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# The value of extracurricular activities to Japanese junior high school students: focusing on the expression of a school's attractiveness in writing

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This study explores the value of extracurricular activities to Japanese junior high school students and how this value can be transmitted to junior students through essay writing. The study participants involved Japanese seventh graders; the essay focused on school attractiveness and covered the following three conditions: (1) "control condition," where juniors (sixth graders) are assumed to be readers, (2) "emphasis condition," where the teacher requested participants to assume a more specific view of the juniors, and (3) "emphasis–visualization condition," where the teacher requested participants to assume a more specific view of juniors and where the participants visualized the characteristics of juniors before completing the writing assignment. More information regarding extracurricular activities was provided in the emphasis–visualization condition. This suggests that when Japanese junior high school students are highly aware of their juniors, they evaluate extracurricular activities as an attractive school feature and readily transmit this value to younger students.

## KEYWORDS

extracurricular activities, junior high school students, value transmission, visualization in writing, school transition, Japan

## 1. Introduction

Extracurricular activities as part of school life are believed to positively affect adolescent development (Eccles et al., 2003). However, they also have several negative aspects, such as over-busyness (Kremer-Sadlik et al., 2010) and stress among the children. In Japan, approximately all junior and senior high schools participate in extracurricular activities, with students often choosing one activity (club) to engage in. Japanese students engage in diverse extracurricular clubs, including sports clubs such as a "basketball club," arts clubs such as a "brass band," and academic clubs such as a "computer club." In most countries of the Organization for Economic Co-Operation and Development (OECD) and its partner countries, extracurricular activities are more prevalent during the school year (before and/or after classes) than during holidays (Organization for Economic Co-Operation and Development, 2017). However, in Japan, such activities are common not only during the school year but also during holidays, as sufficient time is devoted to extracurricular activities throughout the year. According to an Organization for Economic Co-Operation and Development (2019) survey, teachers in Japan dedicate 7.5 h/week to extracurricular activities, which was much higher than the average of 1.9 h/day among teachers from other countries that participated in the survey. Additionally, since the Organization

for [Economic Co-Operation and Development \(2019\)](#) does not account for the time dedicated during holidays and long vacations, Japanese teachers might be more excessively engaged in extracurricular activities than this result suggests.

Although participation in club activities (extracurricular activities) is formally “voluntary,” a survey by the [Japan Sports Agency \(2018\)](#) revealed that 92% of junior high school students and 81% of senior high school students participate in these activities. Many students in Japanese schools start participating in extracurricular activities from the time they are in junior high school and continue until their graduation. Previous studies revealed that those who are actively involved in extracurricular activities are more highly satisfied with school life ([Sumiya, 2005](#)) and more psychologically adapted ([Takemura et al., 2007; Okada, 2009](#)). However, those who were actively involved in extracurricular activities at the time of their enrollment but later withdrew or became reluctant to participate in such activities may experience an increased sense of maladaptation. Therefore, many students are unable to leave extracurricular clubs ([Omi, 2019](#)) despite the negative aspects of extracurricular activities, such as over-busyness ([Kremer-Sadlik et al., 2010](#)) and injury ([Merkel, 2013](#)). Thus, extracurricular activities in Japanese schools are extremely important considering the contemporary Japanese school culture and its relevance to school adaptation.

One of the factors that increases the importance of extracurricular activities in Japanese schools is the relationship between seniors and juniors. In many junior and senior high schools in Japan, senior students are called “senpai” and junior students are called “kouhai.” This seniority-based relationship is hierarchical and highlighted in extracurricular activities. For example, there is a tacit understanding that juniors must comply with the instructions of seniors, while the seniors have authority over the juniors. Therefore, some students who wish to leave a club may not do so because of the possible negative reactions from seniors, even if it is technically easy to quit the club ([Omi, 2019](#)). Another characteristic of extracurricular activities in Japanese schools is that their values are transmitted from seniors to juniors. This includes not only manifested content such as practice methods, but also implicit content, such as attitudes toward extracurricular activities (e.g., our baseball club activities override academic activities). These values may also account for the psychological phenomenon of being unable to leave the club and provide a basis for increasing cohesion within the club and relationships that enhance mutual development ([Omi, 2019](#)).

Extracurricular activities in Japanese schools are unique from an international perspective in that participation is voluntary but semi-mandatory (e.g., [Omi, 2015](#)). The excessive practice time of extracurriculars is equivalent to the working hours in the Japanese work environment, implying that the Japanese culture can also be expressed in extracurricular activities ([Omi, 2019](#)). Thus, extracurricular activities in Japanese schools are significant from an educational psychological perspective. Such activities provide an understanding into the Japanese education system and, by extension, the Japanese culture. Therefore, this study focuses on extracurricular activities in Japanese schools to determine how junior high school students value extracurricular activities and whether the transmitted value is specific to extracurricular activities.

Extracurricular activities in Japanese schools represent a special school culture and participation in such activities can be considered an important factor for school adaptation. This consideration is based

on the correlation between extracurricular activities, a sense of fulfillment, and psychological adaptation in schools ([Takemura et al., 2007; Okada, 2009](#)). In Japanese schools, several other factors (e.g., studies and friendship) are related to fulfillment and psychological adaptation. Therefore, we explore the importance of extracurricular activities in Japanese schools by ascertaining their value relative to other factors. Relative understanding is essential in clarifying the mechanism by which the value of an extracurricular activity is conveyed from seniors to juniors.

To clarify the importance of extracurricular activities in Japanese schools, self-report research methods may be considered, such as allowing students to assess the importance of several major school activities themselves. However, this method may lead students to provide socially desirable answers, such as prioritizing academic work. In this study, to naturally enable junior high school students to externalize the value of activities in their school life, we conducted a writing assignment to determine their perceived school attractiveness. The value of extracurricular activities was clarified using the information characteristics identified by the students regarding the attractive features of the school. Specifically, we conducted a writing assignment for seventh graders to present the attractiveness of junior high school to sixth-graders. An analysis was then conducted to explain how and to what extent students described their extracurricular activities as attractive features of their school.

In the writing process, audience awareness is an important factor that determines the structure and the content of the text ([Hayes and Flower, 1980; Midgette et al., 2008](#)). In Japan, instruction is systematically provided for students to adjust the text to the needs of the reader based on the educational level (e.g., [Ministry of Education, Culture, Sports, Science, and Technology, 2017](#)). Junior high school students can assess the audience and choose writing styles that correspond with the characteristics of the audience ([Midgette et al., 2008](#)). Therefore, conducting a writing assignment for junior high school students to present the attractiveness of their school to elementary school students will help us understand what attractive features of junior high school life they identify for the incoming students. The method of assessing students’ value for certain information using writing assignments is unique and is considered suitable for identifying school attractions. The extracurricular activities are considered valuable if students selectively describe them in the writing assignment as an attractive feature of the school.

This study aims to clarify the value of extracurricular activities to Japanese junior high school students and how this value can be transmitted to junior students through essay writing. For this purpose, we conducted a writing assignment for seventh-grade students just after their entrance into junior high school. We examine the extent to which the value of extracurricular activities is recognized early in the first year of junior high school and how the value is transmitted to younger students. The rationale for targeting seventh-grade students is that the evaluation of extracurricular activities is closely related to the problem of school transition in Japan. School transition is one of the most important events in early adolescence and is likely to decrease well-being (e.g., [Katsantonis et al., 2023](#)), and transitional problems can have a significant impact on later life ([Virtanen et al., 2019](#)). School transition is also important in Japan. Compulsory education in Japan lasts nine years and, in most cases, is divided into six years of elementary school and three years of junior

high school. The relationship between students and teachers changes from a system in which a designated teacher presents most of the subjects to a system in which different teachers present different subjects. In addition, students do not use honorific titles (e.g., “-san”) in elementary school, but lower graders (*kouhai*) in junior high school use them for upper graders (*senpai*). These are major environmental changes in relationships that trigger a variety of problems (e.g., Hou et al., 2020). School belongingness and connectedness may be important for the successful transition (Jindal-Snape et al., 2020), and in Japan, active participation in extracurricular activities is an important factor in enhancing school belongingness and adaptation (Takemura et al., 2007; Okada, 2009). Therefore, clarifying the mechanism of rapid sharing of extracurricular activity value is expected to provide suggestions that will contribute to solving adaptation problems in the school transition.

## 2. Method

### 2.1. Participants

A total of 120 seventh-grade students (74 boys and 46 girls) from a Japanese junior high school participated in the study. All the selected students actively participated in extracurricular activities. The school had not achieved outstanding results in sports or arts tournaments for any extracurricular activities; therefore, it was considered a suitable sample for clarifying specific aspects of common extracurricular activities.

To examine the emphasizing reader assumptions, the participants were divided into three groups based on the following conditions: (1) “control condition” ( $n=40$ , 23 boys and 17 girls), in which only information about the readers (sixth graders) was presented; (2) “emphasis condition” ( $n=40$ , 26 boys and 14 girls), in which, in addition to the information about readers, participants were given verbal interventions to increase their awareness of the readers before starting writing; and (3) “emphasis–visualization condition” ( $n=40$ , 25 boys and 15 girls), in which, in addition to the interventions in “emphasis condition,” participants were asked to describe the characteristics of the readers in the margin of the composition paper before starting writing. If the number of extracurricular activity descriptors increased under the “emphasis” and/or “emphasis–visualization” conditions, extracurricular activities are considered as attractive features that should be valued and presented to elementary school students. Practically, it was difficult to conduct similar writing assignments more than once in a short period at a junior high school; thus, experiments were conducted with a non-equivalent three-group post-test design after measuring the covariate variables in advance.

Ethical approval was not required as no formal ethical procedures were applicable to the type of research conducted. The study was conducted in accordance with the local legislation and institutional requirements, and with the approval of the principal and teachers at the cooperating school. Written informed consent for participation was not required from the participants or the participants’ legal guardians/next of kin because the practices in this study were part of a previously conducted class in which no personal information of the students was handled, and the researchers were given anonymized information. The students provided their assent for participation and were informed that they could withdraw from the analysis at any time.

## 2.2. Instruments

### 2.2.1. Pre-survey items

To control for the difference between the conditions before the writing assignment, students’ self and task perceptions in the Japanese language were measured. It was expected that students with positive attitudes toward Japanese language classes would actively engage in the writing assignment. Using Ichihara and Arai’s (2006) self and task perceptions scale, we developed a scale to measure ability/expectancy (e.g., I am confident that I will get a good grade in the Japanese language class in the future), intrinsic interest value (e.g., I like Japanese language classes), and attainment/utility value (e.g., It is important for me to get a good grade in my Japanese language class). All items were answered on a five-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

### 2.2.2. Writing assignment and categories of school attractiveness

Teachers conducted the writing assignments on the topic “Presenting the attractiveness of your junior high school to sixth graders at elementary schools.” As future seniors, students were asked to write a 20-min 400-character essay about the school’s attractiveness to imaginary sixth graders who might become juniors. Students could request extra essay sheets if their response exceeded one sheet.

The categories of school attractiveness were developed referring to the “school attractiveness” shown in the leaflets and websites of the junior high school. Initially, the first author extracted six school attractiveness categories, including “Philosophy,” “Facilities,” “Education,” “Extracurricular activities,” “Academic achievements,” and “Friends” from leaflets. Next, the teachers at the school confirmed whether these categories expressed the attractiveness of their school without excess or deficiency, and it was confirmed that the defined categories were appropriate. As a pilot study, we conducted the essay writing assignment on school attractiveness with the cooperating school’s eighth graders ( $n=157$ , 89 boys and 68 girls), who were assumed to have a good understanding of the cooperating school’s attractiveness. No student refused to consent to participate in the study. The first author and the teacher who conducted the writing assignment classified the sentences and found that all statements about school attractiveness were classifiable, and the kappa coefficient calculated using the same criteria as in the present study was sufficient (.88). Table 1 shows the examples of sentences corresponding to each category.

A single sentence was classified as a unit. When a long sentence contained more than one topic, the classification was based on semantic content. The first author and another rater, who did not know about the research, independently classified the responses. The kappa coefficient was .79, and reliability was judged to be sufficient. Disagreements between the raters were resolved through discussions.

## 2.3. Procedure

Generally, junior high school enrolment in Japan takes place in April. The composition task was conducted in the middle of May to clarify how seventh graders who had just begun participating in club activities (extracurricular activities) valued the attractiveness of their school. Two days after the pre-survey, a Japanese language class (50 min) was used for the composition task. Although 30 min were

TABLE 1 Examples and descriptive statistics for each category (pilot study).

|                            | Example descriptions  | M (SD)      | n <sup>a</sup> |
|----------------------------|---|-------------|----------------|
| Philosophy                 | In this school, students can be independent.  | 0.16 (0.38) | 24 (15.3)      |
| Facilities                 | The library's collection is one of the largest in the country.  | 2.71 (1.22) | 154 (98.1)     |
| Education                  | The veteran teachers will teach you in a way that suits each student.                                 | 0.57 (0.86) | 61 (38.9)      |
| Extracurricular activities | You can choose from several extracurricular clubs to suit your own needs.                             | 0.48 (0.70) | 59 (37.6)      |
| Academic achievements      | This school has a large number of students going on to higher education.                              | 0.03 (0.16) | 4 (2.5)        |
| Friends                    | The large number of students in this school allows you to find friends whom you are comfortable with. | 0.18 (0.46) | 24 (15.3)      |

n = 157. <sup>a</sup>The number of students describing attractiveness in each category. The numbers in parentheses indicate the percentage of describers.

TABLE 2 Reliability coefficients and descriptive statistics of student's self and task perception.

|                          | $\alpha$ | $\omega$ | Control     | Emphasis    | Emphasis–visualization |
|--------------------------|----------|----------|-------------|-------------|------------------------|
| Ability/expectancy       | .76      | .80      | 3.02 (0.63) | 2.80 (0.83) | 3.06 (0.69)            |
| Intrinsic interest value | .83      | .85      | 3.77 (0.72) | 3.08 (0.89) | 3.86 (0.79)            |
| Attainment/utility value | .73      | .76      | 3.70 (0.73) | 3.58 (0.57) | 3.78 (0.74)            |

allotted to write the essay, factoring in the instruction time, the effective writing time was 20 min. After the topic was written on the board, a composition sheet was distributed to students, and they were asked to write on the topic.

To vary the strength of audience awareness across conditions, we implemented Onoda's (2021) procedure, which also manipulates audience awareness in Japanese junior high school students. In all three conditions, we first presented "Let us present the attractiveness of junior high school to sixth graders" on the blackboard and in the emphasis and emphasis–visualization conditions, just before the writing activity, the teacher told students, "This writing assignment is to be done as a presentation for sixth graders. You need to write as if you are introducing the good points of a junior high school to elementary school students who have come for school information sessions." The inclusion of the term "school information session" was intended to encourage students to envision the readers. In addition to these instructions, in the emphasis–visualization condition, the students were instructed to write the readers' characteristics in the margin of their papers.

## 3. Results

### 3.1. Measurement items

By confirming the reliability of the score of "Student's self and task perception in the domain of Japanese language" measured in the pre-survey, the mean value of each of the three subscales was treated as the subscale score as sufficient reliability was found (Table 2). The scores of the items measured in the pre-survey were used as covariates in the subsequent tests on the difference in means between the conditions.

### 3.2. Difference between conditions

The descriptive statistics and number of descriptors per category are shown in Table 3. There was a deviation in the distribution of the number of relevant descriptions per category; the differences between the conditions were verified using logistic regression analysis, and the number

of students describing each category was used as the objective variable. "Facilities," which most students described, and "Academic achievements" and "Philosophy," which most students did not describe, were excluded from the analysis because the coefficients could not be estimated. The number of descriptions of the entire text, excluding the number of descriptions of the categories that served as the objective variable, was used as the control variable (e.g., when the number of students writing about "Education" was the objective variable, the number of statements in the entire text, excluding the number of statements about the school's "Education" was used as the control variable).

Logistic regression analysis was performed, with the number of describers in each category as the objective variable. "Emphasis dummy" (emphasis condition = 1, other conditions = 0) and "emphasis–visualization dummy" (emphasis–visualization condition = 1, other conditions = 0) were used to evaluate the differences between conditions. The scores of self and task perception in the domain of the Japanese language, gender (girls = 0, boys = 1) and the number of descriptions in the entire text, excluding the number of descriptions in the category that served as the objective variable, were controlled for. The results are presented in Table 4.

No significant dummy variables were found for "Education" and "Friends." However, a significant positive coefficient was found for the emphasis–visualization dummy for "Extracurricular activities," indicating a tendency for the number of students describing extracurricular activities to increase in the emphasis–visualization condition than in the control condition. These results indicate that extracurricular activities in Japanese schools tend to be described as an attractive feature of schools more frequently when elementary school students are strongly considered as readers.

## 4. Discussion

Students in the emphasis–visualization condition, who were highly aware of junior students, described extracurricular activities as an attractive feature of the school. There were no significant differences between conditions for the descriptions of "Education" and "Friends," suggesting that information about extracurricular activities was

TABLE 3 Means, standard deviations, and number of descriptions of the school's attractiveness.

|                            | Control |      |                | Emphasis |      |                | Emphasis–Visualization |      |                |
|----------------------------|---------|------|----------------|----------|------|----------------|------------------------|------|----------------|
|                            | M       | SD   | n <sup>a</sup> | M        | SD   | n <sup>a</sup> | M                      | SD   | n <sup>a</sup> |
| Philosophy                 | 0.05    | 0.22 | 2 (5.0)        | 0.02     | 0.16 | 1 (2.5)        | 0.12                   | 0.33 | 5 (12.5)       |
| Facilities                 | 2.17    | 0.59 | 40 (100.0)     | 2.00     | 1.01 | 36 (90.0)      | 2.55                   | 1.13 | 40 (100.0)     |
| Education                  | 0.80    | 0.61 | 28 (70.0)      | 0.85     | 0.66 | 27 (67.5)      | 0.90                   | 0.81 | 27 (67.5)      |
| Extracurricular activities | 0.25    | 0.44 | 10 (25.0)      | 0.22     | 0.48 | 8 (20.0)       | 0.48                   | 0.51 | 19 (47.5)      |
| Academic achievements      | 0.05    | 0.22 | 2 (5.0)        | 0.08     | 0.27 | 3 (7.5)        | 0.02                   | 0.16 | 1 (2.5)        |
| Friends                    | 0.12    | 0.33 | 5 (12.5)       | 0.18     | 0.38 | 5 (12.5)       | 0.12                   | 0.33 | 5 (12.5)       |

n = 40 for all conditions. <sup>a</sup>The number of students describing the attractiveness in each category. The numbers in parentheses indicate the percentage of describers.

TABLE 4 Results of the logistic regression analysis.

|   | $\beta$ | $\beta_{SE}$ | OR   | 95%CI       |
|---|---------|--------------|------|-------------|
| <b>Education</b>                                    |         |              |      |             |
| Intercept   | -0.37   | 1.59         | 0.69 | 0.03, 14.83 |
| Emphasis dummy                                      | 0.20    | 0.58         | 1.21 | 0.39, 3.86  |
| Emphasis–visualization dummy                        | 0.48    | 0.57         | 1.62 | 0.53, 5.09  |
| Ability/expectancy                                  | 0.74*   | 0.37         | 2.10 | 1.04, 4.41  |
| Intrinsic interest                                  | 0.23    | 0.39         | 1.25 | 0.58, 2.73  |
| Attainment value                                    | 0.26    | 0.44         | 1.30 | 0.56, 3.23  |
| Gender  | -0.71   | 0.49         | 0.49 | 0.18, 1.26  |
| Other information                                   | -0.86** | 0.27         | 0.42 | 0.24, 0.70  |
| Hosmer–Lemeshow test: $\chi^2(8) = 6.14, p = 0.63$  |         |              |      |             |
| <b>Extracurricular activities</b>                   |         |              |      |             |
| Intercept   | -0.78   | 1.37         | 0.46 | 0.02, 8.36  |
| Emphasis dummy                                      | -0.43   | 0.60         | 0.65 | 0.19, 2.13  |
| Emphasis–visualization dummy                        | 1.30*   | 0.52         | 3.68 | 1.36, 10.71 |
| Ability/expectancy                                  | -0.02   | 0.34         | 0.98 | 0.50, 1.95  |
| Intrinsic interest                                  | -0.08   | 0.37         | 0.92 | 0.44, 1.98  |
| Attainment value                                    | 0.36    | 0.38         | 1.43 | 0.65, 3.24  |
| Gender  | 0.53    | 0.47         | 1.69 | 0.68, 4.39  |
| Other information                                   | -0.52*  | 0.23         | 0.59 | 0.37, 0.92  |
| Hosmer–Lemeshow test: $\chi^2(8) = 13.07, p = 0.11$ |         |              |      |             |
| <b>Friends</b>                                      |         |              |      |             |
| Intercept   | -0.51   | 2.04         | 0.60 | 0.01, 30.87 |
| Emphasis dummy                                      | 0.03    | 0.76         | 1.03 | 0.21, 4.67  |
| Emphasis–visualization dummy                        | 0.46    | 0.72         | 1.60 | 0.38, 6.82  |
| Ability/expectancy                                  | 0.16    | 0.48         | 1.17 | 0.48, 3.14  |
| Intrinsic interest                                  | 0.12    | 0.51         | 1.13 | 0.43, 3.23  |
| Attainment value                                    | 0.07    | 0.55         | 1.07 | 0.37, 3.25  |
| Gender  | -0.36   | 0.61         | 0.70 | 0.21, 2.36  |
| Other information                                   | -0.78*  | 0.32         | 0.46 | 0.24, 0.83  |
| Hosmer–Lemeshow test: $\chi^2(8) = 14.01, p = 0.08$ |         |              |      |             |

