Addressing Prosociality in Lower Elementary Classes in China Through Humane Education

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Background

- Prosocial behaviors
  - “[A]ny act that assists, benefits, or provides support for another”\(^1\)

- Prosocial behaviors in children predict:
  - internalizing & externalizing problem behaviors\(^2\)
  - future aggression\(^3\)
  - social functioning\(^4,5\)
  - academic achievement\(^6\)
Development of Prosociality

• Shows strong\(^1\) but non-linear growth\(^7,8\) throughout childhood.

• Largely develops through social interactions\(^9\)
  - Well-guided interactions with others can nurture prosocial behaviors\(^9\)
  - Those who affect a child’s prosocial development becomes increasingly wider and more diverse throughout childhood\(^10\)
  - Heterogeneous social systems may promote prosociality\(^11\)
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• Largely develops through social interactions\textsuperscript{9}
  ◦ Well-guided interactions with others can nurture prosocial behaviors\textsuperscript{9}
  ◦ Those who affect a child’s prosocial development becomes increasingly wider and more diverse throughout childhood\textsuperscript{10}
  ◦ Heterogeneous social systems may promote prosociality\textsuperscript{11}

• Therefore, practice expanding those to whom a child expresses prosociality may encourage its development
Animals as Prosocial Targets

- Children naturally attend to animals\textsuperscript{12,13,14}
- Many animals elicit empathic responses in children
  - That are as strong or stronger than that elicited by other people\textsuperscript{15}
- Indeed, interactions with animals can increase the frequency of prosociality in children & adolescents\textsuperscript{16}
Animals as Prosocial Agents

• Indeed, interactions with animals can increase the frequency of prosociality in children & adolescents

• Small but growing body of research on animal- & nature-based education programs:
  ◦ ↑ expressed empathy for peers\textsuperscript{17}
  ◦ ↑ frequency of prosocial behaviors\textsuperscript{18,19}
Justification for Current Study

• Prosocial development & expression may differ between cultures
  ◦ E.g., individualistic & communal societies\textsuperscript{20,21}

• No known research on animal-based education programs & prosociality conducted in the Far East
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- No known research on animal-based education programs & prosociality conducted in the Far East
- Therefore, the ability of programs to promote prosocial development may differ among countries that emphasize collectivist norms
Methods: Program

- Caring for Life Education Program
  - Created by ACTAsia ([actasia.org](http://actasia.org))
  - Employs student-centered activities
  - Draws on students’ personal experiences
  - Promotes care for animals, people, and the environment
  - Seeks to develop students’ empathic self-efficacy
Methods: Outcome Measure

- Teacher Observation of Classroom Adaptation–Checklist (TOCA-C)
  - Teachers report on their students
  - Measures frequency of various prosocial behaviors during previous 3 weeks
    - E.g., “is friendly,” “is liked by classmates,” and “shows empathy & compassion for others’ feelings”
- Well validated across several populations of children$^{22}$
Methods: Participants

- Partnered with 25 schools in 5 cities across China
- Whole schools randomly assigned (within constraints) to experimental or control group
- All first- and/or second-grade classes in each invited to participate
- 2,255 students & 159 teachers in total
Methods: Procedure

- Teachers rated randomly-chosen subset of 15 students in their class
  - Used TOCA-C prosociality subscale
  - Exactly 1 week before & 1 week after the Caring for Life Program was conducted at experimental-group schools

- Conducted over 3 consecutive academic years
  - Only experimental-group participants in first year
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Analyses

• Used multilevel models of change
  ◦ With full maximum likelihood estimation
  ◦ Accounts well for nested nature of data & variable sample sizes\textsuperscript{23}

• Looked separately at first & second graders
Results: First Graders
Results: Second Graders

[Graph showing mean prosociality scores for different groups across pretest and posttest.]
Conclusions

- Participating in an animal- and nature-focused program improved general, human-directed prosocial behavior
  - In several schools across China
  - While accounting well for possible confounds (e.g., year, city, school)

- The program had a rather strong effect
  - Relative to similar programs conducted in Western countries
  - Especially among second grade students
  - Especially among those who began the study with relatively lower initial levels of prosociality.
Limitations

- Did not investigate *why* the Caring for Life Program is effective
- Teachers who conducted the program also evaluated the students.
- Students in the controls group participated in no additional programming.
- All students lived in cities
References


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