

# 'Pick me up!': Gesture use in toddlers at risk vs not at risk for being late to talk

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## Background

In typically developing children, gestures (i.e. using hands or other body parts to communicate a message non-verbally) precede and predict spoken language ability<sup>1,2</sup>. Less is known about the emergence of gestures in toddlers who are late to talk.

## Aim

To determine whether parent-report of early gesture use might help identify children at risk for being late to talk, by exploring overall gesture use, regularity of gesture use, and type of gestures used, in toddlers deemed at risk versus not at risk for late talking.

## Method

A between groups cross-sectional design was employed, using Australian data from a parent-completed early communication checklist – the OZI-SF (Short Form, Australian English Communicative Development Inventory)<sup>3</sup>

For analysis, multiple regression and correlation were used to determine the relationship between emergence of 12 different types of gestures and toddlers' ability to understand and say words.

Participants	12-18 months (n=335)	24-30 months (n=335)
At risk	81	185
Not at risk	254	150

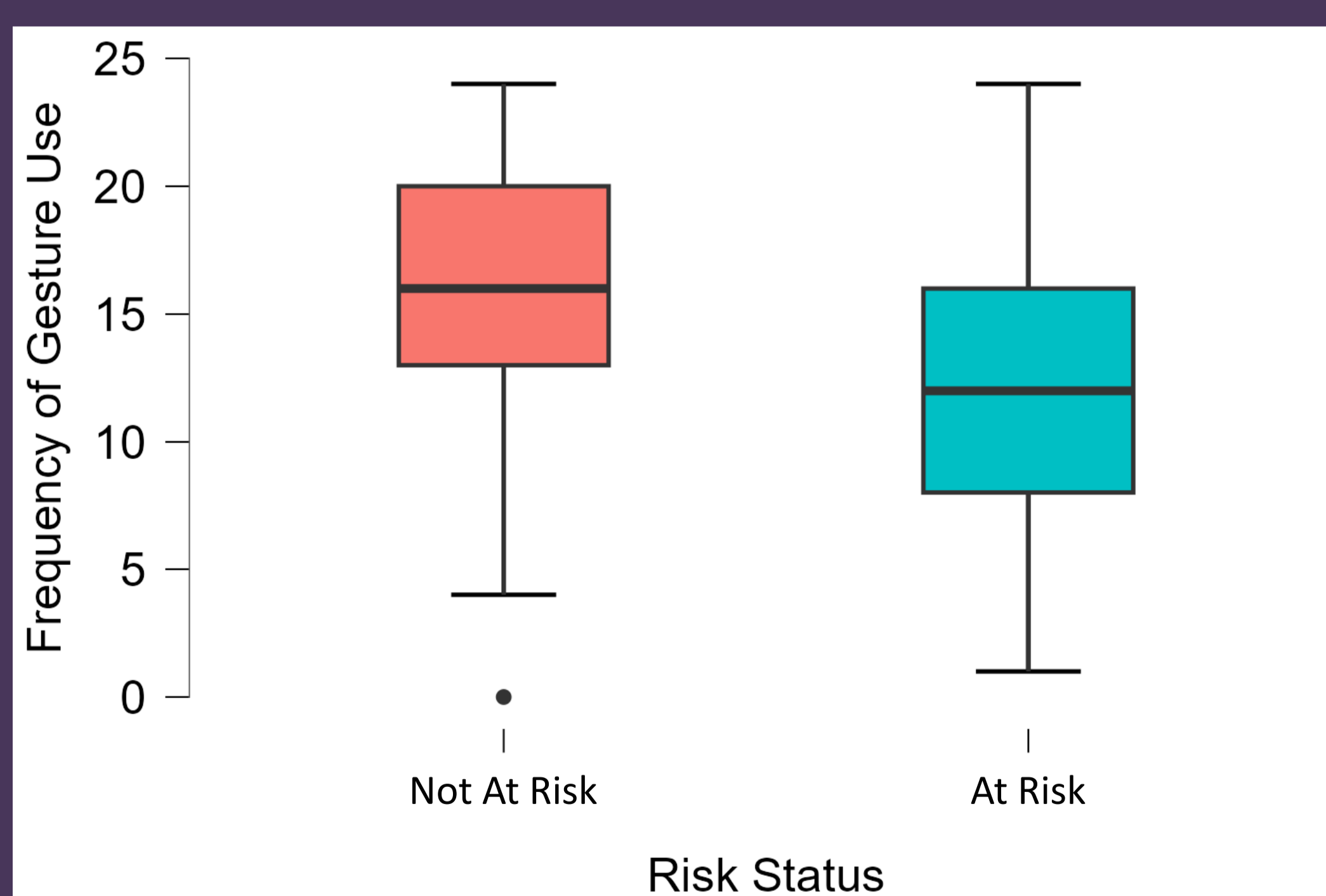
## Results

**Controlling for child age, at-risk toddlers (n=266) used fewer early gestures (like extending arms to request 'pick me up') than toddlers not at risk (n=404), at both 12-18 and 24-30 months of age.**

