



ELSEVIER

Contents lists available at ScienceDirect

# Journal of Experimental Child Psychology

journal homepage: [www.elsevier.com/locate/jecp](http://www.elsevier.com/locate/jecp)



## Cultural differences in the imitation and transmission of inefficient actions



Kathleen H. Corriveau <sup>a,\*</sup>, Cara J. DiYanni <sup>b,1</sup>, Jennifer M. Clegg <sup>a</sup>, Grace Min <sup>a</sup>, Jason Chin <sup>a</sup>, Jad Nasrini <sup>b</sup>

<sup>a</sup> Boston University, Boston, MA 02215, USA

<sup>b</sup> Rider University, Lawrenceville, NJ 08648, USA

### ARTICLE INFO

#### Article history:

Received 31 March 2016

Revised 3 March 2017

#### Keywords:

Imitation

Learning

Tool use

Teaching

Culture

Preschoolers

### ABSTRACT

Across two studies, we explored cultural differences in children's imitation and transmission of inefficient actions. Chinese American and Caucasian American preschoolers ( $N = 115$ ) viewed either one or three models using two inefficient tools to perform two different tasks. In the video, when the model(s) performed the task, only the inefficient tool was available; thus, their choice to use that tool could be considered rational. Next, children were invited to complete the task with either the inefficient tool or an efficient alternative. Whereas the two cultural groups imitated a single model at similar rates, Chinese American children imitated significantly more than Caucasian American children after viewing a consensus. Similar results were found when exploring differences in information transmission. The Chinese American children were significantly more likely than their Caucasian American peers to instruct using an inefficient tool when they had initially viewed a consensus demonstrate it. We discuss these findings with respect to differences in children's use of *social* versus *task-specific* cues for learning and teaching.

© 2017 Elsevier Inc. All rights reserved.

\* Corresponding author.

E-mail address: [kcorriv@bu.edu](mailto:kcorriv@bu.edu) (K.H. Corriveau).

<sup>1</sup> Both of these authors contributed equally to this work.

## Introduction

Children learn much about the world from observing and imitating the actions of others (Legare & Nielsen, 2015). Indeed, imitation is one of the main mechanisms for the faithful transmission of cultural information across individuals and across generations (Hopper, Flynn, Wood, & Whiten, 2010; Whiten, 2005). Imitation as a mechanism is not without costs, however. Children are prone to over-imitate a model's questionable actions—even if those actions are not required to achieve the particular goal (Horner & Whiten, 2005; Kenward, 2012; Keupp, Behne, & Rakoczy, 2013; Lyons, Young, & Keil, 2007; Nielsen & Tomaselli, 2010) or if they lead to sacrificing the intended goal itself (DiYanni & Kelemen, 2008; DiYanni, Nini, & Rheel, 2011; DiYanni, Nini, Rheel, & Livelli, 2012).

However, it is not the case that children copy seemingly questionable actions indiscriminately. Theoretical accounts have highlighted “cultural transmission biases” (Boyd & Richerson, 1985; Rendell et al., 2011) that focus on *characteristics of the model* (i.e., traits of the model that are consistent across time) (Buttelmann, Zmyj, Daum, & Carpenter, 2013; Cook & Smothergill, 1973; Garrett & Cunningham, 1974; Zmyj, Buttelmann, Carpenter, & Daum, 2010; see Wood, Kendal, & Flynn, 2013, for a review) as well as *characteristics of the situation* (i.e., aspects that may change from one situation to another). In the current study, we explored children's relative weighting of different characteristics of the situation when deciding whether to imitate and teach new information to others. *Situation-specific* characteristics include both *social* components (i.e., the social context surrounding a task) and *task-specific* components (i.e., elements of the behavior itself). Little research has directly explored the relative influence of social versus task-specific variables when exploring children's situation-specific imitation strategies. Below, we review children's use of social and task-specific components when deciding whether or not to imitate before turning to the current research design.

A large body of research indicates that children are readily influenced by social information in learning situations. For example, children are sensitive to whether or not pedagogical cues are present (Buchsbaum, Gopnik, Griffiths, & Shafto, 2011; Kiraly, Csibra, & Gergely, 2013; Phillips, Seston, & Kelemen, 2012; see also Csibra & Gergely, 2006; Csibra & Gergely, 2009; Csibra & Gergely, 2011), whether or not the model's actions were intentional (Carpenter, Akhtar, & Tomasello, 1998; Meltzoff, 1995), and who is present when children are asked to copy a previously demonstrated task (DiYanni et al., 2011; Nielsen & Blank, 2011). Children are also influenced by whether an action was performed by a majority or a single model (Bond & Smith, 1996; Chen, Corriveau, & Harris, 2013; Chu, 1979; Corriveau & Harris, 2010; Corriveau, Kim, Song, & Harris, 2013; DiYanni, Corriveau, Kurkul, Nasrini, & Nini, 2015; Haun, Rekers, & Tomasello, 2012; Herrmann, Legare, Harris, & Whitehouse, 2013; McGuigan & Robertson, 2015). Children's sensitivity to information presented by a majority is not limited to their imitation; in situations where an individual is presented with a group of informants who acquiesce about some piece of new information, children are more persuaded to trust information from the group than a conflicting piece of information that comes from a single informant (e.g., Corriveau, Fusaro, & Harris, 2009; Fusaro & Harris, 2008). Children's preference for a consensus has been found even when the larger group presents information that is questionable or blatantly inaccurate (e.g., Asch, 1956; Corriveau & Harris, 2010; Haun & Tomasello, 2011; McGuigan & Robertson, 2015). This tendency to conform to the majority has been found in multiple species (Claidière & Whiten, 2012) and in multiple cultures (e.g., Frager, 1970; Mejia-Arauz, Rogoff, Dexter, & Najafi, 2007; Sistrunk, Clement, & Guenther, 1971; Williams & Sogon, 1984; see Bond & Smith, 1996, for a review).

Other research indicates that task-specific components influence children's imitation. The outcome of a behavior, such as whether the start and end states are the same (Legare, Wen, Herrmann, & Whitehouse, 2015) or whether a physical-causal goal is apparent or presented in the instructions (Clegg & Legare, 2016b; Williamson & Markman, 2006; Yu & Kushnir, 2014), affects children's imitation. Children are also sensitive to the kinds of objects being used in a behavior (Horner & Whiten, 2005) and what objects are available to actors. For example, 14-month-olds were more likely to use their heads to turn on a light after a model did so only when the model's hands were free and she could have used them but chose not to do so (Gergely, Bekkering, & Kiraly, 2002). When the model's hands were occupied by a blanket, children rationalized that this was the reason she did not use her

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات