



Changes and Trends in High School Students' Awareness of Information Ethics Following a Lecture on Information Ethics

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Changes and Trends in High School Students' Awareness of Information Ethics Following a Lecture on Information Ethics

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Abstract

A lecture was conducted for high school third graders, the age group with the highest SNS usage rate in Japan, using SNS-related trouble cases from nursing students' clinical practice. The lecture explained the good and bad aspects of SNS-related behavior based on related laws for students who were third graders in high school in 2022 and 2023. The changes in awareness after the lecture were similar in both years. However, there was a slight increase in inappropriate attitudes toward SNS posts among students in 2023. In particular, it was found that there were dangerous attitudes toward posting methods when there was no target audience for the post. Continuous education is necessary to enable students to have a critical awareness of information ethics and take correct actions.

Keywords: high school students, information moral training, nursing students, social network service

1 Introduction

In modern society, the proliferation of the internet has led to an increase in the amount of information available and made it easier to gather information. However, there is also a risk of the spread of misinformation and misleading information. Therefore, the ability to distinguish between truth and falsehood and assess reliability is required.

Information ethics is an ethical guideline for the correct use and sharing of information. In the information society, it is essential to have information ethics skills. Currently, information ethics education in Japan from elementary school to high school aims to develop the skills of processing, judging, and collecting information. Specifically, it consists of five pillars: (1) ethics of the information society, (2) understanding and observing the law, (3) wisdom for safety, (4) information security, and (5) building a public network society [1]. According to a 2022 survey by the Ministry of Internal Affairs and Communications, the age group with the highest SNS usage rate is between 13 and 29 years old [2]. In particular, SNS use is prevalent among high school and college students, and there is a tendency for more frequent problems. Therefore, information ethics education is also necessary for high school students, and the subject of "Information" has been

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made compulsory in high school education since 2003 to cultivate practical information utilization skills, scientific understanding of information, and attitudes to participate in the information society. However, it has been reported that while high school students have many opportunities to access information, education on information ethics is insufficient [3]. In particular, in information ethics education, it is important to understand the law when handling information, but it is expected that there may be cases where the educators' ICT education skills and legal knowledge are insufficient, and there is concern about the gap in information ethics education. In this study, a lecture was conducted for high school students using the information ethics guide created for nursing students, and the effects and learning outcomes were investigated. This guide is characterized by its emphasis on regulating behavior based on legal knowledge.

This study compares the effects of lectures aimed at improving high school students' awareness and skills of information ethics over two years and considers teaching methods based on the trends observed.

2 Research Methods

2.1 Target

Male and female third graders of high schools in Prefecture A in 2022 and 2023.

2.2 Method

In 2022 and 2023, two out of four cases in the information ethics guide for nursing students were used to conduct a 30-minute lecture using "video" and "slides". The two cases taken up in the lecture were the protection of personal information based on the post and the content related to shooting with smartphones. We made two of the contents related to it and gave lectures with the same content and method in 2022 and 2023.

2.2.1 Summary of case studies

Each case was summarized in Manga format to learn about the proper handling of information, based on incidents that occurred during clinical practice for nursing students.

2.2.2 Case studies

Case 1: Signing and sealing the pledge

Case 2: Duty of confidentiality in clinical training

Case 3: Handling of practice records

Case 4: Photographing using a smartphone

2.4 Survey Contents

The questionnaire was conducted using an anonymous self-administered format.

A. Items related to learning from case studies

B. Interpretations of actions based on the case study statements related to three issues, part-time job, university, and interpersonal relationship as an application from the content of the lecture

2.5 Analysis Method

The analysis was performed by simple tabulation for each year of 2022 and 2023 and compared. For free descriptions, an overview of the reactions shown by the participants after attending the lecture was summarized.

2.6 Ethical Considerations

This study was conducted with the approval of the Ethics Review Committee of Shubun University (Approval No. 2022SR001). The purpose of the study, research cooperation, and ethical considerations for responding to the voluntary web questionnaire were explained in writing in the moral guide. Consent was deemed to have been obtained by answering and submitting the web questionnaire. Survey data was strictly managed to prevent access by anyone other than researchers.

3 Results and Discussion

A total of 308 responses were obtained in 2022 and 285 responses in 2023.

