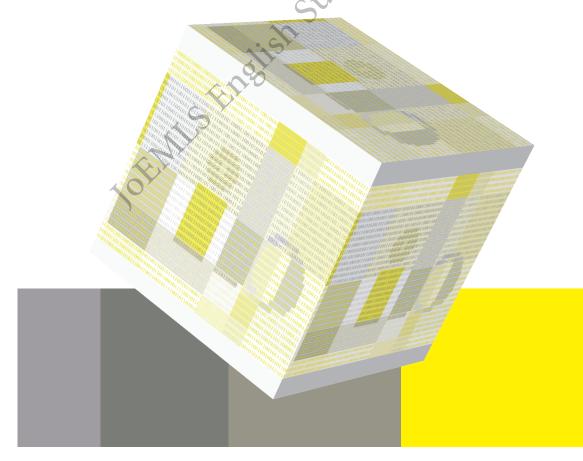
#### **JoEMLS**

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## 教育資料與圖書館學 JOURNAL OF EDUCATIONAL MEDIA

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#### **JOURNAL OF EDUCATIONAL MEDIA & LIBRARY SCIENCES**

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# Best Practices for the Digital Scholarly Journal Communication

The establishment and maintenance of a website has an important symbolic meaning within the digital environment. For a scholarly journal, the official website acts as a representative of the journal's prestige within academia, while also carrying the vital responsibility of displaying the publisher's professional image. In addition, the integrity of the information presented on the official website has a direct effect on readers' trust toward the journal. In order to enable readers to better understand, browse, and participate in the journal's academic activities via the website, along with enjoying other relevant services such as consulting and obtaining article content, the official website search function and the integrity of the information provided within the articles are of great importance.

In recent years, we have actively participated in efforts regarding scholarly communication, open science, open access, and journal publication, through implementing our digital collection, as well as article licensing and international cooperation. We have also introduced numerous value-added publishing policies, such as Open Point, Open Peer Review, and InSight Point guided reports. However, with the back-end architecture of our current journal collection website having been established over a decade ago, the front-end web page appearance, the consultation function, and the architecture of the back-end management platform all no longer meet our current requirements.

In early 2023, we received a grant from the National Science and Technology Council (NSTC) Research Institute for the Humanities and Social Sciences for digital communication purposes, and have therefore set out to improve the appearance of front-end data fields, our back-end database management, and the search functions for website users on the existing journal website. We have also invested in labor power to establish a bibliography of the 143 articles published over the past 10 years, so as to enable readers to use search terms to find bibliographic information and article references. This will increase the likelihood of readers successfully finding specific articles via the website search function.

Furthermore, in order to promote the academic achievements of the journal to the international community, as well as create opportunities for interaction with international readers and strive to be awarded with the Directory of Open Access Journals (DOAJ) Seal, the journal has chosen to use the

Internet Archive as a third-party repository, to which full-text electronic article files and bibliographic information will be retrospectively uploaded. Within this process, and so as to expand the efficacy of the digital dissemination of academic articles, we are trying our utmost to retrospectively register published articles that have not previously been registered with a Digital Object Identifier (DOI) and present them within the bibliographic information of the third-party repository simultaneously. This is so as to guide readers to visit our website via the DOI link and to make further use of value-added services relevant to the articles.

Through our dedication to the aforementioned value-added services, we hope to enhance readers' confidence in our journal, leading to more active engagement with and use of the wealth of academic content that we offer.

In this issue, the external review process was conducted across a total of 10 articles, of which only three were accepted. The remaining seven articles were rejected due to insufficient content, resulting in a 70% rejection rate for this issue. Prior to the external review, a further 13 English-language articles (from both international and domestic authors) were returned due to their research objectives and word counts being inconsistent with the journal's policies and standards. The scholarly works that were successfully published in this issue include: Re-Shiuan Chen and Ya-Ning Chen, "Analysis and Development of a Research Data Policy Framework for Higher Education Institutions"; Chiao-min Lin and Chih-yen Chiu, "The Influence of Picture Book Integrated Gender Equality Education Curriculum on the Physical Autonomy Cognition of Junior Elementary School Children"; and Mei-Lien Hsueh and Chien Chou, "An Exploratory Study on the Taiwanese Higher Education Students' Understanding of Personal Data Protection Act."

We look forward to further discussion and sharing of research with our academic peers in the future, and wish to express our sincere gratitude to all authors and reviewers for their hard work and dedication.

Sincerely,

Jeong-Yeou Chiu

JoEMLS Editor-in-Chief

Chang-Huei Lin

JoEMLS Editor



# Analysis and Development of a Research Data Policy Framework for Higher Education Institutions $^{\psi}$

Re-Shiuan Chen<sup>a</sup> Ya-Ning Chen<sup>b\*</sup>

#### Abstract

Academic funders, publishers, and Higher Education Institutions (HEIs) have developed research data policies gradually since research data have been regarded as crucial scholarly evidence and assets. However, there has not been a study analyzed composed items and framework of HEIs' research data policies. This study aims to examine the evolutional development of research data policies including whether policies are an individual document or a part of other policies, the relationship between policies and other related documents, and components of HEIs' research data policies, through by analyzing 39 research data policies selected from top-ranked HEIs. In addition to content analysis of components listed in the HEIs' research data policy, the study has found that influence and reference relationships have existed between HEIs' research data policies and other documents. According to analysis of components of HEIs' research data policies, this study has also built up a framework composed of four categories as follows: general, planning, data stewardship and monitoring. And this study furthering divided components of four categories into mandatory, recommendatory and optional. It is also suggested to develop HEI's data policy through promotion by national-level policy, encourage libraries collaborating with related stakeholders to frame data publishing and citation norms and offer research data services in terms of requirements of research process.

**Keywords:** Research data policy, Research data management, Higher education institutions

Ψ This article is based on the first author Re-Shiuan Chen's master thesis "Analysis and Development of Research Data Policy Framework for Higher Educational Institutions". The authors also presented a portion of the findings as a poster article entitled "The Role and Responsibility in the Research Data Policy of the Top-Ranked Higher Education Institutions" (全球頂尖高教機構研究資料政策中的角色與職責) at the 2nd Conference of LIS and Practice (CoLISP 2022).

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#### **SUMMARY**

#### Introduction

Research data, deemed valuable assets, form the foundation of science. To enhance academic research quality and maintain best practices in research data management (RDM), academic publishers, funders, and higher education institutions (HEIs) are actively developing research data policies, which are official documents covering various issues, including data ownership, data management plans (DMPs), privacy, and other related topics. The relationships among research data policies and other documents are complex and worth exploring. Nevertheless, to date, no study has analyzed the relationships, compositions, and framework of research data policies in HEIs. Consequently, this study aims to investigate the compositions and relationships of the 39 research data policies selected from the 55 top-ranked HEIs and to propose a framework for HEI research data policies.

#### **Literature Review**

Academic funders, publishers, and HEIs have increasingly developed research data policies, recognizing them as crucial scholarly evidence and assets. These policies reveal substantial variation across countries and institutions (Briney et al., 2017), with Liu et al. (2020) highlighting distinctions in the focal points of research data policies in the United Kingdom, Australia, and the United States—demonstrating that a world-scale study on institutional research data policies is necessary. In addition, while existing studies have identified various relationship types between research data policies and other related documents, a more comprehensive analysis is required. The following section delineates these identified relationships. First, Cox et al. (2017) emphasized the pivotal role played by policy makers and funders in enhancing research data management and data sharing, as revealed in an international survey. Second, inconsistencies among research data policies from different stakeholders may have contributed to conflicts. Third, Briney et al. (2015) categorized HEI research data policies as standalone or under intellectual property policy. Fourth, Higman and Pinfield (2015) observed that HEI research data policies often interlink with other intrainstitutional documents or policies, such as academic ethics, information security, and intellectual property rights. Last, Hong Kong University's research data policy has been adapted from that of the University of Oxford.

The significance of institutional research data policies emerged through a survey encompassing 68 HEIs in the United States (Keralis et al., 2013), catalyzing further research into their development. Nevertheless, prior studies have predominantly focused on specific countries (Briney et al., 2015; Cox et al., 2017;

Huang et al., 2021; Liu et al., 2020). Moreover, previous global-scale studies have selected top-ranking HEIs from one of international university rankings as a research subject (Liu et al., 2020; Liu & Liu, 2020), potentially limiting the generalizability of the conclusions. In terms of content analysis, existing studies and guidelines have explored the structure (Xing et al., 2019; Xing & Song, 2019; Liu & Liu, 2020) and components (Briney et al., 2015; The Data Life-Cycle Management Project, 2016; Erway, 2013; Hall et al., 2013; Higman & Pinfield, 2015; Horton, 2018; LEaders Activating Research Networks Project, 2017; Liu et al., 2020; Portage Institutional RDM Strategy Working Group, 2020) of research data policies in HEIs. However, a comprehensive study of the components and their distributions is still lacking. Furthermore, no study has yet proposed a framework for HEI research data policies.

As a result, this study aims to examine the development of research data policies, including whether policies are standalone documents or part of other policies, the relationships between policies and other related documents, and the components of HEI research data policies. Ultimately, his study aims to establish a framework for HEI research data policy. The research questions (RQs) are as follows:

- RQ1: What is the prevalence of standalone and affiliated research data policies among the top global HEIs?
- RQ2: What are the relationships between the research data policies and other documents of top global HEIs and other documents?
- RQ3: What content structures are used in the research data policies of top global HEIs?
- RQ4: What are the categories and components of the research data policies of top global HEIs? What is their distribution?
- RQ5: What is the research data policy framework of HEIs? Which elements can be classified as mandatory, recommended, or optional within this framework?

#### **Research Method**

From 7 February to 14 March 2022, this study collected information on the 55 HEIs from the four well-known world university rankings, including the Academic Ranking of World Universities, Quacquarelli Symonds World University Rankings, the Times Higher Education World University Ranking, and U.S. News & World Report.

The analysis codes were derived from the literature review as follows.

 The independence of the HEIs' research data policies (RQ1): standalone, affiliation, decentralized, and no policy.

- The relationships between the HEIs' research data policies or other documents (RQ2): adaptations, conflicts, influences, and references.
- The structure of the HEIs' research data policies (RQ3): topics, roles and responsibilities, principles, and others.
- The categories and components of the HEIs' research data policies (RQ4):
  - Categories: general, planning, data stewardship, and monitoring.
  - Codes: aims/objectives, data ownership, definitions, disposal/ destruction, DMP, ethics, funding and cost, related policies, review, risk management, roles and responsibilities, access storage/retention, and others.

In consideration of grouping mandatory, recommended, and optional components of the research data policy framework (RQ5), this study employed a weighted index structured according to varying levels of detail, as outlined below.

- Degree 0 indicates no regulations.
- Degree 1 indicates regulations that present tasks without guidance or details.
- Degree 2 indicates guidelines or principles are provided.
- Degree 3 indicates that details about how to complete the tasks are provided.

The criteria for grouping mandatory, recommended, and optional elements were determined by subtracting the highest and lowest values of the sum of the weighted index and dividing by the number of groups.

#### Results

A total of 39 research data policies were identified from 40 (72.73%) HEIs. Among these, 31 (56.36%) HEIs had standalone policies, six (10.91%) had affiliated policies, and three (5.45%) had distributed individual policies. Nine (16.36%) had not yet formulated institutional research data policies, and for three institutions (5.45%), the existence of such policies could not be conclusively determined, as online inquiries yielded no search results and attempts to contact staff members from these institutions for assistance proved unsuccessful. In addition, the policy of Heidelberg University was available only in German, and access to the policies of the California Institute of Technology and the National University of Singapore was limited to their faculty and students. Therefore, these three policies were excluded from the content analysis. Additionally, Harvard University has independently formulated policies pertaining to research data retention, ownership, and security. As a result, this study analyzed 39 research data policies, including 33 standalone policies and six affiliations, from 37 HEIs.

The main findings of this study are as follows.