“Facilities,” which almost all respondents wrote about, and “Philosophy” and “Academic Achievements,” which few students wrote about, were not included in the analysis. VIF < 3 for all variables. \*p < 0.05; \*\*p < 0.01.

particularly valued as information that should be communicated to younger students. The fact that the seventh graders increased their descriptions of extracurricular activity immediately after their enrollment in junior high school by assuming imaginary junior students as readers suggests that the value of extracurricular activities was shared within the first month of school, and they are potential value transmitters. Information about extracurricular activities tends to be activated when junior students are perceived as audience, and therefore the value of extracurricular activities is likely to be transmitted from seniors and shared among students immediately after their enrollment. In Japan, extracurricular values are transmitted through the senior–junior relationship (Sumiya, 2005; Takemura et al., 2007; Okada, 2009), and it is assumed that having values like those of seniors increases junior students’ school belongingness and connectedness to school, which enhances well-being (Jindal-Snape et al., 2020). In contrast, students who are reluctant to participate in extracurricular activities are less likely to have belongingness and connectedness to school, which may cause school transition problems (e.g., Katsantonis et al., 2023). Therefore, it is important to support students during the transition period by helping them to focus on attractions other than extracurricular activities, such as educational content and school life, showing them that the appeal of school is multifaceted.

### 4.1. Limitations and perspectives

This study was conducted in a single junior high school. The findings are thus limited regarding generalizability. The target schools were typical Japanese schools, where no bias existed regarding the exclusive enrollment of low-income (or high-income) students, and where the level of extracurricular activities was average. However, the tendency to actively communicate the value of extracurricular activities to younger students may have been more pronounced when schools with high levels of extracurricular activities (e.g., schools aiming to win a national championship) were targeted. Accumulating findings on students’ evaluation of extracurricular activities and value transfer among students in various schools would enable a more in-depth analysis of school transition problems from the perspective of extracurricular activities.

The second limitation is that students’ evaluations of extracurricular activities were not measured. If the value of extracurricular activities is deeply rooted in the Japanese school culture, students with low evaluations of such activities may transmit them as an attractive aspect of their school. It is thus necessary to clarify the relationship between the evaluation of extracurricular activities and the transmission of the attractiveness and value of club activities.

## Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

## Ethics statement

Ethical approval was not required for the studies involving humans as no formal ethical procedures were applicable to the type of research conducted. The study was conducted in accordance with the local legislation and institutional requirements, and with the approval of the principal and teachers of the cooperating school. Written informed consent for participation was not required from the participants or the participants' legal guardians/next of kin because the practices in this study were part of a previously conducted class, no personal information of the students was handled, and the researchers were given anonymized information. The students provided their assent for participation, and were informed that they could withdraw from the analysis at any time.

## Author contributions

RO: Conceptualization, Formal analysis, Funding acquisition, Investigation, Methodology, Resources, Validation, Writing – original draft, Writing – review & editing. YO: Supervision, Validation, Writing – review & editing.

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## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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