3.1 Items Related to Learning from Cases

For Question 1, "Were any of the cases reminded you of your own behavior in the past?" the response "Yes" was 72 (23.5%) in 2022 and 49 (17.2%) in 2023, showing a slight decrease in 2023. The breakdown of "Yes" responses is shown in Figure 1. Since multiple answers were possible, there were 79 responses in 2022 and 63 responses in 2023.

Comparing the two years, there was no significant change in the proportion of each item of the behavior that reminded students of their past actions, and it was found that "taking pictures of the contents of books and prints" was the most common in both years. However, the percentage was higher in 2022 at 51 (64.6%) than in 2023. The next most common behavior was "posting about others", with 20 (25.3%) in 2022 and 12 (19%) in 2023.

The item that was consistently selected with the highest proportion of behaviors that reminded students of their past actions for two consecutive years was the copyright law's right of reproduction (Article 21) related to "taking pictures of the contents of books and prints". While reproduction is not a problem when students are studying for personal use, the moment they send and share the content with others on SNS, it becomes a copyright infringement. In this way, problems often arise from the actions "after" reproduction, and it is necessary to understand such details and explain them in the instruction.

In other words, the results suggest that simply explaining that "taking pictures of the contents of books and prints is wrong" is not effective. Instead, it is necessary to explain the matter down to the level of behavior in order to lead to a change in students' behavior.

Next, in order to confirm their knowledge of laws related to posting, they were asked with multiple answers possible "What laws could be violated even if inappropriate content is posted on SNS using a '24-hour deletion function' or 'posting with the intention of immediate deletion'?" The results are shown in Figure 2.

Among the 287 responses in 2022 and 285 responses in 2023, the items that showed a change between 2022 and 2023 were as follows: In 2022, the most common selection was violation of the "Personal Information Protection Act" with 237 responses (82.6%). This was followed by the "Portrait Rights" with 228 responses (79.4%). In contrast, in 2023, "Copyright" was the most

common selection with 217 responses (76.1%), followed by "Portrait Rights" with 214 responses (76.1%).

Regarding inappropriate posting, it is possible to violate any of the four laws, but it depends on the content of the post. For example, since multiple answers were allowed, students could select all four laws.

