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# SHARING AMONG CHILDREN ACROSS CULTURES Marie Schäfer & Daniel Haun

Project	Comparative Cognitive Anthropology
Task	Short experimental study with children aged between 3 and 11.
Goal of task	To compare sharing interactions between children across different cultural contexts (and age groups).
Prerequisites	To complete this task you will need the corresponding fieldkit (including beads, strings and two boxes), a video camera, a tripod, and a short board or tray.
Outcome	Multi-authored publication

# Background

To act prosocially in the context of sharing is a human behaviour that has been observed across cultures (e.g. Henrich et al., 2005, Gurven, 2004). Already very young children show motivations and prosocial concerns for sharing with others (e.g. Eisenberg & Fabes, 1998, Lucas, Wagner & Chow, 2008, Brownell, Svetlova, & Nichols, 2009), and actively engage in resource distributions (e.g. Olson & Spelke, 2008, Sigelman & Waitzman, 1991). Experimental evidence indicates that there is a development from more egoistic concerns in very young children towards increased prosociality in children at late kindergarten and early school age (Fehr, Bernhard & Rockenbach, 2008). This developmental trend has been repeatedly found across different cultural and economic contexts (Rochat et al., 2009).

However, although humans across cultures seem to develop prosocial concerns and a sense of fairness in the context of resource allocations, cross-cultural studies have also revealed variability with regard to the extent of sharing, and possibly also the underlying motivations and fairness notions. Economic game experiments conducted with adults in various small-and large-scale societies have, for instance, shown that the proportion of a resource that people would spontaneously offer to another individual in an anonymous situation (or that they would consider to be a fair offer by another individual in such a situation) varies strongly depending on cultural and economic background (Henrich et al., 2005). Even the sharing behaviour of very young children seems to be already influenced by the social environment that they grow up in: Rochat and colleagues have shown that despite a universal developmental trend towards increased prosociality, children in some cultures tend to share more extensively with others earlier in life (Rochat et al., 2009).

Which cultural values and other factors might shape or influence prosocial behaviours in the context of sharing, the underlying fairness notions and its developmental trajectory is still largely unknown, and needs to be investigated in more detail in future research.

The present study aims at a comparison of the social interactions that underlie sharing among children growing up in different cultural environments. Cross-cultural research so far has mainly focused on the actual or preferred outcomes of resource distributions; less attention has been paid to the social behaviours that lead to a redistribution itself within a natural interaction. However, it has been shown that sharing can occur through different kinds of social interactions in which giver and recipient may play more or less active roles. For instance, a redistribution of a resource can be initiated spontaneously by the resource holder

himself (i.e. through active giving or offering access to the resource), or be elicited by the recipient (e.g. the recipient prompts sharing by requesting or simply taking from the resource). In the latter case, the recipient plays a far more active role for the sharing event to happen (see Birch & Billman, 1986, Rao & Stewart, 1999). Thus, cross-cultural results concerning only the outcome of a re-distribution might often be difficult to interpret. Similar outcomes (for instance, an equal distribution) could in fact be the result of quite different types of interactions involving varying motivations and considerations by the interacting individuals. More information about the actual, natural behaviours through which sharing occurs among peers within different cultural contexts (and across different age groups) might therefore provide important insights for learning more about how cultural values, norms and conventions shape prosocial behaviours, and how children growing up in different cultural environments come to engage in the respective sharing practices.

That the cultural background might in fact have an influence on sharing among children has already been indicated by studies conducted in various large-scale societies. For instance, it has been shown that American 3 to 5 year-olds engage mainly in sharing elicited by the recipient (but rarely exhibit spontaneous sharing) when confronted with a highly unequal distribution of preferred and less preferred food items between themselves and a peer friend or acquaintance (Birch & Billman, 1986). In contrast, in a cross-cultural comparison with 4 to 5 year-old (middle and upper class) Chinese and Indian children, Chinese children of the same age exhibited mainly spontaneous sharing among each other while Indian children predominantly engaged in passive sharing in the form of tolerated taking by the recipient (Rao & Stewart, 1999).

Considering the cross-cultural variability in large-scale societies, a further systematic investigation of sharing interactions among children growing up in various small-scale societies would be particularly useful and interesting. It could provide important information about how cultural values as well as economical, ecological and social factors might influence and shape social interactions that lead to resource redistributions between individuals, and thereby help to answer questions regarding the potential set of motivations and social cognitive capacities that might underlie sharing in humans.

