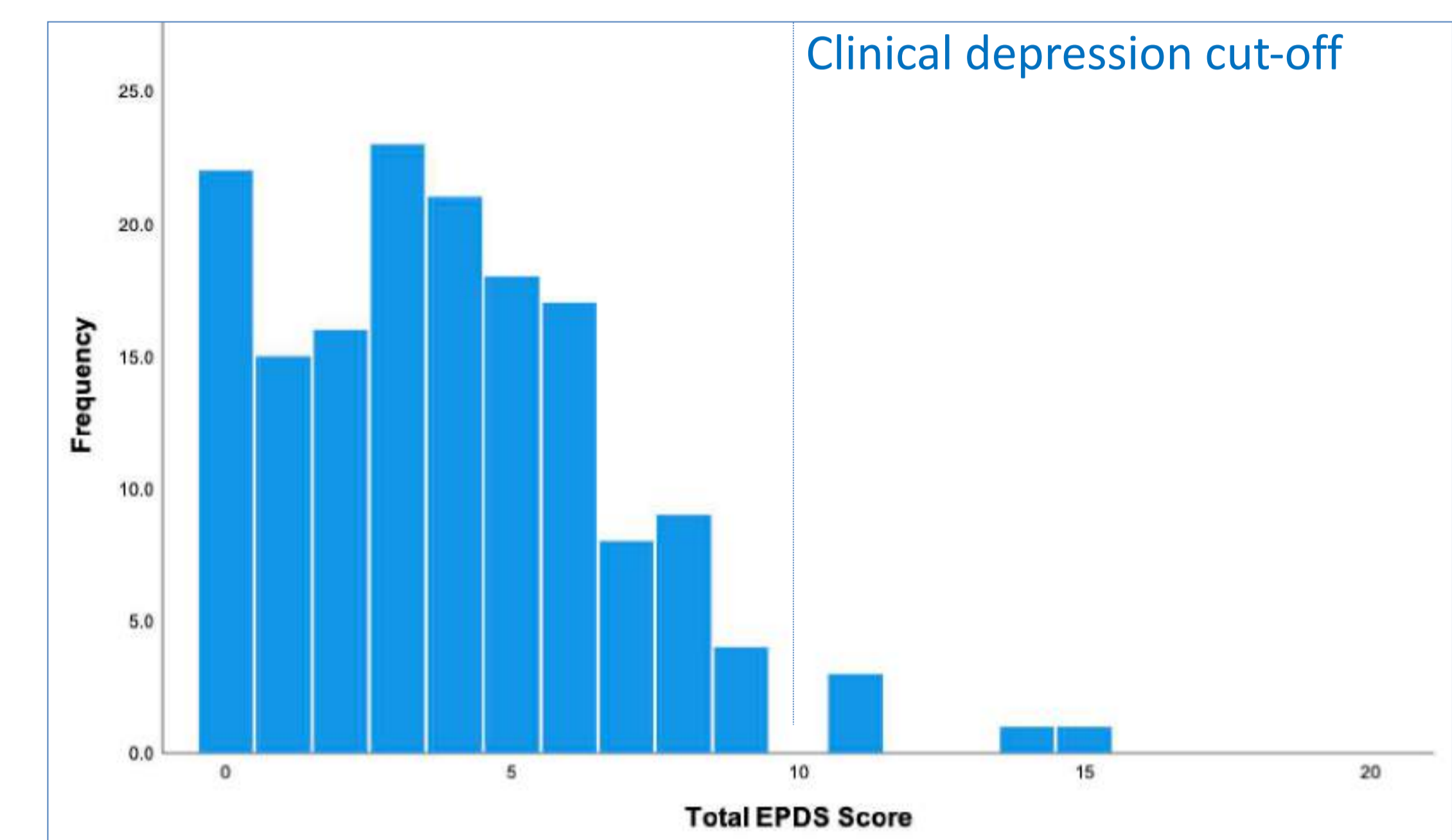


Conclusion

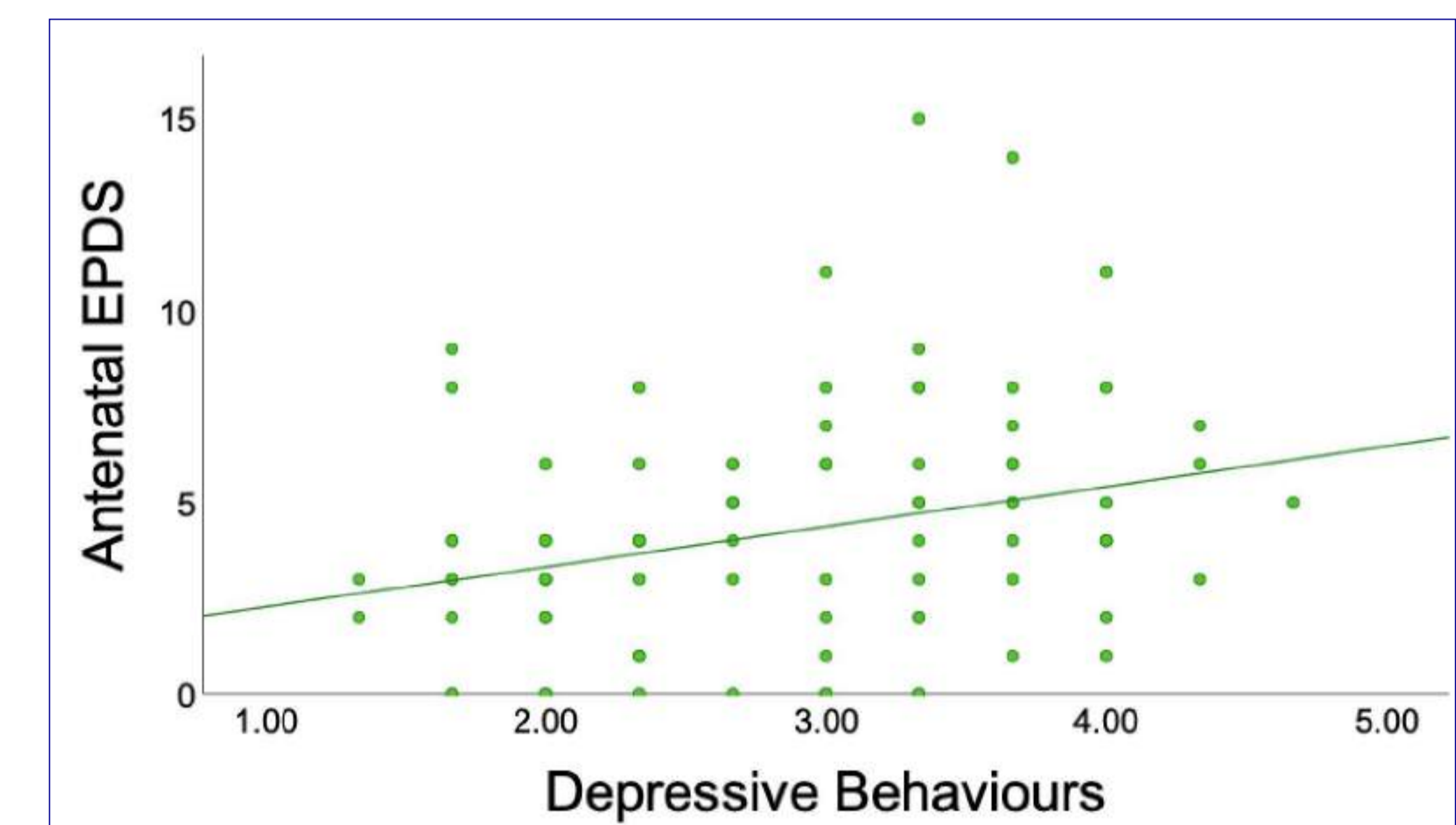
Maternal antenatal depressive symptoms were significantly associated with maternal mood during interaction with her infant at 1m. In turn, maternal mood and sensitivity at 1m predicted infant gross motor skills at 12m.