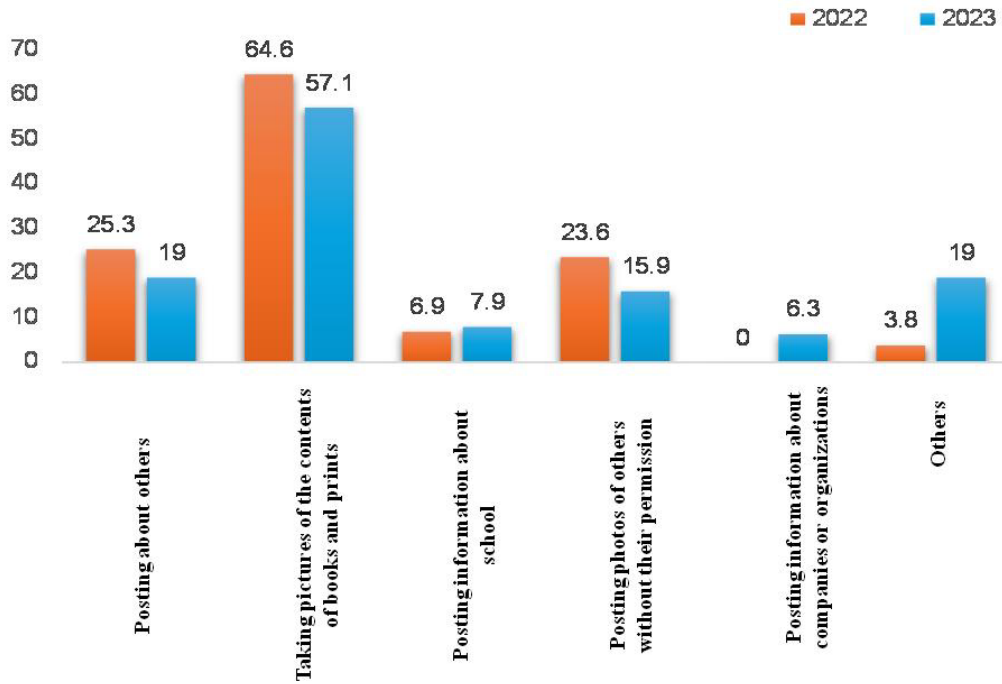


Figure 1: Matters that come to mind in the introduces cases

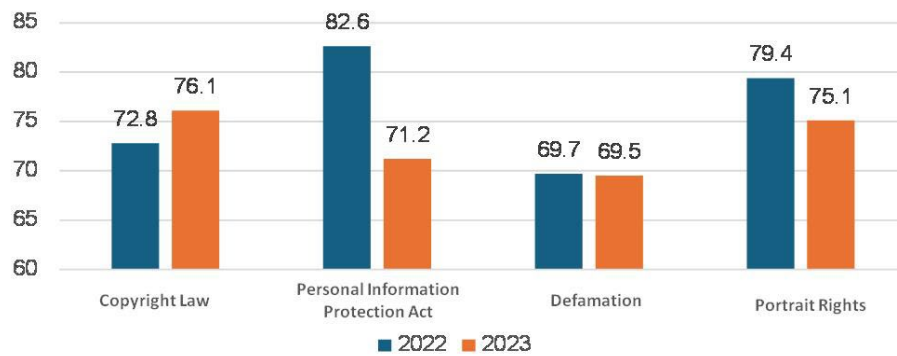


Figure 2: Laws violated by inappropriate posts

It is possible that the students in 2022 became more aware of the leakage of personal information and the infringement of the right of publicity through the lecture, while in 2023, they may have become more aware of copyright and the right of publicity.

The fact that students, regardless of which law they chose, became aware that inappropriate posts could violate laws is a promising result that suggests they may be more cautious when posting on SNS. Okamoto [4] and Kanetsuna et al. [5] advocate for high school students to make "smart posts" and have a "certain sense of crisis." They believe that showing the laws that lie beyond the use of SNS can serve as a basis for regulating behavior.

3.2 Application of the Lecture Content

To apply the content of the lecture, three cases from everyday life were presented: 1) part-time job, 2) university, and 3) friendship, and the students were asked to choose the most correct action.

For the part-time job case, the question was about the response to the following situation: "Part-time worker A took a picture of himself/herself putting his/her body in the refrigerator in the kitchen (pranking) and posted it on SNS." As a result, over 80% of the students in both 2022 and 2023 chose the answer "Refrain from the prank and do not post the picture," which was the most common response.

On the other hand, in 2023, the option "It's okay to just take the picture," which was one of the other options, was selected by 23 (7.6%) respondents in 2022 and 33 (11.6%) respondents in 2023, and the option "It's okay to prank, but it's not okay to post the picture on SNS" was selected by 19 (6.3%) respondents in 2022 and 31 (10.5%) respondents in 2023. Both of these options increased from the previous year.

In recent years, there has been a year-on-year increase in acts that violate public order and good customs, such as part-time terrorism (prank by a part-time worker).

According to a 2019 article in the Nikkei newspaper, 18% of internet users aged 13 and over have experienced malicious posts [6]. This suggests that sufficient education is needed about the disadvantages of inappropriate posts.

In addition, for the question in the university section, "A asked me to give him/her friend B's contact information immediately after entering university, so I gave A B's contact information without permission," there were 303 responses in 2022 and 285 responses in 2023. In both years, the most common response was "Get B's permission before giving it out," accounting for 80% of all responses.

On the other hand, in both years, about 10% of the respondents answered "Tell B after giving out the contact information" or "Give out the contact information without B's permission."

The perception that it is okay to get permission later revealed that there are students who are not aware of personal information leaks and the right of publicity. This attitude can also be seen as problematic behavior in the following section on friendship as well.

For the question about friendships, "The three close friends frequently exchanged messages on SNS, but in the conversation with friend A, there was content about friend B (both good and bad aspects). Example: (B is good in ××, but I wish B could fix ××)" The most common response was "I do not post contents on SNS that evaluates friend B, including good aspects, without friend B's knowledge," with 237 (78.2%) responses in 2022 and an increase from 2022 to 229 (80.4%) responses in 2023.

4 Conclusion

In this study, we conducted an information ethics lecture for high school third-graders in 2022 and 2023. The lecture explained the laws related to SNS based on cases that occurred during

nursing students' clinical practice. In the post-lecture awareness survey, about 80% of the students were able to demonstrate correct behavior, but there were inappropriate responses from about 10-20% of the students, which was almost the same for both years.

It is undeniable that the information society will continue to develop, but SNS-related troubles will not decrease if we continue to use it without clear rules. We believe that it is necessary to construct information ethics education as a part of the crisis management educations in the future.

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