

Influence of Animacy and Collectivity on the Production of the Optional Mandarin Plural Marker *men*

The Mandarin marker *men* “们” is traditionally described as an optional plural or collective marker, strongly restricted to human nouns (Li 1999; Iljic 1994). However, recent studies of spoken corpora suggest that *men* is more flexible, appearing occasionally with non-human nouns (Yao & Cook, 2025), and exhibiting a range of extended uses beyond plurality (e.g., diminutive; Cook 2009, 2019). Further, Mandarin plural expression often relies on quantifier-classifier structures (Kim 2008; Kim & Meng 2022), which raises questions about how speakers’ use of *men* interacts with alternative strategies.

Corpus studies allow close examination of places where *men* was used, but make it challenging to identify places where it was possible but omitted. The current study uses an experimental approach to explore the influence of animacy and collectivity on Mandarin speakers’ use of *men* and other number-marking strategies. By observing participants’ descriptions of structured scenes, we can build a fuller understanding of the factors that guide speakers’ use and non-use of *men*.

Native speakers of Mandarin (n=84) completed a picture description task. Pictures varied by animacy of the target referent (human, animal, object) and number/collectivity (singular, plural-individual, plural-group; Table 1). Plural-individual and plural-group images differed in whether the target referents formed a coherent group or not (e.g., apples spread on a table vs in a bowl, children playing individually vs together). Participants’ descriptions were audio-recorded and coded for presence/absence of *men* and other number-marking strategies: other plural expressions (*ji3ge4* “several”), singular expressions (*yi1ge4* “one”), unmarked. If both animacy and collectivity play key roles, we predicted that *men* would appear primarily with multiple human referents, with the highest rates in the plural-group condition.



Results indicate a preference to use *men* with human nouns, but also frequent use with animal nouns, and little difference between the plural-individual and plural-group conditions. As shown in Figure 1, *men* occurred in approximately 60% of trials with human plurals and 36% of trials with animal plurals. It never occurred in singular trials, and was very rare with object plurals. Mixed-effects models of *men* use in plural-individual and plural-group trials supported this pattern: There was a reliable effect of both Helmert-coded animacy contrasts (human/nonhuman, animal/object; p s < .001), and no reliable effect of collectivity (plural-individual/plural-group) nor any reliable interactions (p s > .5).

Further exploration of the data showed that, collapsing across animacy, plural-marking strategies were similar in the plural-individual and plural-group conditions. Figure 2 shows the distribution of *men*, other plural expressions, and unmarked forms across singular, plural-individual, and plural-group trials. Notably, some plurals were marked with both *men* and another plural expression.

Our results thus suggest a stronger role for number and animacy than for collectivity: *men* occurs only in plural contexts, with both human and animal referents, and use was not reliably different between plural-individual and plural-group conditions. These findings provide experimental evidence that Mandarin plural marking is less constrained than traditionally assumed and that collectivity may play a more limited role, with implications for formal analyses and future corpus and diachronic research.

Keywords: *men*, plural, collective, morphosyntax, Mandarin Chinese, production

Experimental image examples:

	Singular	Plural group	Plural individual
Human (child)	Tip: Play with toys 提示: 玩玩具 	Tip: Play with toys 提示: 玩玩具 	Tip: Play with toys 提示: 玩玩具 