

Parental Responsiveness Rating Scale, Educator Version (PaRRiS-E)

Background

Preliminary work was conducted by Levickis and colleagues¹ to develop an observational rating scale of parent-child interaction, specifically a measure of parental responsiveness. The Parental Responsiveness Rating Scale (PaRRiS) was adapted from Marfo's² global rating scale of responsiveness. In this previous work, video clips of mother-toddler dyads during free-play were blindly rated on the PaRRiS tool at age 2 years and language outcomes were assessed using a standardised measure at age 3 and 4 years. PaRRiS ratings were shown to strongly predict expressive, receptive and total language scores at ages 3 and 4 years. A high level of inter-rater reliability was achieved on the PaRRiS tool. Findings showed that it is feasible to train staff to use PaRRiS efficiently and reliably in a large community-based sample of mother-child dyads.³ Levickis et al.⁴ then tested the feasibility of training community child health nurses to use PaRRiS at child age 24-30 months to reliably measure the quality of parent-child interactions in practice.

We have now adapted the scale for use with educators in early childhood education and care settings as a measure of responsiveness. Educator responsiveness can be measured using the scale during interactions between educators and one to four children.

Responsiveness is defined as adult behaviours that are contingent, developmentally appropriate and prompt in response to a child's initiations.⁵ Responsiveness that is associated with child language development includes adult behaviours that occur immediately after a child's behaviour (action or vocalisation/verbalisation) and are related to the child's focus of attention. For example, a child is pretending to cook on a toy stove, the adult asks, 'what are you cooking?'

Responsiveness Rating Definitions

1 = very low Adult rarely responds in a developmentally appropriate way either verbally or non-verbally to any of Child/Children's gestures or verbalisations AND Adult attempts to redirect Child/Children's behaviour, rather than following Child/Children's interests

Example of very low rating: Throughout the observation, the adult misses opportunities to respond in a contingent and appropriate way to child's verbalisations (e.g., child is playing with toy horse and says 'horse', but adult does not respond or might nod or say 'uh-huh'). The adult spends all/almost all of the observation redirecting the child, for example, the adult is reading a book with the child and the child wanders over and starts playing with a puzzle, the adult attempts to draw the child's attention away from the puzzle and back to the book. *It is important to note that if it is appropriate for an adult to redirect a child, for example, due to safety concerns, this would not be counted as redirecting.*

2 = low Adult responds occasionally in a developmentally appropriate way either verbally or non-verbally to Child/Children's gestures or verbalisations AND/OR Adult spends more time attempting to redirect Child/Children's behaviour than following Child/Children's interest

Example of low rating: Adult spends more time during the observation attempting to redirect the child's attention rather than following the child's interest. The adult labels (e.g., child picks up doll's

¹ Hudson S, Levickis P, Down K, Nicholls R & Wake M. Maternal responsiveness predicts child language at ages 3 and 4 in a community-based sample of slow-to-talk toddlers. *International Journal of Language & Communication Disorders*. 2015;50: 136–142

² Marfo K., Correlates of maternal directiveness with children who are developmentally delayed. *American Journal of Orthopsychiatry*. 1992;62(2), 219–233.

³ Down et al 2014 Measuring maternal responsiveness in a community-based sample of slow-to-talk toddlers. *Child Care Health and Development*. 2015;41:329–333.

⁴ Levickis, P., McKean, C., Walls, E., & Law, J. (2019). Training community health nurses to measure parent-child interaction: a mixed-methods study. *The European Journal of Public Health*.

⁵ Bornstein MH, Tamis-LeMonda CS. Maternal responsiveness and cognitive development in children. *New Directions in Child & Adolescent Development*. 1989;43:49-61.

dummy and adult says, 'dummy') a few times in response to the child's behaviour during the session, but the adult also misses many opportunities to respond to the child's verbalisations. As the adult uses labels a few times (contingent responsive behaviours) but also misses opportunities to provide linguistic input and is redirecting more than following the child's interest, a rating of 2 is assigned rather than a 3.

3 = moderate Adult spends some time responding in a developmentally appropriate way either verbally or non-verbally to Child/Children's gestures or verbalisations, and some time ignoring them AND/OR

Adult spends equal time following Child/Children's interest and redirecting Child/Children's behaviour

Example of moderate rating: Adult responds some of the time in a contingent and developmentally appropriate way, e.g. with labels, but misses opportunities to imitate or expand child's vocalisations. Adult follows the child's interest about half the time, while redirecting half the time.

4 = high Adult often responds in a developmentally appropriate way either verbally or non-verbally to Child/Children's gestures or verbalisations AND/OR Adult spends more time following Child/Children's interest than redirecting Child/Children's behaviour

Example of high rating: Adult responds in a contingent and developmentally appropriate way to child's behaviours, e.g., child says 'horsey', adult says 'a horsey, what noise does a horsey make?'. The adult asks developmentally appropriate questions in response to the child's focus of attention and responds to child's verbalisations. The adult does attempt to redirect the child's attention from one activity to another but spends more time following the child's interest than redirecting their behaviour.

5 = very high Adult frequently responds in a developmentally appropriate way either verbally or non-verbally to Child/Children's gestures or verbalisations AND Adult rarely attempts to redirect Child/Children's focus from the current activity, but follows Child/Children's interests

Example of very high rating: Throughout the play session, the adult follows the child's interest (e.g., the adult is reading a book with the child, the child moves away to start doing a puzzle, so rather than try to encourage the child to come back to the book, the adult focuses on what the child is now doing). The adult frequently and consistently responds in a contingent way to the child's vocalisations (e.g., child is playing with a toy horse and says 'horse', the adult imitates and says 'horse' or expands and says 'it's a big, brown horse').

Note: Specification of extent of adult directiveness: 'redirecting the child/children's behaviour' refers to redirecting the child/children's attention away from their current focus of attention/interests at that point in time.

PaRRiS-E Scoring

Please rate the observed adult-child interaction based on the ratings of adult responsiveness below (choose one only):

Very low	Low	Moderate	High	Very high
1	2	3	4	5

Additional comments/notes about observation:
