

# Intrinsic and Altruistic Motivation Among Worker Co-Operative Participants: Text Mining Analysis Based on the Reporting Activities at the Zoo

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**Abstract:** *The Japanese government is encouraging local governments to transition junior high school extracurricular activities to community-led initiatives to address excessive teacher workloads and teacher shortages. Previous research has suggested that worker co-operatives may play a role in facilitating this transition. This study focuses on the “Children’s Editing Club.” In their reporting activity students interview workers and write reports. The purpose of the investigation is to confirm in which aspects of this program students’ intrinsic and altruistic motivations are elicited. Surveys were conducted of students who participated in reporting activities at two different zoos, and text-mining analysis was performed to extract frequently occurring words from both sets of responses. The results indicated that interview activities with interviewees elicited intrinsic motivation in students. Furthermore, the findings suggested that increased opportunities for communication among students could promote altruistic motivation. The results suggest that local organizations can act as hubs connecting students with society.*

**Keywords:** Intrinsic motivation, altruistic motivation, worker co-operative, extracurricular activities

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## INTRODUCTION

In recent years, the state of extracurricular activities in Japanese schools has undergone significant changes. Following the formulation of comprehensive guidelines on extracurricular activities by the Japan Sports Agency in March, 2018, and the Agency for Cultural Affairs in December, 2018 (Japan Sports Agency, 2018; Agency for Cultural Affairs, 2018), recommendations from the Central Council for Education were issued in January, 2019 (Central Council for Education, 2019). Additionally, supplementary resolutions by the House of Representatives in November, 2019, and the House of Councilors in December, 2019, emphasized the need to shift extracurricular activities from being school-based to community-based (House of Representatives, 2019; House of Councilors, 2019). This recommendation was made in light of addressing issues such as workstyle reform in schools and teacher shortages.

Consequently, in September, 2020, both the Japan Sports Agency and the Agency for Cultural Affairs announced a plan to gradually transition weekend extracurricular activities to community-led initiatives starting from the 2023 academic year (Japan Sports Agency, 2020). In June and August, 2022, specific measures regarding these initiatives were proposed by the advisory committees on transitioning extracurricular activities to community-based models established within the Japan Sports Agency and the Agency for Cultural Affairs (Japan Sports Agency, 2022; Agency for Cultural Affairs, 2022). Based on these recommendations, efforts were made to promote collaboration between schools and local communities, as well as to transition extracurricular sports and cultural activities to community-based sports and cultural club activities managed by local organizations. In December, 2022, the guidelines from the Japan Sports Agency and the Agency for Cultural Affairs were consolidated and comprehensively revised, designating the period from the 2023 to the 2025 academic year as the reform promotion phase for community-based transition (Japan Sports Agency & Agency for Cultural Affairs, 2022).

In order to achieve this transition, Saitama City (2024) held a “Research and Coordination Council for Establishing a Regional Sports and Cultural Club Activity System” on July 28, 2023. Similarly, Sapporo City (2024) convened a “Review Committee for the Transition of Extracurricular Activities to Community-Based Models and Ensuring Opportunities for Regional Sports and Cultural Arts Activities” on August 28, 2023. The Sendai City Board of Education’s (2024) “Sendai City Council for the Regional Transition of Extracurricular Activities” was held on August 22, 2024. Meanwhile, the Kawasaki City Board of Education (2024) organized a “Roundtable Discussion on Extracurricular Activities at Kawasaki City Junior High Schools” on November 28, 2023.

Amid these developments, some cities have begun outlining policies regarding the future of school extracurricular activities and new community club activities. Chiba City Board of Education (2024) announced a policy to transition weekend school extracurricular activities to community-based club activities starting in the summer of the 2026 academic year, while retaining school-based extracurricular activities on weekdays. Niigata City (2024) stated that starting from April, 2026, weekday extracurricular activities will be conducted only until approximately 4:45 PM (within the working hours of teaching staff), and no school-based extracurricular activities will take place on weekends. However, the establishment and management of extracurricular activities will remain at the discretion of individual schools. Nagoya City (2024) announced that beginning in October, 2025, weekend extracurricular activities, except for participation in competitions, will be transferred to local organizations. In alignment with the national policy promoting the gradual transition of weekend extracurricular activities to community-based initiatives (Japan Sports Agency & Agency for Cultural Affairs, 2022), several cities have established their own guidelines.

On the other hand, some cities have announced plans to transition not only weekend but also weekday extracurricular activities to community-based models. For example, the Kobe City Board of Education launched the “Committee for Examining the Transition of Extracurricular Activities to Community-Based Models” on November 10, 2022. This committee, comprising academic experts, school representatives, parent representatives, and local organizations, held extensive discussions (Kobe City Board of Education, 2024). In July, 2024, the committee announced “KOBEDIAMOND KATSU,” a plan for the full transition of junior high school weekday and weekend extracurricular activities to community-based management starting in 2026 (Kobe City Board of Education, 2024). Additionally, the Kobe City Board of Education announced in December, 2024, that it would begin soliciting activity groups from mid-January 2025, with the possibility of an early start (Kobe Katsu, 2025; Kubota, 2024).

Under the “KOBEDIAMOND KATSU” initiative, local organizations selected and reviewed by the Board of Education will serve as the managing entities for extracurricular activities. These

organizations will employ regional instructors and interested junior high school teachers to guide students. Activities will take place at junior high schools or other facilities, and participation will not be limited to junior high school students alone. Furthermore, the program will primarily operate on a membership fee basis. Participants will have the flexibility to choose activities across school districts, and new disciplines not previously offered in traditional school extracurricular activities will be introduced. In this way, Kobe City is taking one of the most innovative approaches to transitioning extracurricular activities to a community-based model (Kobe Katsu, 2025; Kubota, 2024). In December, 2024, a national expert panel compiled a reform proposal to extend the community-based transition, which had been progressing on weekends, to weekdays (Hayashibe, 2024).

Previous studies on the transfer of extracurricular activities from schools have primarily focused on sports-related club activities. Information regarding the adoption of cultural club activities by local community organizations remains insufficient at this point (Aoyagi, 2021; Omuro & Shioiri, 2024; Iwama, 2024). Previous research has confirmed that participation in sports-related club activities fosters positive and desirable character traits among students and contributes to stabilizing emotional empathy (Kwon, 2018). Additionally, a positive attitude toward participation in club activities has been identified as crucial for students in both sports-related and cultural activities (Fujiwara & Kawamura, 2016; Okada, 2009; Sumiya & Muto, 2001).

In response, the author previously investigated an activity of the Worker Co-operative Kodomo Henshubu (hereafter referred to as the Children's Editing Club), which manages cultural club activities in Kobe City. The study revealed that students participating in these activities exhibited intrinsic and altruistic motivations (Murai, 2024). However, the activity under investigation was a field trip requiring an overnight stay, offering students extraordinary experiences beyond their typical daily routines.

This study aims to contribute to the existing body of research by investigating a case where a local organization takes on the management of regular, day-to-day cultural club activities, specifically a reporting activity. Surveys were conducted with participating students, followed by a text-mining analysis of transcribed interviews. This approach aims to determine whether students exhibit intrinsic and altruistic motivations in their participation.

## **LITERATURE REVIEW**

### **Intrinsic and Altruistic Motivation**

Intrinsic motivation arises from the enjoyment and satisfaction derived from the activity itself, without external rewards or pressures. It is associated with creativity, sustained learning, and perseverance (Ryan & Deci, 2000). Intrinsic motivation has been shown to enhance performance, particularly in open-ended tasks requiring qualitative performance (Hubley et al., 2024). Additionally, intrinsic motivation is often linked to positive workplace outcomes (Kuvaas et al., 2017).

On the other hand, extrinsic motivation is driven by the desire to obtain rewards or approval from others (Buzdar et al. 2017). It has been shown to improve performance, especially in closed-ended tasks requiring quantitative performance (Hubley et al. 2024). However, extrinsic motivation is often negatively or un-related to workplace outcomes and academic performance (Kuvaas et al., 2017; Lepper et al., 2005).