- 1. This study created 48 codes for the relationships labeled as "influence," with over 80% (40 codes) sourced from external documents. Among these, 22 (55%) are related to international or national motivations, 15 (37.5%) are associated with funders' requirements or movements, and the remaining three (7.5%) are linked to state regulations or consortia initiatives.
- 2. This study found that HEI data policies reference external documents, such as funder policies/statements and privacy laws, while internally relying on intellectual property rights, research conduct, security, and record preservation. Additionally, research data policies may list the local laws as related policies.
- 3. This study found that over half (23, 58.97%) of research data policies utilized a hybrid structure. Specifically, 17 (43.59%) policies employed both "topics" and "roles and responsibilities" as their structure.
- 4. This study investigated eight roles and their corresponding responsibilities as outlined in the 39 research data policies. These roles encompass the university, researchers, principal investigators, supervising unit of researchers, the research office, the information technology department, the library, and the institutional review board.
- 5. This study examined the content and components of four categories: general, planning, data stewardship, and monitoring. Furthermore, the research data policy framework in HEI was established as follows.
  - (1)Mandatory items: aims/objectives, data rights, definitions, roles and responsibilities, related documents, scope of the policy, and storage and retention.
  - (2) Recommended items: Accessibility, disposal and destruction, DMP, and implementation.
  - (3)Optional items: Citation and publication, cost and risk management, ethics reviews, and related issues.

#### Conclusion

This study conducted content analysis on 39 research data policies obtained from the top 55 ranked universities to identify their types, structure, relationships, and components. The framework of HEI research data policy was also established. Additionally, eight roles in these policies and their responsibilities were presented. Nevertheless, the limited sample size and the limited geographic distribution of samples in this study may constrain the findings, necessitating further research.

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# The Influence of Picture Book Integrated Gender Equality Education Curriculum on the Physical Autonomy Cognition of Junior Elementary School Children<sup>4</sup>

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#### **Abstract**

This study explored children's learning effects on physical autonomy cognition and their learning feelings by integrating picture books into gender equality education courses. This study adopted the pre-test and post-test design of the pre-experimental research. The participants randomly had selected two classes of first-grade elementary school students as the teaching objects, and had implemented an eight-week sex education course. One class was the experimental group that received picture books integrated into teaching, the other class maintained textbook teaching. Before teaching, the Physical Autonomy Cognition Scale was used for pre-testing, then after teaching, post-testing was carried out to compare the quantitative analysis data, and supplemented by qualitative interviews to understand students' opinions on the implementation of the course. The results indicated that integrating picture books into the sexual education curriculum was effective for primary school children's physical autonomy cognition, and school children were preferred to the teaching method of integrating picture books into the curriculum. In the comparison between the two effects of picture book teaching and textbook teaching, there was no significant difference in the "basic concept" of physical autonomy cognition, but in "situational judgment", the learning effect of picture book teaching was better than that of textbook teaching, and it had reached statistical significance. Finally, the research results proposed suggestions for integrating picture books into teaching.

**Keywords:** Picture book teaching, Gender equality education, Physical autonomy cognition, Body safety education, Learning effects

 $<sup>^{\</sup>psi}$  This article is based on the results of the master's thesis "The Impact of Using Picture Books to Integrate Gender Equality Education Curriculum on the Awareness of Physical Safety of Junior Elementary School Children" and was rewritten and completed by the supervisor.

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#### **SUMMARY**

#### Introduction

Sexual harrassment incidents are increasing in elementary schools. Sex jokes or improper physical contact among classmates are considered as sexual harrassment. However, pupils might not realize at the time, nor understand how to cope with it. The stage from preschool to junior elementary school is the critical time to develop life education. Physical safety education should be started from childhood. Children have to present correct physical autonomy cognition, understand what is improper contact, and know how to seek for assistance and solve problems when encountering dilemmas. Junior elementary school pupils enjoy listening to stories that the understanding of interpersonal interaction could be expanded through the connection between story scenarios in picture books with personal experiences. For this reason, the learning effectiveness of picture book integrated gender equity education curriculum on pupils' physical autonomy cognition is discussed in this study. Traditional textbook teaching and picture book integrated instruction are designed to understand pupils' learning difference in ditinct teaching styles.

#### Methods

Health class in school curricula is used for the experimental teaching of picture book integrated gender equity education. Two G1 classes with 24 pupils in each class in an elementary school in Hsinchu County, Taiwan, are randomly sampled as the research objects. The experimental group is taught with picture book integrated curriculum, and the control group remains textbook didactic teaching style. The prior conditions of pupils in two classes are similar, without receiving gender equity education curriculum before the teaching experiment. The researcher, according to textbook contents, co-designs the curriculum with other teachers and uses "physical contact between others and me", "my body boundary", and "refuse unsafe contact" as the teaching topics. The selection of picture books is based on readings provided in Gender Equity Education web and reading lists recommended in the reading promotion of elementary school freshmen by Ministry of Education.

