Data Article

Brief data report on parent-child pro-environmental engagement across five cities in China

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\section*{ARTICLE INFO}

\textbf{Article history:}
Received 14 February 2021
Revised 11 March 2021
Accepted 12 March 2021
Available online 18 March 2021

\textbf{Keywords:}
Pro-environmental behavior
Parent-child engagement
Adolescence
Family norm
Socialization

\section*{ABSTRACT}

The data presented here was partially published in the article “Action, Communication, and Engagement: How Parents “ACE” Children’s Pro-Environmental Behaviors” \cite{1}. The data was collected from 23 elementary summer schools across five cities in China. Two data files were presented: Child’s Dataset, and Parent’s Dataset. The Child’s Dataset included children’s parents’ pro-environmental behaviors (PEBs), children’s perception of parental PEBs, children’s report of parent-child communication toward environmental issues. The Parent’s Dataset included parents’ PEBs and parental report on parent-child pro-environmental engagements. Demographic information was presented in each dataset. The datasets can be used for reproducibility, reanalysis, longitudinal follow-up studies, and cross-cultural comparisons.

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\textbf{DOI of original article:} 10.1016/j.jenvp.2021.101575

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\textit{https://doi.org/10.1016/j.dib.2021.106970

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Specifications Table

| Subject area | Psychology |
|--------------|------------|
| More specific subject area | Environmental Psychology |
| Type of data | Table, Quantitative Data |
| How data was acquired | Survey, Excel |
| Data format | Raw |
| Parameters for Data Collection | Participants were 516 families (children and parents) from five different cities in China. |
| Description of data collection | Participants reported four questionnaires about their pro-environmental behaviors (PEBs) and parent-child pro-environmental “ACE” interactions (Action, Communication, and Engagement). Demographic questions were collected. |
| Data source location | City: Beijing, Harbin, Fuzhou, Guangzhou, Hangzhou |
| Country: China | |
| Data accessibility | Available at Mendeley Data |
| Related research article | F. Jia, & H. Xu, (2021). Action, Communication, and Engagement: How parents “ACE” children’s pro-environmental behaviors. Journal of Environmental Psychology. 74, 101,575. https://doi.org/10.1016/j.jenvp.2021.101575 |

Value of the Data

- The open science of the raw dataset demonstrates transparency. It can be used for replications or meta-analyses, and longitudinal follow-up studies to test parent-child pro-environmental engagement.
- The dataset can be analyzed in different statistical methods, such as analysis of variance, regression, factor analysis, and mediation analysis.
- The dataset includes five different urban cities in China. It may allow for comparisons of different urban and rural groups or an investigation of a specific city.

1. Data Description

The dataset (i.e. Tables 1 and 2) contains self-reported responses of 516 children and 516 parents. The data file 1 is grouped into fields that recorded demographic information, children’s pro-environmental behaviors (PEBs), children’s perception of parental PEBs, children’s report of parent-child communication. The data file 2 included demographic information, parents’

Table 1
Child data file.

| Variable | Variable Description | Variable Type | Variable Labels |
|----------|----------------------|---------------|----------------|
| Code | Anonymous coded ID | Nominal | N.A |
| BirthYear | Year of Birth | String | Text |
| Birthmonth | Month of Birth | String | Text |
| Gender | Gender | Nominal | 1 = boy; 2 = girl |
| City | Current city | Nominal | 1 = Beijing; 2 = Harbin; 3 = Guangzhou; 4 = Fuzhou; 5 = Huangzhou |
| B1 to B23a | 23 items on child’s PEBs | Nominal | 1 = never; 2 = a little bit; 3 = sometimes; 4 = fairly often; 5 = always |
| N1_F/M to N3_F/M | Children’s perception of father’s and mother’s PEBs | Numeric | 1 = never; 2 = a little bit; 3 = sometimes; 4 = fairly often; 5 = always |
| D_F & D_M | Discussions with father and mother about environmental issues | Nominal | 1 = never; 2 = a little bit; 3 = sometimes; 4 = fairly often; 5 = always |

a. Items # 3, 5, 6, 9, 13, 14, 15, 16, & 19 need to be reversed.
Table 2
Parent data file.