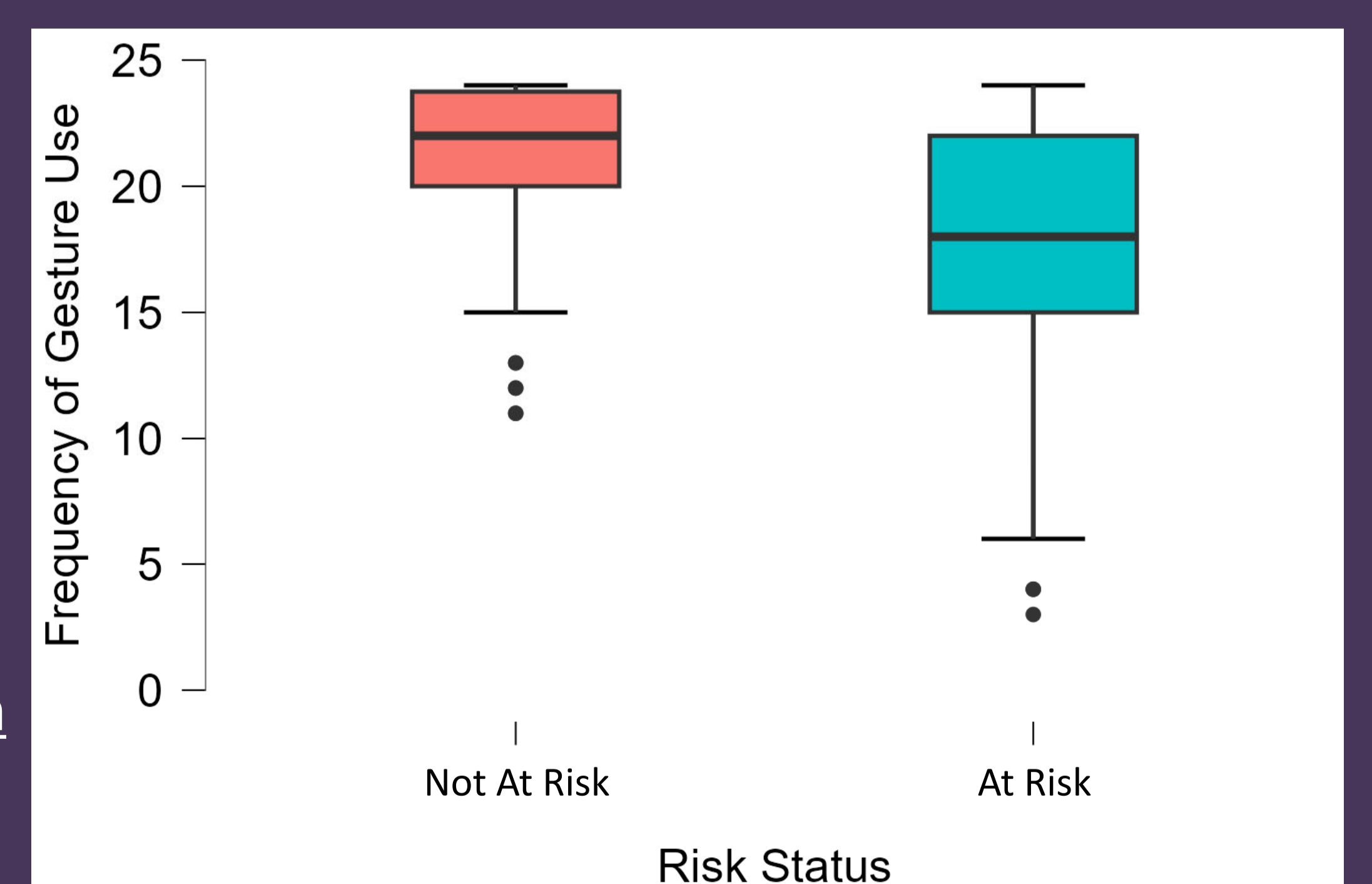
This was true of overall gesture use (the count of how many gestures were used 'sometimes' or 'often') as well as a more conservative, transformed measure of regularity of gesture use (i.e. gesture score weighted for 'often' vs 'sometimes').

It was also true for deictic gestures (early pointing gestures) as for symbolic (later, word-like gestures, such as waving hands for 'bye bye'). Among toddlers at risk, gesture use was strongly related to the ability to understand spoken words, particularly at 12-18 months.

Graph 1: Regularity of gesture use toddlers deemed at risk versus not at risk of late talking, in the 12 to 18 month age group



Graph 2: Regularity of gesture use toddlers deemed at risk versus not at risk of late talking, in the 24 to 30 month age group



## Conclusion

There may be utility in incorporating a measure of toddlers' early gesture use to monitor early communication in collaboration with parents/caregivers, to provide accurate, efficient, early identification and early intervention for the approximately 1 in 10 toddlers who are late to talk.