The evaluation of learning effectiveness is referred to "physical autonomy cognition survey" (Tsai, 2020) and "cognition and response of body boundary questionnaire" (Ong, 2017), which are integrated and revised to become "physical autonomy cognition scale" adopted in this study. Before the formal practice, junior elementary school teachers and the school guidance counselor are invited to the expert validity assessment. The scale items are divided into "basic concept", for understanding pupils' concept about physical autonomy cognition,

and "situational judgment", for understanding pupils' behavioral judgment of physical safety situations through situational descriptions. The questionnaire is scored with 5-point scale.

#### Results

### Comparison of Learning Effectiveness on Physical Autonomy Cognition Between Two Teaching Styles

Regarding the pretest performance on physical autonomy cognition scale, pupils in the experimental group and the control group do not appear significant differences in basic concept and situational judgment, revealing the consistence of pupils' physical autonomy cognition in the teaching experiment.

The pretest/posttest performance between the experimental group and the control group is compared after the 8-week experimental teaching with different teaching styles. The posttest performance with picture book integrated instruction is much higher than it with textbook teaching. The basic concept cognition and situational judgment cognition with picture book integrated instruction increase 5.21 and 8.8, respectively. Textbook teaching also shows progress on posttest, but it is not as many as picture book integrated instruction (Table 1).

Table 1 Mean difference of pretest/posttest performance in physical autonomy cognition scale between pupils in two groups

Stage	Group	No. of people	Mean	SD	Pretest/posttest difference	
Picture book integrated instruction	basic concept pretest	24	43.92	6.81	+5.21	
	basic concept posttest	24	49.13	6.67		
	situational judgment pretest	24	56.08	7.66	+8.8	
	situational judgment posttest	24	64.88	6.66		
Textbook teaching	basic concept pretest	24	41.54	10.03	+4.67	
	basic concept posttest	24	46.21	6.54		
	situational judgment pretest	24	57.71	6.81	+2.29	
	situational judgment posttest	24	60.00	7.60		

In comparison of the difference in the posttest performance between the experimental group and the control group, there is no remarkable difference in basic concept (t = -1.53, p = 0.133), while p-value = 0.022, smaller than 0.05, in situational judgment reveals significant difference in situational judgment between pupils in two groups (Table 2).

#### Interview Analysis of Pupils With Picture Book Integrated Curriculum

After the picture book integrated gender equity education curriculum, 24 pupils in the experimental group are interviewed to understand the opinions about picture book integrated instruction. From the interview result, it is discovered that junior elementary school pupils enjoy picture book integrated

cognition posteest or publis in two groups								
Stage	Group	No. of people	Mean	SD	Degree of freedom	t	<i>p</i> -value (two-tailed)	
Basic concept posttest	Picture book integrated instruction	24	49.13	6.67	_ 46	-1.53	0.133	
	Textbook teaching	24	46.21	6.54				
Situational judgment	Picture book integrated instruction	24	64.88	4.88 6.66	46 -2.36	-2.364	0.022*	
posttest	Textbook teaching	24	60.00	7.60	_			
						* 0	OF -::C:I	

Table 2 Independent sample t test of physical autonomy cognition posttest of pupils in two groups

\*p < 0.05, significant.

gender equity education as the abstract concepts are simply and vividly described through picture book plots for pupils understanding the knowledge concepts. Pupils prefer picture book integrated instruction because of enjoying listening to stories, vivid and interesting story contents, story scenarios similar to life experience, understanding abstract concepts in the textbook, and better impression through listening to stories than reading on their own. Pupils reveals good understanding of body safety boundary and refusing uncomfortable contact after the picture book integrated instruction. Apparently, picture book contents deliver "cognition", "affection", and "skill" to enhance pupils' physical autonomy cognition and guide pupils to refuse unsafe contact.

#### **Conclusion and Discussion**

In the analysis of physical autonomy cognition posttest performance between two groups, basic concept does not achieve significant differences, revealing that the learning of basic concept could achieve the learning effect with either textbook teaching or picture book integrated curriculum instruction. In the statistics of situational judgment, the experimental group shows higher average score than the control group, with remarkable differences. Accordingly, the application of picture book integrated curriculum teaching style could achieve better learning effectiveness on situational judgment than simply using textbook knowledge teaching.