Results

Prevalence of maternal depression

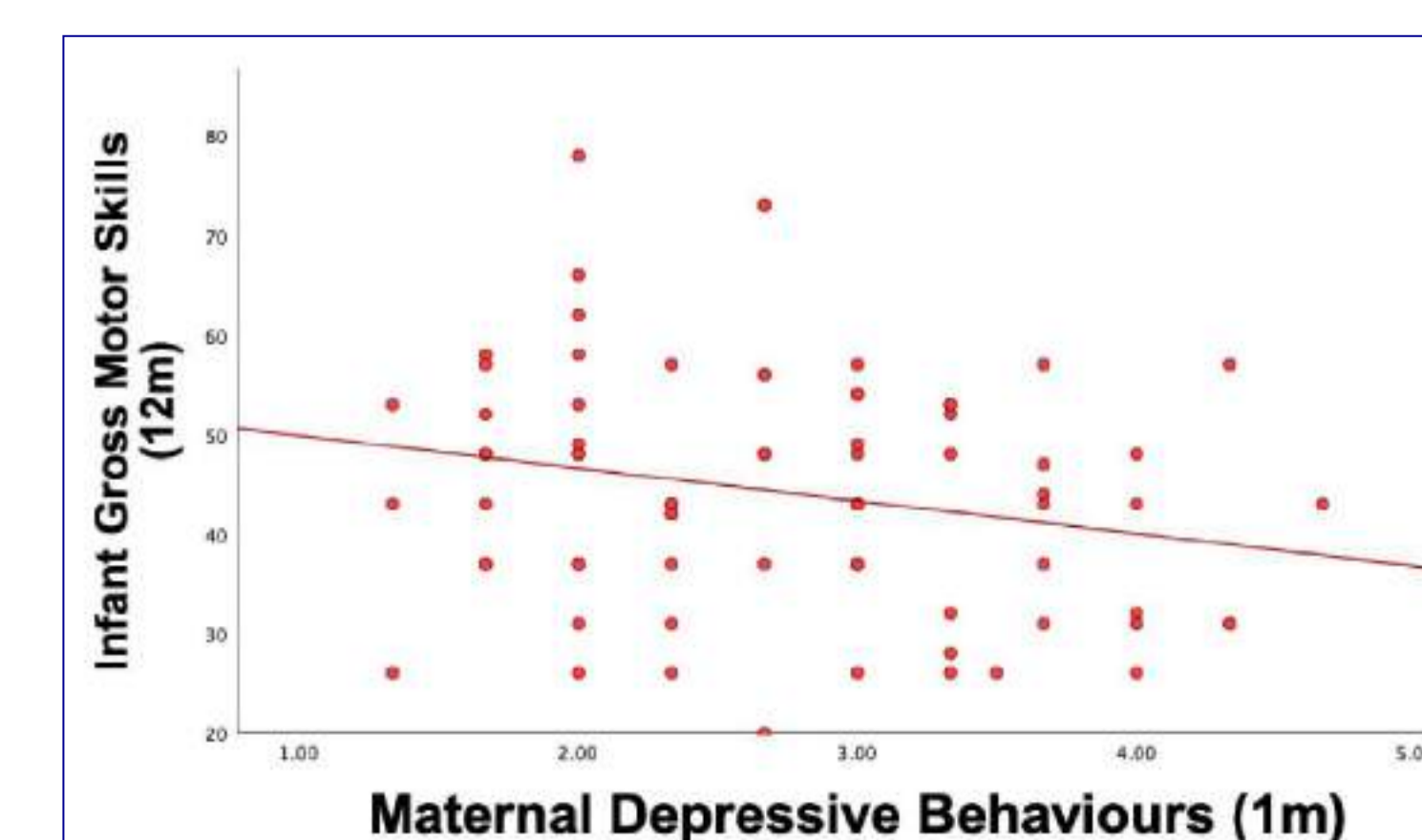


Association between maternal depression and interaction with infant

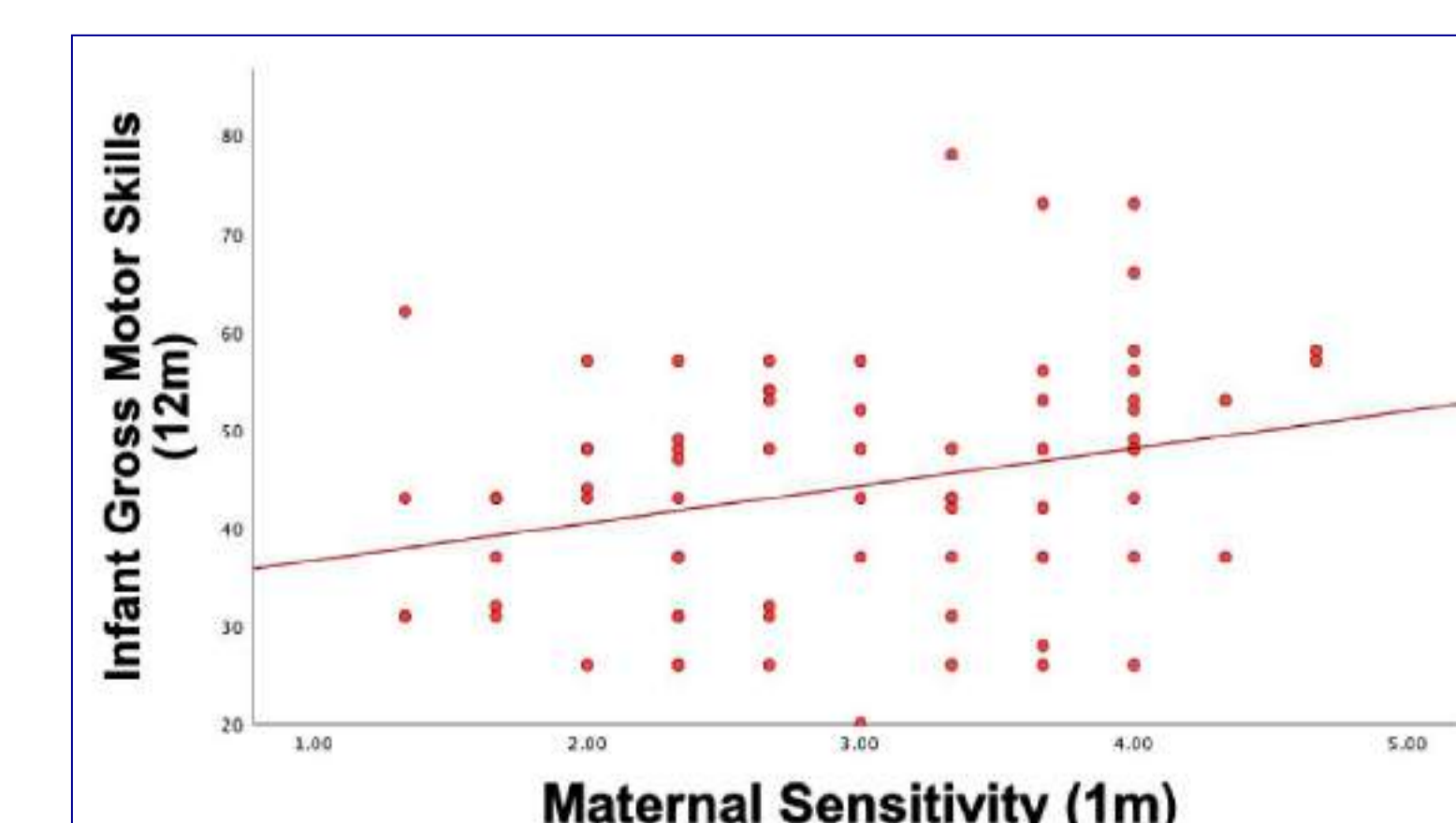


$r(79) = -.27, p = .02.$

Association between maternal behaviour and infant GM skills



$r(69) = .23, p = .05.$



$r(69) = .28, p = .02.$



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