The relationship between intrinsic and extrinsic motivation includes the "undermining effect," where external rewards can diminish intrinsic motivation (Cerasoli et al., 2014). Studies on intrinsic motivation in children have shown that monetary rewards or prizes can decrease intrinsic motivation, while positive verbal reinforcement can enhance it (Anderson et al., 1976). Furthermore, intrinsic motivation has been shown to decrease linearly from third to eighth grade (Lepper et al., 2005).

Altruistic motivation is the drive to act in ways that benefit others or society as a whole. According to previous research, altruistic motivation is based on a sense of connection to

society, science, and community, and is cited as a key reason for participation in community-centered research (Carrera et al., 2018). Studies on altruistic motivation in children aged 3 to 5 have confirmed that empathetic concern significantly increases at age 5 (Hao & Du, 2021). The development of altruistic behavior in children is related to neurocognitive and emotional mechanisms. Research on children aged 6 to 12 has shown that helping behavior driven by altruistic motivation increases with age. This development is particularly influenced by emotional clarity and involves the functional integration of empathy-related networks and frontoparietal brain regions (Hoffmann et al., 2022). Altruistic motivation is also important in education, with high-achieving students showing stronger responses to altruistic values (Giersch, 2021).

Intrinsic motivation has been shown to significantly influence altruistic behavior. Previous research has revealed a positive correlation between intrinsic motivation and altruism in nurses (Sundry, 2023). Additionally, neurobiological studies on altruistic and strategic decision-making have shown that altruistic behavior provides intrinsic satisfaction, activating different reward networks in the brain. Specifically, altruistic choices activate certain areas of the prefrontal cortex (Cutler & Campbell-Meiklejohn, 2019). The intrinsic and altruistic motivations of children are interrelated, with intrinsic motivation often serving as a foundation for altruistic behavior. For example, children are intrinsically motivated when they see others helping, which promotes altruistic behavior (Hepach et al., 2013).

### **Worker Cooperative**

Worker co-operatives are enterprises owned and operated by workers. In Japan, worker co-operatives are also known as “worker’s co-op,” characterized by workers deciding their own working conditions and management policies. This allows workers to achieve a fairer and more sustainable way of working. There is little research on worker co-operatives in Japan. Lee (2023) focuses on the attention given to worker co-operatives in Japan as an alternative means to address regional economic stagnation. Specifically, how worker co-operatives are utilized for regional revitalization. The emergence of worker co-operatives in Japan began as a response by workers to the unemployment crisis and loss of livelihood following the post-war reduction of unemployment measures (Lee, 2023). Japanese worker co-operatives create alternative workplaces for socially vulnerable people and address issues related to social exclusion (Kubo, 2020). Recently, activities in the welfare field have increased, producing new value in local communities (Lee, 2023). Japan is an aging society with a very low birth-rate and a declining population. This is creating challenges in a wide range of areas, including nursing care, welfare for the disabled, childcare support, and community development. There is a diminishing workforce to take on these challenges. Those who wish to address these diverse needs have been using corporate entities such as NPOs and corporate associations, or working for voluntary organizations without corporate status, to realize their lifestyle and work style goals (Murai, 2024). One of the goals of the Japanese government is for worker co-operatives to take on some of the responsibilities of public administration, and it is necessary for worker co-operatives to have the potential to fulfill this role (Murai, 2024). Fortunately, there is precedent for this. There are many cases of worker co-operatives contributing to sustainable and vibrant local communities, such as the following examples.

“The Workers’ Co-operative Niwato Co.” in Yamagata City, Yamagata Prefecture, acts as an intermediary to connect local governments, specialized businesses, and people wishing to relocate in order to solve the increasing problem of vacant houses. “The Workers’ Co-operative Furanuisukore” in Furano City, Hokkaido, provides learning and life support, as well as parenting and educational consultation services for children who are truant or unable to adapt to school, and their parents. They are currently working towards establishing a free school. “The Workers’ Co-op Yamaguchi” in Hikari City and Kudamatsu City, Yamaguchi Prefecture, engages in civil engineering projects, management and cleaning of public facilities, and after-school day services. “The Workers’ Co-operative Ueda” in Ueda City, Nagano Prefecture,

focuses on building repairs, with experienced elderly people playing an active role (Ministry of Health, Labour and Welfare, 2025).

As of April 16, 2024, there were 90 worker co-operatives in Japan (Murai, 2024), but by December 1, 2024, this number had increased to 117. They include ‘Campsite Management’, ‘Elderly Care’, ‘Funeral Services’, ‘Adult Guardianship Support’, ‘Support for the Needy’, ‘Media Production’, ‘Childcare Support’, ‘Local Fresh Fish Sales’, ‘Making Lunch Boxes for Schools’, ‘Welfare for the Disabled’, ‘Cleaning’, ‘Building Management’, ‘Cafe Management’, ‘Festival Management’, and ‘Housekeeping’. One of the reasons for this growth is the establishment of eight worker co-operatives in Tokyo that manage Seikatsu (everyday life) Club stores (Table 1). Additionally, it is noteworthy that worker co-operatives have been established for the first time in Fukui Prefecture and Ehime Prefecture (Ministry of Health, Labour and Welfare, 2022).

As of December 1, 2024, the prefecture with the most worker co-operatives established is Tokyo, with 21 co-operatives, followed by Hyogo Prefecture with 11 co-operatives (Table 1). Of those 11 worker co-operatives, 7 are established in the Kobe area. Kobe City can be considered a leader in worker co-operative activities in Japan.

**Table 1. Worker Co-operatives by Prefecture (as of December 1, 2024).**

Hokkaido	7	Nagano	4	Okayama	2
Miyagi	1	Gifu	1	Hiroshima	1
Yamagata	1	Shizuoka	3	Yamaguchi	1
Gunma	1	Aichi	3	Ehime	4
Chiba	4	Mie	6	Kochi	1
Saitama	10	Kyoto	2	Fukuoka	3
Tokyo	21	Osaka	3	Saga	1
Kanagawa	8	Hyogo	11	Kumamoto	2
Niigata	2	Nara	2	Kagoshima	1
Fukui	2	Tottori	3	Okinawa	2
Yamanashi	2	Shimane	2	32 areas	117

### **The Worker Co-operative Children’s Editing Club**

This study focuses on the Children’s Editing Club, which is the longest-running and most groundbreaking example of a worker co-operative in the Kobe City area. The main business of the Children’s Editing Club is editorial activities. In addition to editorial activities, it has expanded to include music club activities, creating spaces for students and adults, community dining, career and alternative education projects (Kodomo Henshubu, 2025). Figures 1 and 2 show the main projects for the fiscal year 2024. The history of this project began in April, 2021, with the participation of six students. In the second term, 11 students participated. In March, 2023, the Children’s Editing Club changed its legal status to a worker co-operative, with 36 participants in the third term, 41 in the fourth term, steadily increasing the number of participants (Kodomo Henshubu, 2025). Thus, it can be confirmed that the Children’s Editing Club has been a place for student extra-curricular activity prior to Committee for Examining the Transition of Extracurricular Activities to Community-Based Models in the Kobe City Board of Education announcing its plan to fully transition middle school club activities to community-based management on July 3, 2024 (Kobe City Board of Education, 2024).



Figure 1. Home Dry Sneaker Cleaning Flyer.



Figure 2. Hyogo Penmanship and Calligraphy Festival Flyer.

### Outline of the Oji Zoo Reporting Project

The Kobe Municipal Oji Zoo is located within Oji Park in the Nada Ward of Kobe City. It is easily accessible by public transportation, with nearby train stations and bus stops. The zoo covers a total area of 80,618 m<sup>2</sup>, which is divided into several sections: the zoo itself, a science museum, an amusement park, and an area designated as an Important Cultural Property by the Japanese government. As of October, 2024, the zoo is home to approximately 700 animals from around 120 species (Oji Zoo, 2025).

This study observed and conducted a survey with the participants of the Oji Zoo Reporting Project, which is conducted annually. An overview of the project is shown in Table 2 (Kodomo Henshubu, 2025).

**Table 2. Oji Zoo Reporting Project Overview**

Dates	Saturday, September 21, and Sunday, September 22, 2024
Place of stay	Day Trip
Weather	Day 1: Cloudy; Day 2: Rainy
Participants	30 students from grade 5 to 9
Fee	Free
Purpose	Completing an article through interviews
Facility name: interview subjects	(i) Zoo Hall: A reading play and drama about the zoo performed by theater troupe members, a class where teachers from a school for students with visual impairments teach about life by touching animal bones, a quiz about animals conducted by agricultural high school students, and an animal philosophy story by an author. (ii) Lecture Room: Papercraft workshop. (iii) Animal Science Museum Rest Area: Exhibitor booths from a resource recycling company and a professional school for animal trainer training. (iv) Various Locations within the Zoo: SDG-themed quizzes and stamp rallies, as well as an AR app experience where visitors can take virtual selfies with pandas and koalas.

**Outline of the Tennoji Zoo Reporting Project**

The Local Independent Administrative Agency Tennoji Zoo is adjacent to Tennoji Park in Tennoji Ward, Osaka City, Osaka Prefecture. It is easily accessible by public transportation, with nearby train stations and bus stops. The zoo covers approximately 11 hectares and includes a museum and a multipurpose plaza. As of October, 2024, the zoo is home to about 170 species and 1,000 animals (Tennoji Zoo, 2025).

This study observed and surveyed the Tennoji Zoo Reporting Project participants, which is conducted annually. Table 3 gives an overview of the project (Kodomo Henshubu, 2025).

**Table 3. Tennoji Zoo Reporting Project Overview**

Dates	Saturday, November 9, and Sunday, November 10, 2024
Place of stay	Day Trip
Weather	Day 1: Sunny; Day 2: Sunny, later cloudy
Participants	23 students from grade 5 to 9
Fee	Free
Purpose	Completing an article through interviews
Facility name: interview subjects	(i) Museum Hall: A planetarium guided by a completely blind guide, a reading play and drama about the zoo performed by theater troupe members, a class where teachers from a school for students with visual impairments teach about life by touching animal bones, a talk about the brilliance of insect life and fun stories by a photographer and designer, an animal philosophy story by an author, and animal exercises and quizzes in sign language. (ii) Laboratory Workshop in the Museum: Papercraft workshop. (iii) Event Space Under the Deck: Introduction of SDGs initiatives and workshops by sponsoring companies. (iv) Various Locations within the Zoo: SDGs-themed quizzes and stamp rallies.

## METHODOLOGY

A survey was conducted via an SNS messaging group targeting 30 students who participated in the Oji Zoo Reporting Project and 23 students who participated in the Tennoji Zoo Reporting Project from grades five to nine. Notably, there were 20 students who participated in both the Oji Zoo and Tennoji Zoo projects, with a total of 43 students participating in either.

The survey included the following two questions:

- (1) “Through the zoo reporting project, please describe a time when you felt you were able to think, act, and express yourself.”
- (2) “Through the zoo reporting project, please tell us about a time when you did something for the people around you or received something from them.”

There were no upper- or lower-word limits for the responses, and blank submissions were allowed if there was any uncertainty. Ethical considerations included explaining the purpose and objectives of the survey to all parents and students, obtaining parental consent before the survey, and clarifying via the SNS group that the survey results would be anonymous to ensure that individuals could not be identified.

A text mining analysis was conducted on the responses obtained from the students in the two projects to identify the words that appeared and determine which project they were biased toward. The software used was ‘AI Text Mining’ by User Local (User Local, 2025).

## FINDINGS

Of the 30 students from grades 5 to 9 who were asked to participate in the survey for the Oji Zoo interview project, 15 responded (response rate of 50.0%). Reflecting on the project, 7 students (46.7%) mentioned periods when they engaged in intrinsically motivated actions. Additionally, 5 respondents (33.3%) experienced altruistic actions, either by themselves or others. It should be noted that only altruistic actions performed by the students were included, while events related to interviewees and staff were excluded.

**Table 4. Intrinsically and Altruistically Motivated Events in the Oji Zoo Reporting Project**

Respondent Number	Intrinsic Motivation – Question 1	Altruistic Motivation – Question 2
1	No event	No event
2	No event	No event
3	No event	I was nervous when interviewing and asking questions, but my friends made me feel encouraged.
4	I was in charge of interviewing the scriptwriter and director. At school, I learned that it’s good to respond in a way that makes the person you’re talking to feel like they’re being listened to, so I kept that in mind. Additionally, I was able to utilize my previous interviewing experience.	No event
5	I was able to actively ask questions while interviewing such as when I took photos.	No event
6	No event	No event

7	No event	My team members made me take photos while interviewing
8	No event	No event
9	I wasn't very interested in science, but I learned about animal bones. I was surprised to find out how much can be understood just from animal bones.	No event
10	While interviewing at the company booth, I timed my interviewing by observing when it was less busy.	They made notes for me, and when I got stuck with a question, someone else asked it on my behalf.
11	While listening to the author, I made an effort to simultaneously follow along with the author's book.	My team members made notes to write the summary that I was originally supposed to write.
12	I was able to do interviewing while cooperating with my friends.	I worked with my team members to come up with the text.
13	No event	No event
14	No event	No event
15	I thought for myself and asked various questions.	No event

Out of the 23 students from grades 5 to 9 who were asked to participate in the survey for the Tennoji Zoo interview project, 15 responded (response rate of 65.2%). Reflecting on the project, 10 students (66.7%) mentioned periods when they engaged in intrinsically motivated actions. Additionally, 9 respondents (60.0%) experienced altruistic actions, either by themselves or others. It should be noted that only altruistic actions performed by the students were included, while events related to interviewees and staff were excluded.

**Table 5. Intrinsically and Altruistically Motivated Events in the Tennoji Zoo Reporting Project.**

Respondent Number	Intrinsic Motivation – Question 1	Altruistic Motivation – Question 2
16	I was able to think for myself and do interviewing and compile articles.	No event
17	No event	No event
18	No event	I had one of my team members come up with the text. After that, they taught me some tips to write.
19	No event	I was happy when one of my team members casually made an effort to ask my thoughts after the planetarium show.
20	No event	I was sure to use the most polite language possible when interviewing people.
21	While interviewing with the sign language interpreter, I was able to ask further questions based on my impressions and observations. I smiled and mimicked the gestures used in sign language communication while interviewing. Additionally, I expressed my opinions more clearly than before.	I was constantly mindful to ensure that the new members participating for the first time didn't feel nervous or troubled. I was pleased to see the new members were interviewing and made notes diligently and earnestly.

22	While actually interviewing, I completely forgot the content I was supposed to cover while interviewing, but I quickly came up with other questions.	One of my team members made questions when I was hesitant to ask.
23	With a visually impaired person, I tried hard while interviewing to be easily understood for someone with a visual impairment.	When compiling the article, I contributed my opinions and helped organize the notes while interviewing.
24	I was in charge of interviewing for the play and learned that there are many ways to express things in sign language. I also tried using sign language myself.	When I had to write the article, I was able to think calmly because my team members made examples to show me and offered suggestions.
25	I was able to ask questions without feeling embarrassed.	No event
26	While interviewing, I mentioned my interest in insects first to break the ice and make it easier to get the conversation going.	When I started to lose focus because I was getting hungry, one of my team members made an effort to get some fries for me.
27	I thought about various things to write the article. Then, I exchanged opinions with my colleagues to write it.	I exchanged gummies with one of my team members during the break.
28	I was able to use the camera and took photos.	No event
29	No event	No event
30	I touched the animal bones and identified the animal.	No event

### Text Mining Comparison of Intrinsically and Altruistically Motivated Events across Both Projects

Despite both the questions and answers being in Japanese, efforts were made to maintain the frequency of the following words during translation. Table 6 lists the frequently occurring words because of text mining intrinsically and altruistically motivated events in the projects at Oji Zoo and Tennoji Zoo. The frequently occurring words in intrinsically motivated events were ‘animal,’ ‘able,’ ‘bones,’ ‘in charge,’ ‘interviewing,’ and ‘took (photos).’ The frequently occurring words in altruistically motivated events were ‘make,’ ‘interviewing,’ ‘members,’ ‘took (photos),’ and ‘write.’

