Postgraduate Students' Practice on Usage of Copyrighted Images for Educational Works

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Abstract. The advent of information and communication technologies (ICTs) in various disciplines brings potential benefits to the users. In the context of education, postgraduate students can get hold of a wide variety of resources for their educational purposes, including images. Nevertheless, one major drawback to this opportunity is the potential for encroachment into the intellectual property rights of the legal owner of the images, primarily copyrighted images. Accordingly, this study embarked to explore the practice of postgraduate students in choosing online images for their educational works, as well as to examine the behavior of postgraduate students when confronted with copyrighted images for their educational works. Engaging upon purely qualitative methodology, a total of 40 students of higher learning institutions in Malaysia participated in an online survey containing open-ended questions. The data was analysed using computer-aided qualitative data analysis software ATLAS.ti version 22. The study found various resources used by the students to get image sources for their educational works, such as search engines, royalty-free images website and image editing websites. The study further found different attitudes by the students when confronted with copyrighted images, some would avoid using the images, while some others would still use the images in their educational works, with or without acknowledging the creators of the images. The implication of the study is better understanding of the postgraduate students' practice on usage of copyrighted images for educational works. Hopefully the findings would contribute to the literature on students' behaviour and intellectual property rights in the academic setting.

Keywords: postgraduate · copyright · awareness · quality education · SDG4

1 Introduction

A copyright is a form of intellectual property that grants the possessor the exclusive right to reproduce, adapt, exhibit, and perform a creative work for a predetermined time period. In general, the duration of this authority is limited. The creative endeavour

could be a work of literature, art, instruction, or even music. Copyright in Malaysia is governed by the Copyright Act of 1987. It offers extensive protection for copyrightable works, including as literary, musical, and creative works, films, sound recordings and performances, broadcasts, and derivative works. Due to the expansion of the Internet business, a revised version of the Act was proposed to the Parliament in 2011 and went into force on March 1, 2012. Copyright law safeguards the legal, economic, and moral rights of the author, owner of copyright, and/or performer [1]. Therefore, the author, copyright owner and/or performer has the right to seek redress from the infringer for using his/her copyrighted works without consent or authorization under the legislation.

One of the most infringed rights due to the accessibility to the Internet and information technologies is copyright [2, 3]. Copyright is often infringed by people duplicating other people's information or services as they can be assessed without exerting much effort or paying for it. There is a growing concern about tertiary students infringing copyrights. According to [4], students are frequent content users (digital or otherwise) to facilitate their learning process with limited disposable income, thus making them more susceptible to infringing copyrights. This is further supported by empirical evidence from previous research. In addition, the high cost of books and periodicals, the absence or poor implementation of legal protection for copyrighted works, a lack of understanding of the principle of plagiarism, free internet copying, academic research pressure, peer pressure, a lack of knowledge and education, a lack of awareness on piracy and its consequences, easier access to the information needed, the availability of photocopiers, and a lack of understanding of what is correct or incorrect on the Internet all contribute to the problem [5–7]. In this context, References [8, 9] also concurred that the lack of awareness leads to copyright infringement such as plagiarism and piracy as well as unlawful photocopying in academia. Additionally, the lack of a copyright expert in education institutions further contributed to the students' lack of awareness [10].

Therefore, it is crucial to raise copyright awareness in academia, especially among students. Awareness of copyright law is one of the rudimentary means to inhibit copyright infringement apart from the penalties for infringing the law [11]. This could be carried out via taught courses under the curriculum. According to [4], universities could raise awareness about copyright infringement issues by first updating their policies regarding this aspect and communicating such policies to their members.

In addition, when designing and revising policies for the prevention and control of digital piracy, it is important to consider factors such as personal ethics, other sociopsychological aspects, and the age of users [12]. The next step is the development and distribution of copyright education programmes. The final point is that students are required to participate in these copyright education classes. This is due to the fact that students who are not familiar with copyright law are more likely to accidentally misuse protected goods. Students would gain a better knowledge of what constitutes an infringement of intellectual property after taking these courses on copyright. Because of this, one of the most important strategies for raising awareness of copyright violations is instructing information literacy to university students through the medium of classroom-based instruction. In addition, in order to prevent widespread violations of copyright law brought on by students when they are generating their own work, institutions are obligated to develop appropriate attitudes regarding copyright law along the way [3, 13].

In this regard, reference [14] highlighted that awareness campaigns could also improve copyright interest. Workshops, seminars, and training can educate students on copyright infringement. For instance, an action plan for raising copyright awareness could be formed by encouraging copyright awareness, understanding copyright law, and disseminating information regarding copyright status and issues to prevent infringement [11, 15]. Furthermore, reference [3] emphasised that students continually generate fresh information on a variety of topics and use it for diverse purposes. With the advancement of information and communication technologies, it has become much easier to present and share information, which has increased copyright issues. If copyright issues are not addressed, students may produce less output, resulting in less development and progress.

2   Problem Statement

The digital world provides the availability of facilities that brings many impacts and challenging issues to the forefront. In the Education field, the digital world gives a high impact, creating a digital environment in the teaching and learning process. The resources and references enable the easier ways of acquisition, more innovative and engaging the students. The resources include diagrams or tables stated in the respective articles. Students need to determine the appropriate resources and materials as well as to ensure that the materials are legitimate materials to be used or manipulated for their educational works. Thus, the students' action or behavior is critical matter. The widespread availability of sources and knowledge in the digital environment also makes it easier and will contribute to the cases of fabrication research and fake sources among the students [16].

According to a study that carried out in this context [17], it is found that some good practices or students' behavior has been implemented by the respondents such as looking at the sources technically (e.g. size, colors) appropriate with their assignments and checking the claimant's status of source either royalty-free or copyrighted. However, this study was only a preliminary study that was conducted with a small number of students. According to [18], digital photography for teaching and learning has not always adhered to the greatest ethical standards.

Generally, there are many reasons turn out to be factors that affect student's behavior such student's environment, cost efficiency, learning style and ethical education [19]. Furthermore, [20] mentioned that ethical behaviors are still being discuss among the scholars and educators. It is also urgently need for further action and research on ethical behaviour. Even though particularly many courses in higher education institution have the syllabus related to ethics or cyberlaws. For instance, Research and Methodology courses in many programmes focuses on citation and plagiarism on academic writing. Similarly, Reference [16] said that the widespread of digital research exposed the academic writing to the unethical act.

Due to the need, this study explores the practices of postgraduate students in choosing online images as well as to examine their behavior towards copyrighted images during completing their educational works.

3   Research Questions

Based on the problems aforementioned, there are two research questions that guide the study:

(1) What is the practice of postgraduate students in choosing online images for their educational works?
(2) How would postgraduate students behave when confronted with copyrighted images for their educational works?

4   Purpose of Study

The study aims to achieve the following two objectives:

(1) To explore the practice of postgraduate students in choosing online images for their educational works.
(2) To examine the behavior of postgraduate students when confronted with copyrighted images for their educational works.

5   Research Methodology

The study adopted qualitative methodology, focusing on postgraduate students in Malaysia as the unit of analysis. A total of 40 students participated in the online survey, containing open-ended questions. The survey which was developed primarily to address the research questions of the study was administered between November and December of 2021. The breakdown of the 40 respondents is as produced in Table 1.

The analysis of the open-ended responses of the survey was conducted using the qualitative data analysis software ATLAS.ti version 22, which was developed by ATLAS.ti cpmpany based in Berlin, Germany [21]. ATLAS.ti was chosen as it was appropriate for the purpose of the study, being speedier than the manual method of analysis. The interface of the ATLAS.ti analysis project is produced in Fig. 1. The analysis of the open-ended survey responses was carried out using entirely inductive approach, as it would enable the researchers to explore deeply into the minds and thoughts of the respondents, which in turn, would produce more meaningful findings [22].

Table 1. Respondents of the Study

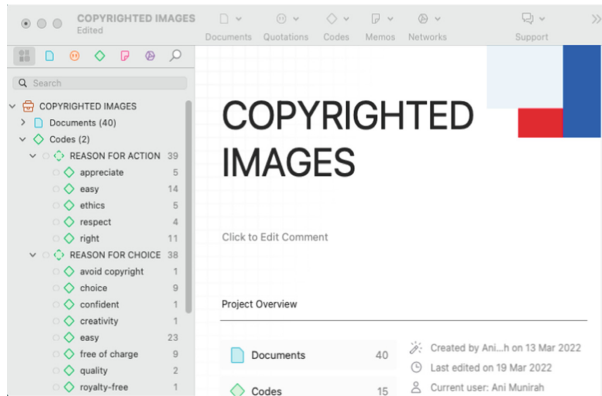| Dimension	Description	Total no of respondents
Gender	Male	14
	Female	26
Cluster of specialisation	Science and Technology	11
	Non- Science and Technology	29
Level of study	PhD	31
	Master	9

Fig. 1. Interface of the ATLAS.ti analysis project.

6 Findings

In answering the two primary aims of the study, the following findings are hereby produced.

6.1 Choice of Online Images for Educational Works Among Postgraduate Students

The study found interesting practices by postgraduate students in choosing online images for their educational works. The top choice among postgraduates in choosing images for their works is by way of Internet search either by using Google, Yahoo!, Bing, or any other search engine providers, with a total of 33 students (28%). As can be seen, search engines play a pivotal role in exposing students to the choice of images for their educational needs, potentially following the ease of use of the search engines that fit into their purposes. The next top choice for getting online images is Google Images with a total of 26 students (22%) followed by Canva.com with a total of 14 students (12%). Other choices include the famous royalty-free images provider Pexels.com with 4 students (4%), and Pixabay.com and Shutterstock.com with 4 students respectively (3%). The distribution of the choice of online images for educational works among postgraduate students is shown in Fig. 2.

The choice by the students was motivated by several factors as shown in the Sankey diagram in Fig. 3. Particularly for users of search engines and using Google Images, they are of the opinion that it is easy to get or obtain the images, simply by entering the search term into the query, and they are presented with a wide range of selection of images, which are predominantly free of any charges. This is rightly so that the Internet is one large 'library' that hosts millions of images captured and stored in its database. However, one should always be mindful and aware that simple search through the images using search engines is not necessarily available for free use. Part of the images could be well protected by intellectual property laws, such as copyright, patent, trademark, industrial design and others.
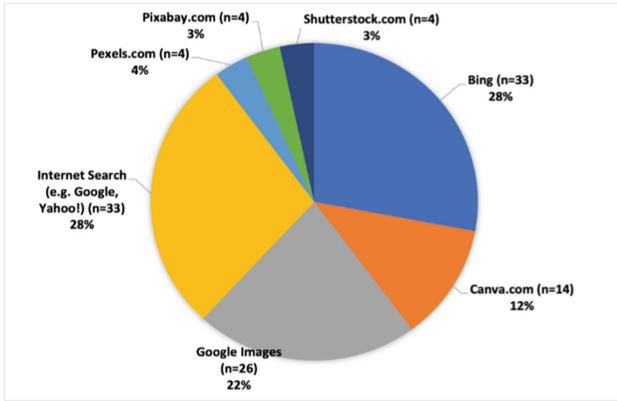
Fig. 2. Choice of online images for educational works among postgraduate students.

Apart from ease of getting hold to such images, few respondents also mention their reason for choosing a specific source of images is because they are looking for images that are free of charge, in addition to wealth of options to choose from. Understandably the images that are retrieved from search engines or simple image search portals are made available without any charges to the user. Accordingly, the simplicity of retrieving the intended images coupled with free pricing of the images seemed to attract quite a significant number of postgraduate students.

This finding is in line with the fact that Google Images is a web-based service offered by Google that enables users to search for images on the internet. Even though it performs the same fundamental querying and result-fetching functions as Google's primary search engine, it is better viewed as a specialised offshoot. Therefore, as effective as Google is in returning web search results, Google Images also shares the same capability in returning fast and easy results for the users [23].
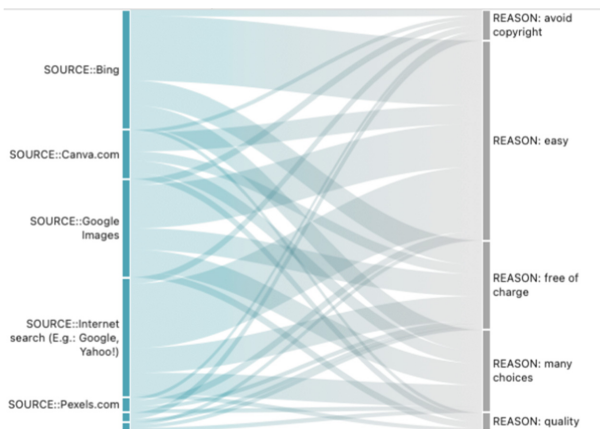