| Variable     | Variable Description                                                                 | Variable Type | Variable Labels                                                                 |
|--------------|-------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------|
| IDP          | Parent's coded ID                                                                   | Nominal       | Match with children                                                              |
| Parentform   | Who fills the survey?                                                               | Nominal       | 1 = father; 2 = mother; 3 = other                                                 |
| Primparent   | Who is the primary caregiver?                                                       | Nominal       | 1 = father; 2 = mother; 3 = grandparents; 4 = nanny; 5 = others                  |
| Job          | What is your current occupation?                                                    | String        | Text                                                                             |
| Income       | What is your yearly family income in Chinese Yuan?                                 | Nominal       | 1 = up to 5000; 2 = 5000–10,000; 3 = 20,000–50,000; 4 = 50,000 to 100,000; 5 = over 100,000 |
| City-P       | Parent's current city                                                               | String        | Text                                                                             |
| PB1 to PB13a | Parent's PEBs                                                                        | Numeric       | 1 = never; 2 = a little bit; 3 = sometimes; 4 = fairly often; 5 = always         |
| A1 to A15    | Parent-child pro-environmental engagement activities                               | Numeric       | 1 = never; 2 = a little bit; 3 = sometimes; 4 = fairly often; 5 = always         |

a. Items # 3, 5, 6, 8, 13, 14, 15, 22 need to be reversed.

PEBs, and parental report on parent-child pro-environmental engagements. Descriptive statistics can be obtained from functions in Excel files. In addition, users can transform the format of the data files to Statistical Package for the Social Sciences (SPSS) and RStudio. Both statistical tools are frequently used in social sciences. Tables 1 and 2 summarize the variables contained in the provided data files. Both files can be merged into one single file by matching children and parents ID codes.

2. Experimental Design, Materials and Methods

The data is based on a correlational design. Zero-order correlation coefficients can be computed to test simple relationships between any two variables. Factor analyses can be run to see if different domains exist within the test variables (e.g., different domains in PEBs and engagements). Path analyses can be performed to test presumed relationships among different variables.

Five hundred and sixteen children from first and sixth grades and one of each of their primary caregivers (total N = 1032) children were recruited through local summer schools in five major urban Chinese cities (Beijing, Harbin, Fuzhou, Guangzhou, and Hangzhou). Twenty-eight summer schools were selected based on personal contacts. The name of the summer schools cannot be revealed due to the local ethics board agreement. All children completed an online questionnaire during class period, and their parents filled out an online questionnaire at home. The project entitled “Pro-Environmental Engagement in China” was reviewed by the research and ethic committee in the School of Education at Harbin Normal University, China. Children’s assents were obtained with parental permission. The parental informed consent, including children’s willingness to participate in the study, was obtained before conducting the study. A unique anonymous ID was assigned to each child and parent for a matching purpose.

The questionnaire packet (see the supplied file) included children’s and parents’ pro-environmental behaviors (PEBs), children’s perception of parental PEBs, children’s report of parent-child communication toward environmental issues, and parental report on parent-child pro-environmental engagements. Reliability scores validity checks were reported in the published articles [1].

Demographic information included children’s birth year and month, children’s grade level, parents’ age, gender, parental report of family income, and primary caregiver.

Children’s and Parents’ pro-environmental behaviors were assessed using an adapted version of the General Ecological Behavior Scale [2]. The same 23 items for children and parents were used to measure their PEBs. Participants responded on a 5-point Likert scale from 1 (never) to 5 (always). This measure was also available in Appendix A of the original article [1].
Children’s perceptions of parental actions were measured by asking how they perceived their parents’ pro-environmental actions on three activities: recycling, buying green products, and conserving electricity [3]. Each child was asked to respond to the question by perceiving their father and mother, respectively. Six items were included on a 5-point Likert scale from 1 (never) to 5 (always). Sample items were “How often does your father/mother recycle?” Please see the data file for the specific items.

Parent-child communication was measured by the same item for mother and father, respectively “In your everyday life, how often does your parent (mother and father respectively) talk about the benefits of acting environmentally friendly?” Children were asked to respond on a 5-point Likert scale from 1 (never) to 5 (always). Please see the data file for the specific items.

Parent-child engagement was measured by asking parents to respond to how often they have been involved with their children on 15 daily pro-environmental activities. These activities were created in a pilot study by asking parents to list the environmentally friendly activities they do with their children. This measure was also available in Appendix B of the original article [1].

Ethics Statement

The study was approved by the ethics and research review committee at the School of Education at Harbin Normal University. The parental informed consent, including parental permission and children’s willingness to participate in the study was obtained electronically before conducting the study.

CRediT Author Statement

Fanli Jia: Conceptualization, Methodology, Analyses, Visualization, Data Curation, Writing original draft and revision, Supervision; Hui Yu: Analyses; Methodology, Resources; Data collection; Visiting Scholar at Seton Hall University 2019–2020.

Declaration of Competing Interest

This research was not sponsored by any institution or organization.

Supplementary Materials

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.dib.2021.106970.

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[1] F. Jia, H. Xu, Action, communication, and engagement: how parents “ACE” children’s pro-environmental behaviors, J. Environ. Psychol. 74 (2021) 101575, doi:10.1016/j.jenvp.2021.101575.
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