Pupils in the experimental group notably enhance the pretest/posttest performance on basic concept and situational judgment after the picture book integrated gender equity education instruction. The standard deviation is reduced, revealing pupils' more specific understanding of physical safety cognition mentioned in the curriculum, after teachers' picture book reading, role play, and discussion among classmates, with immediate learning effect. Physical safety education is a life topic, which cannot develop the effect simply by textbook description, but can be connected with pupils' life to present the real assistance.

The qualitative interview reveals that junior elementary school pupils prefer picture book integrated instruction, mainly because of most pupils enjoying listening to stories, story contents being interesting and related to life, picture books fictionalizing difficult knowledge, attractive beautiful pictures, participation in role play, and sharing & discussion. Compared to textbook lecturing, it could attract junior elementary school pupils to involve in learning. Since pupils enjoy picture books, it could induce the learning motivation and interests to further multiply learning effectiveness.

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#### An Exploratory Study on the Taiwanese Higher Education Students' Understanding of Personal Data Protection Act

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#### **Abstract**

Information privacy is one of the important rights in modern people's lives, and the level of understanding regarding information privacy in the Personal Data Protection Act (hereinafter referred to as the PDPA) by students at the higher education stage (that is, at the university level or above) is the basis for exercising the right. To explore students' understanding of the PDPA, the researcher distributed the "PDPA situational-case questionnaire," and collected responses from 745 students. Results of the analysis stated that, firstly, the students have a high level of understanding in terms of "notification obligation". Secondly, students possess a moderate understanding of the definition of government agency and the liability of the commissioning agency for damages. Lastly, students have a low level understanding in the following concepts: 1. the personal data of the deceased are not protected by the PDPA; 2. Definition of personal data; 3. Notification of collection matters; 4. Collection of special personal data; 5. The condition for a non-government agency shall be liable for the damages; 6. Two situations where the PDPA is not applicable. In addition, students have a low or moderate understanding of the collection, processing and use of general personal data, depending on the actual situation. Results of the study can be used as a reference for colleges and universities in the development of PDPA courses.

**Keywords:** University student, Use, Personal Data Protection Act, Higher education, Information privacy, Collection

#### **SUMMARY**

#### Introduction

According to Judicial Yuan Interpretation No. 603, the Constitution of the Republic of China (Taiwan), Article 22, guarantees the right to information

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privacy. To protect this right, Taiwan has enacted the Personal Data Protection Act (PDPA) and incorporated information privacy education into primary and secondary school curricula. Because the PDPA is crucial for safeguarding personal information and because Taiwanese higher education students have received comprehensive education on information privacy, exploring whether students understand the PDPA's provisions is essential. Therefore, the authors conducted an empirical study by using a situational case questionnaire to determine how well Taiwanese higher education students understand various provisions of the PDPA. The study explored whether these students are aware of the following: 1. the entities regulated by the PDPA; 2. the obligation to notify in case of personal data leakage; 3. the responsibilities of the commissioning agency; 4. the scope of personal data covered by the PDPA; 5. the required content when collecting personal data; 6. the requirements for collecting, processing, and using general and special personal data; 7. the liabilities of nongovernmental agencies for damages; 8. situations in which the provisions of the PDPA do not apply. The findings from this study can serve as guidance for higher education institutions in implementing PDPA education, teaching related topics, and developing tailored teaching materials.

#### **Study Implementation**

The authors used self-designed scenarios based on campus situations to create the questionnaire. The questionnaire content included questions on basic participant background information, eight campus scenario cases, and questions for each case. In total, 12 questions about the campus scenario cases in the questionnaire were related to the key provisions of the PDPA. The validity of the questionnaire was then reviewed by five experts. The correlation between the eight cases and the provisions of the PDPA is shown in Table 1.

The participants were recruited after the study protocol was reviewed and approved by the Institutional Review Board. University students aged 20 or more were eligible for inclusion. They completed the questionnaires anonymously. Questionnaires were distributed directly to students or were mailed or personally handed over to teachers who assisted in distributing them to students.

A total of 900 questionnaires were distributed, and 757 questionnaires were completed, of which 745 were valid. The response rate was 84.11%.