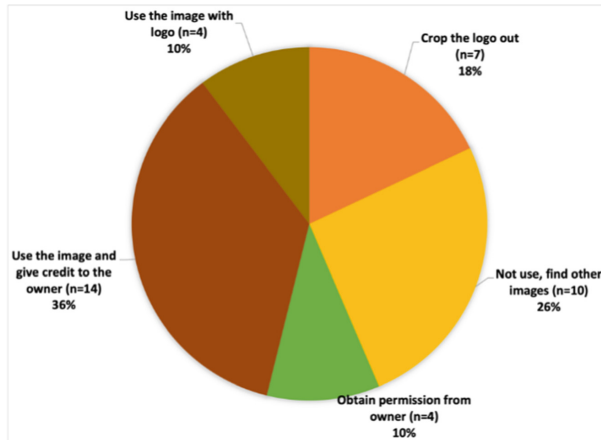**Fig. 3.** Choice of online images for educational works among postgraduate students.

Fig. 4. Behavior of postgraduate students regarding copyrighted images for their educational works.

Finally, some respondents did mention that they would look for royalty-free images from Pexels.com, Pixabay.com and Shutterstock.com as they are aware of the copyright held by the original creator of non-royalty-free images. The term "royalty free" refers to a specific kind of license that stock photography agencies utilise when selling stock photographs [24]. A one-time, flat charge is required to purchase this sort of licence, which provides the purchaser with the right to use the image in a variety of contexts. This implies that the user only have to pay for the licence once, and they are free to use it in any of the acceptable ways for the rest of your life without being required to make any future payments. When working with stock photographs, the most fundamental idea they need to be familiar with is the fact that they are not purchasing the actual photograph but rather the legal permission to use it in a specific manner.

6.2 Behaviour of Postgraduate Students When Confronted with Copyrighted Images for Their Educational Works

The behavior of the students is diverse when confronted with copyrighted images for their educational works, as shown in Fig. 4. Two prevalent behaviours are (i) to use the images, and (ii) to avoid using the images.

6.2.1 To Use the Copyrighted Images

The majority of the respondents (25 students out of $40 = 64\%$) would proceed to use the images, even after finding out that the images are protected by copyright laws. The 25 students are divided into the actionary behaviours as follows:

- 7 out of 40 students (18%) would use the images by editing or cropping the copyright logo of the owners. This appears to be a significant concern to the institution as well as it might open up the potential for legal action to be instituted against the students

for breaching copyright laws. It is to be noted that using copyrighted materials such as images is against the law.

- 4 out of 40 students (10%) would use the images by not cropping out the copyright logo, instead they would just maintain the actual presentation of the images with the owner's logo being displayed to indicate that the images are actually owned by somebody else, and not the students themselves.
- 14 out of 40 students (36%) would use the images as they are, and by doing so, also give credit to the owners of the images. In such a scenario, it is still possible to use the copyrighted work of another individual without infringing on intellectual property laws or ethical norms. An illustration of this would be for the student to give credit to the person who originally owned the work. Even while this will shield the students from plagiarising, it is still possible for them to infringe upon someone else's intellectual property rights.

6.2.2 To Avoid Using the Copyrighted Images

A minority of the respondents (14 students out of $40 = 36\%$) would try to avoid using such copyrighted images. This group of respondents demonstrate a high level of awareness towards legal recognition of copyrighted works. The 14 students are divided into the following behaviours:

- 4 out of 40 students (10%) would not use the images unless obtaining prior permission from the owner. This behaviour is commendable, given that the students recognise the hard work and intellectual property of the copyright owners in developing and creating the images, hence it is only right that their permission be obtained first before the images can be used in the students' educational works.
- 10 out of 40 students (26%) would avoid the images altogether, instead they would find other images (which are not copyrighted) for the purpose of their educational works. This category of students demonstrates the highest level of awareness of copyright materials. Instead of going for images that might be protected under copyright laws, the students would choose alternatives to such images, for instance, royalty-free images or the ones awarded with private label rights.

Even though a significant proportion of students are aware of and knowledgeable of the implications of their activities, more students will nonetheless proceed to use copyrighted photos in their educational works, as was deduced from the facts presented above. In this setting, it is essential to have a solid understanding of the reasons behind the behaviours of the children. Figure 5 summarizes in Sankey diagram format the reasons for behaviour of the postgraduate students when confronted with copyrighted images for their educational works as discussed earlier. The indicators on the left-hand side of the diagram indicate the actions or behaviours of the postgraduate students when confronted with copyrighted images. While the right-hand side of the diagram outlines the reasons for such behaviours by the students.