**Table 6. List of Frequent Words in Intrinsically and Altruistically Motivated Events.**

Frequent Words in Intrinsically Motivated Events			Frequent Words in Altruistically Motivated Events		
animal (4)	able (7)	bones (3)	made (9)	interviewing (5)	members (11)
in charge (2)	interviewing (14)	took (photos) (2)	write (4)		

### Investigation and Analysis Results

#### Context of Intrinsically and Altruistically Motivated Events

By reviewing the survey responses in Tables 4 and 5, the context of the words frequently seen in intrinsically and altruistically motivated events were summarized in Tables 7 and 8.

**Table 7. Context of intrinsically motivated events in the Zoo Reporting Projects.**

Respondent Number	Context of intrinsically motivated events in the Oji Zoo Reporting Project.	Respondent Number	Context of intrinsically motivated events in the Tennoji Zoo Reporting Project.
4	During the interview	16	During the interview and article writing
5	During the interview	21	During the interview
9	During the interview	22	During the interview
10	During the interview	23	During the interview
12	During the interview	24	During the interview
		25	During the interview
		26	During the interview
		27	During the article writing
		28	During the interview
		30	During the interview

**Table 8. Context of altruistically motivated events in the Zoo Reporting Projects.**

Respondent Number	Context of altruistically motivated events in the Oji Zoo Reporting Project.	Respondent Number	Context of altruistically motivated events in the Tennoji Zoo Reporting Project.
3	During the interview	18	During article writing
7	During the interview	19	During the interview
10	During the interview	20	During the interview
11	During article writing	21	During the interview
12	During article writing	22	During the interview
		23	During article writing
		24	During article writing
		26	During the break time
		27	During the break time

From Table 7, it was confirmed that intrinsic motivation tended to occur during interviews. On the other hand, from Table 8, it was confirmed that altruistic motivation tended to occur not only during interviews but also during article writing and break time.

## CONCLUSION

To alleviate the excessive workload of teachers, local communities in Japan are increasingly taking on the responsibility of accepting students after school, as mandated by the government. One example of this initiative is the activities of the Worker Co-operative Children's Editing Club. As part of these activities, students participated in interviews at Oji Zoo and Tennoji Zoo, completing their respective projects. This paper evaluates the students who participated in these projects. Through surveys conducted with the students, it was suggested that intrinsic motivation is elicited during interviews. Therefore, to further enhance the success of the Children's Editing Club, the qualitative improvement of interview activities can be considered a key factor. Additionally, altruistic motivation was observed not only during interview activities but also during article writing and break time. Hence, communication among the students throughout the entire project can be considered crucial when designing the projects. These results suggest that local organizations can serve as a hub connecting students to society, potentially making extracurricular activities more meaningful. One of the key strengths of the Children's Editing Club is its role in connecting students with society. In practice, clients make requests to worker co-operatives and their members perform tasks such as conducting interviews or writing articles for the clients. This entire process serves as important professional experience for student members.

## Limitations and Future Research

This study aimed to verify the intrinsic and altruistic motivations that arose in students during interview activities while analyzing each interview individually. This was done to evaluate the feasibility of club activities transitioning to local community activities. For a deeper examination, it is necessary to conduct a longitudinal study. For example, by conducting questionnaires in multiple instances with same respondents where respondent identification numbers are tracked, such that previously isolated interviews would be connected into a continuum, providing new insights. As the same Children's Editing Club participants respond to more questionnaires, it will be possible to capture their internal and external changes. Additionally, by expanding the survey subjects to include parents, it will be possible to confirm the differences in responses between students and parents and open doors to new discoveries. This study used intrinsic and altruistic motivations as indicators to evaluate the respondents. However, other indicators could be used to gauge self-transformation, such as self-efficacy (the belief in one's ability to succeed) (Chen et al., 2001; Scherbaum et al., 2006), self-esteem (the sense of accepting one's own value and existence positively) (Tomas & Oliver, 1999; Alessandri, et al., 2015), and happiness, which includes temporary joy and fun, emotional happiness, and broader, more lasting well-being (Lyubomirsky & Lepper, 1999; McDowell, 2010). To evaluate the transition of club activities, it is necessary to conduct interviews with stakeholders such as parents and school officials to identify indicators of success, rather than researchers deciding unilaterally which indicators to use.

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