### Task

In this study, two same-sex children of roughly the same age are confronted with a highly unequal distribution of an amount of desirable items between them. The subsequent interaction between the children is recorded with a video camera (approx. 3 to 5 minutes). The video recordings will later be used to analyse the sharing behaviour between peers. See below for a detailed description of the study procedure.

# The more dyads recorded the better. Children between 3 and 7 years are especially preferable.

### **Participants**

Children should be tested in same-sex dyads of roughly the same age (within 1 year of each other). Ideally, the two children tested together should know each other, but should not be too closely related (no siblings for instance).

## Study location

The study location should be a quiet place where participants feel unobserved and cannot be interrupted or disturbed. The spot where the study interaction takes place should be marked somehow, for example by a sitting mat, or a flat table or box functioning as a focus for the sharing events.

## Study material

As a desirable resource for sharing, small colourful wooden beads are used which can be collected by the children by being thread on a string. Per children dyad, two strings and 18 beads are required which can be found in little plastic bags in the fieldkit. The fieldkit also includes two identical boxes with a lid (padded inside) and a subject list for documenting the study sessions.

Other materials that are needed: a short board or tray, a video camera and a tripod.

# Study procedure

**Step** (1) - Preparation of study session (in the absence of the children):

The two boxes are filled with beads: one box with 11 beads, the other box with 1 bead. The boxes are placed on a board or tray.

The video-camera is positioned at the study location so that the interaction between the two children can be filmed from the side including both children in the picture (profile view, see Picture 1 below).

The whole session is video-recorded. At the beginning of each video film, the experimenter reads out loud the dyad number that he/she assigned to the pair of children on the subject list (!) and the date.

### **Step** (2) - Introduction of reward.

The two children are seated opposite to and in reach of each other in the study location (e.g. on a mat, or at a small table/box). **The experimenter asks each child to say his/her name.** 

Each child receives a string and 3 beads. The experimenter shows the children how to thread the beads onto the string, making sure that each child can do it her-/himself.

**Step (3)** - Initiation of interaction.

After both children have successfully finished putting the beads on their strings, the experimenter announces that they can have more beads to fill up their strings.

The experimenter presents the two boxes on the tray/board, and says that there are more beads inside these boxes.

The experimenter explains that he/she has to quickly go and do something else but that the children can use the beads in the boxes to continue filling up their strings by themselves while he/she is gone.

The experimenter then offers the tray with the two boxes to the children (holding it between the children so that each box is equidistant from each child), and says that each child can take one box (see Picture 1 below).

The experimenter then leaves immediately, and the two children are left alone to open the boxes.

Step (4) - Termination of session after the interaction.

The children should remain undisturbed at least until both children have used up all beads in the boxes, and have put them on their strings (about 5 minutes). Afterwards, the experimenter comes back, and ends the study session.

If appropriate, highly unequal distributions between the children can be evened out by the experimenter (he/ she can give more beads to the disadvantaged child).

In order to avoid that the tested children will influence other children before their participation (for instance by giving them some of their gained beads), the experimenter should collect the strings with the beads from the children after the test. He/ she explains to the children that they can put more beads on their strings later when he/ she has found more beads, and that he/she will keep their strings until then. In this way, the experimenter stores all beads while he/ she is still conducting the experiment, and distributes them (plus extra beads) among the children only after the study is over.

# **Step (5)** - Documentation of session.

The experimenter fills in all the required information for the tested dyad in the subject list (place and date of study, name, sex and age of each child, etc.). It is especially important to mark which of the two children got the box with 11 beads at the beginning of the interaction!

Further, the relation between the two children (e.g. same playgroup, same school class, same village, relatedness, etc.), and any additional helpful comments about the participants or the study session should be noted down (e.g. observed incidents, irregularities or disturbances during the study session, etc.).



Picture 1. Experimenter presents the two boxes (with items inside) to children and lets each child take one.

# Analysis

The video-recorded interactions will be evaluated according to quantity and frequency of sharing, as well as according to different types of behaviours through which sharing occurs (for example, spontaneous offers or requests).

#### Guidelines for recruiting children

All participating children should voluntarily follow and interact with the experimenter!

Additionally, the experimenter should ask at least one adult who is responsible for the participating children in the local community (e.g. parents, other close family members, teachers, etc.) for permission to conduct the study and to video-record the children.

Children who show any signs of discomfort or lack of motivation at any point of the study should be released from their participation immediately!

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