The students who proceeded to use the photographs by cutting out the logo did so primarily for the reason that it is a simple action to carry out, which they cited as their primary justification for doing so. However, a user needs to be aware that once an image has been given copyright protection, it is impossible for anyone else to use the image
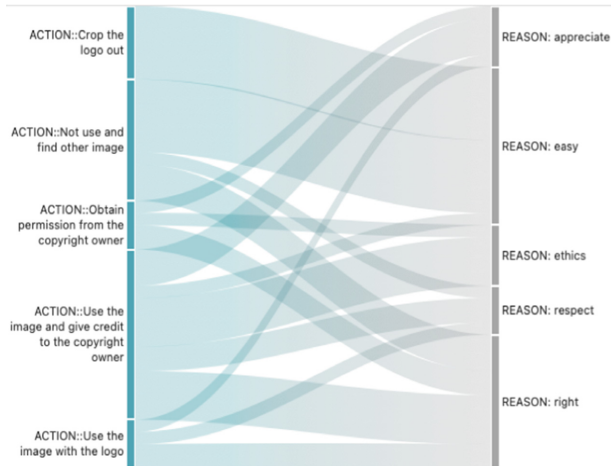
Fig. 5. Reasons for behaviour of postgraduate students.

without the permission of the image's owner [24]. A user also needs to be aware that once an image has been given copyright protection, it is impossible for a user to use the image. Users are required to always work under the presumption that any image they come across is associated with some form of copyright due to the regulations that govern this area. They could be required to pay fines or face additional legal action if they do not comply with the order issued by the court.

The group of students who discussed their decision to use the images in conjunction with the copyright logos stated that they did so for three reasons: I to show appreciation for the copyright owner' efforts and initiatives in developing or creating the images; (ii) to show respect for the copyright owners; and (iii) because it is the ethical thing to do. People do have a responsibility to defend intellectual property rights in order to encourage the expansion of enterprises, which is crucial to the economic well-being of a nation. This is true because it is right that people have this obligation. Not just the music, movie, television, and book industries, but also businesses that produce new commodities and corporations that come up with modifications to old products all rely on copyright to identify who should receive compensated for their contributions.

Some other students who chose either to use the images and by giving credit to the copyright owner as well as the ones who would not use it unless obtaining the copyright owner's prior permission is generally to appreciate and respect the copyright owner, as well as it is the ethical thing to do.

Finally, the group of students who stated that they would not use any copyrighted images at all and would instead look for other images to use in their educational works explained that they did this because they believed it to be the ethical thing to do as well as out of respect for the owners of the copyright. They also mentioned that it is an easy thing to do, and that in order to avoid any legal implications in the future that may be the result of any copyright infringements, they would rather simply obtain other images that do not have any copyright claims, or ones that have royal-free rights. This is because it is the easiest thing to do.

7 Conclusion

In conclusion, the awareness of copyright in academic institutions, particularly among postgraduate students as in the context of the present study, should be taken into consideration by raising the importance of observing copyrighted materials for educational works. In particular, this should be the case for postgraduate students. At the university level, taught courses could be integrated into the curriculum, with the primary focus being on fostering a heightened sense of awareness among postgraduate students in their respective educational endeavours. Not to be overlooked is the fact that since copyright is an exclusive right, every breach ought to preferably be considered a complaint offence. This is because the owner of the copyright is the one who is aware of the violation.

Taking into consideration the objectives of this research, the authors would like to draw attention to two key aspects: first, the propensity of postgraduate students to select images from the internet for use in educational works; second, the actions of students when confronted with copyrighted images in educational works. As a result, the findings of this study furnish the potential for a better knowledge of the practises that postgraduate students engage in regarding the utilisation of photographs protected by copyright for educational purposes. This research proposes that its findings would contribute to the body of literature on students' behaviours and intellectual property rights in the context of an academic environment. With the changes brought by globalisation and IR4.0 confronting higher education landscape, it is expected that more open sources as well as copyrighted images would be available to be used by students and academics. This translates into higher risk of copyrights issues to occur. Hence, appropriate measures need to be in place, and this calls upon further research to be conducted in this regard. This is the recommendation made by the study.

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