## Children's familiarity with objects shapes caregiver-child joint attention and learning

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The novelty of an object for a child impacts how parents interact with and talk about the object to their children, and how children handle objects. Furthermore, parental input such as object labelling, and characteristics of parent-child interaction such as joint and sustained attention impacts children's vocabulary size. Against this background, the current study examines the features of parent-child interaction and parent labelling when they naturally interact with objects varying in their familiarity to the child, and how these factors influence children's learning of the labels for these objects. In particular, we investigated whether (i) parents lead more instances of joint attention (JA) when playing with novel relative to familiar objects, (ii) parents preferentially label novel relative to familiar objects and (iii) children's learning of novel word-object associations is affected by the frequency of labelling and children's sustained attention toward the objects. We recruited 31 parent-child dyads (14-23 months old), who were asked to play with four different toys - two familiar and two novel to the children (but familiar to the parents). We examined parent and child eye-movements using head-mounted eye trackers and parent labelling behaviour. Following that, we tested children's recognition of the labelled novel objects. We found (i) that children led fewer instances when the object is novel to them, and (ii) parents labelled familiar objects more than novel objects during play. Furthermore, (iii) children did not show any recognition of novel objects' names learnt; and thus, novel word-object recognition was not related to the frequency of object labelling or children's sustained attention. Our findings may provide support to the view that children are active participants in their daily interactions, which may prompt parents to follow their children during play sessions and that these qualities of parent-child interaction does not currently influence novel word learning in toddlers.