#### Results

In total, 745 questionnaires were examined. The study's participants consisted of a majority of females (393 students, 52.75%), a smaller number of males (317 students, 42.55%) and 35 students (4.7%) who preferred not to indicate their gender. Regarding their educational background, nearly half

Case-related PDPA provisions Case description Case 1. A part-time-worker student 1. Whether government agencies are subject to lost a flash drive that stored student the PDPA regulations. data 2. The obligation to notify. Case 2. An entrusted company Responsibilities of the commissioning agency. leaked personal student information Case 3. The breach of personal 1. Whether personal data of deceased individuals information of deceased people are protected by the PDPA. 2. Notice of collection of personal information. 3. Requirements for the collection, processing, and use of general personal data by nongovernmental agencies. Case 4. Requiring students to hand Requirements for the collection, processing, and in urine drug testing results use of special personal data. Case 5. Internet users engaged in 1. Type of personal data protected by the PDPA. doxing behavior 2. Requirements for the collection, processing, and use of general personal data by nongovernmental Liabilities of nongovernmental agencies for Case 6. Personal student data were leaked from a private university damages. The provisions of the PDPA do not apply to Case 7. A group photo was posted on Facebook the personal data being collected, processed, or used by a natural person purely for purposes of personal or household activities. Case 8. A student posted a video of The provisions of the PDPA do not apply to a teacher's misconduct in class. audiovisual data collected, processed, or used in public places or public activities and not connected to other personal data.

Table 1 Campus scenario cases and PDPA provisions

were enrolled in public universities (359 students, 48.19%), followed by private universities (248 students, 33.29%) and private universities/colleges of science and technology (103 students, 13.83%). A significant majority of the participants were undergraduates (621 students, 83.36%), while more than 10% were graduate or Ph.D. students (102 students, 13.69%). Participant understanding of the provisions of the PDPA was categorized into three levels depending on correct answer rate: low (0%–33%), moderate (34%–66%), and high (67%–100%). Understanding of the provisions of the PDPA varied across students.

#### **High Level of Understanding**

The PDPA stipulates the obligation to notify in the event of a personal information breach. Approximately 89.13% of all participants answered this correctly, indicating a high level of understanding.

#### **Moderate Level of Understanding**

Regarding definition of government agency, 44.83% of the participants answered correctly, indicating a moderate level of understanding.

#### **Low Level of Understanding**

The PDPA covers various aspects, including the scope of personal information protection (correct answer rates: 19.19% and 24.56% for the two questions); the notification content when collecting personal information (correct answer rate: 13.69%); requirements for the collection, processing, and use of special personal data (correct answer rate: 26.71%); and the circumstances under which the PDPA does not apply (correct answer rates: 22.42% and 29.13% for the two questions).

#### Moderate or Low Level of Understanding

The PDPA has requirements for the collection, processing, and use of general personal data. The correct answer rates for these aspects were 25.37% and 57.32%, respectively. Additionally, PDPA outlines requirements for liability in cases of damage (correct answer rates: 65.10% and 25.37%). The level of understanding varied, falling into the categories of low or moderate depending on the situation.

#### **Conclusion and Suggestions**

Higher education students have a low understanding of the provisions of the PDPA. This raises concerns about potential cases where students might inadvertently violate the PDPA's provisions. Furthermore, because of a lack of understanding of the provisions of the PDPA, students may fail to protect their own personal information and struggle to legally and responsibly collect, process, and use the personal information of other individuals. This poses significant concerns at personal, societal, and national levels. Educators must take this concern seriously.

Based on the results of the study, the authors propose the following:

- 1. Establish personal data protection websites. Universities and colleges can create a dedicated "PDPA Zone" on their websites that feature real-life privacy cases relevant to students, provide detailed explanations of the provisions of the PDPA (particularly the provisions that students have moderate to low understanding of), and offer consultation services on PDPA-related matters.
- 2. Implement PDPA education courses and speeches. To familiarize students with the PDPA, colleges and universities should incorporate information privacy courses into general education curricula. These courses should include indepth PDPA instruction and make use of outside experts or scholars to deliver PDPA-focused speeches in classrooms.
- Design educational materials. Design and develop PDPA education materials that students can relate to. Consider publishing PDPA books or online resources with scenarios from campus life. Structure these materials

to include scenario-based questions, multiple-choice options, detailed explanations of case problems, and assessment through test questions.

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