

INTELLECTUAL PROPERTY RIGHTS (IPR) AWARENESS AMONG UNDERGRADUATE STUDENTS

Hway-Boon Ong*, Yih-Jian Yoong**, Bahma Sivasubramaniam***

Abstract

This study is conducted to examine the perception and awareness of intellectual property rights (IPR) among university students. A survey was conducted to illicit information about IPR from two private universities' students in Malaysia. It was discovered that university students perceived plagiarism and piracy as infringement of IPR. Therefore, provision of adequate information, active participation of government bodies and university's authorities, as well as IPR awareness activities are three factors that will encourage IPR awareness among these university students.

Keywords: IPR, Students, Factor Analysis, Malaysia

* Economics Unit, Faculty of Management, Multimedia University, Malaysia

** Faculty of Information Technology, Multimedia University, Malaysia

*** Law Unit, Faculty of Management, Multimedia University, Malaysia

Introduction

Intellectual property is a generic term that refers to creations of the intellect i.e. minds. Just as tangible property is capable of being protected, intellectual property is also similarly protected. In fact, such is the importance of intellectual property that the United Nations created a specialised agency, the World Intellectual Property Organisation (WIPO) and entrusted it with multiple tasks concerning intellectual property including raising awareness, protecting and enforcing those rights arising from IP on a universal spectrum.

Generally speaking, intellectual property (IP) arises from four different fields – literary, scientific, artistic and industrial arenas (WIPO, 2004). IPs created from these fields of expertise had tangible economic values. Thus, understanding and awareness of IPs will increase our appreciation of the existence of IPs and protect the rightful use of IPs.

The convention establishing the World Intellectual Property Organization (WIPO¹⁹), 1967 is instructive in clarifying the term “intellectual property”. It does not define intellectual property as such but sets out a descriptive explanation. It states that “*intellectual property shall include rights relating to literary, artistic and scientific works, performances of performing artists, phonograms and broadcasts, inventions in all fields of human endeavour, scientific*

discoveries, industrial designs, trademarks, service marks and commercial names and designations, protection against unfair competition, and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.” It can therefore be observed that intellectually property is defined widely and is not given a restrictive meaning by the world body (WIPO, 2004).

The importance of intellectual property rights (“IPR”) cannot be underscored enough. It is acknowledged that IPR seek to protect the creators, the inventors, the innovators. Such protection would also encourage research and development, innovation and inventions. At the same time, infringement of IPR is an issue that deserves serious consideration. Infringement in the context means doing anything without the consent, permission or licence of the IP right owner. **S.36(1)** of the **Copyright Act 1987** of Malaysia for example states that *Copyright is infringed by any person who does, or causes any other person to do, without the licence of the owner of the copyright, an act the doing of which is controlled by copyright under this Act.*

Thus, the purpose of this study is to examine the awareness of intellectual property rights (IPR) among university students. The target audience is prime fodder for this study as intellectual property rights play a significant role in the field of academia. It is asserted that this study is important on a two-fold basis. First, there is a need to emphasise on the awareness and importance of protecting IPR. Secondly, there is a correlating need to emphasise on the awareness and importance of the existence of infringements of IPR.

¹⁹ The World Intellectual Property Organization (WIPO) is an agency of the United Nations dedicated to developing an international intellectual property (IP) system, which rewards creativity, stimulates innovation and contributes to economic development while safeguarding the public interest.

Literature Review

Copyrights and IPR are key drivers in creativity and innovation (Bach, Cohendet, Penin and Simon, 2010). Copyright laws award the author the exclusive right on his or her creative work, including the rights to make copies for dissemination. Explicitly, copyright protects a literary, musical, artistic, dramatic and audiovisual work from being reproduced without the permission from the author (Spinello, 2007). But yet, creativity and innovation in video games and music evolves from the limitation in existing applications, which may be a combination of old and new ideas. As such, issues with regards to IPR can sometimes be difficult to handle when there is a grey line that divides imitation and innovation of existing artistic work and ideas (Bach, *et al.*, 2010). Spinello (2007) suggested adequate reward to spur creativity and innovation but moderate protection on IPR so that the former will not restrict expansion of ideas. Spinello stressed that overprotection of IPR can be as damaging as underprotection.

However, when knowledge is recognized as IPs, and they are shared and utilized to improve work processes, firms' performances can be enhanced. Bollen, Vergauwen and Schnieders (2005) stressed that it was necessary to integrate IPR when formulating a firm's strategy because a firm's performance depended on intellectual capital as well as physical capital. Farhadi and Tolvstiga (2010) agreed and further explained that IPs should not be addressed in isolation but be attended to concurrently with other business applications, strategies and road maps. Therefore the lack of knowledge and understanding on IPs among policy makers and governing authorities would then obstruct the formulation and implementation of IPR (Said, 2010).

Then again, in the academia, the availability of digital information from the Internet and online resources provided by digital libraries in universities and colleges allows easy access to knowledge and information. However, the convenience provided by digital library resources has created opportunities for systematic downloading, distribution to unauthorized users, and going beyond the purpose and character of academic use (Wu, Chou, Ke and Wang, 2009). A survey conducted on 109 respondents from 18 universities and colleges in Taiwan found that students misunderstood about copyright laws when using digital library resources (Wu, *et al.*, 2009). Although sharing of knowledge is now a common phenomenon due to the rapid advancement of

information communication technologies (ICT) (Garcia-Perez and Ayres, 2010), it has been found that students perceive digital resources should be shared, even though without permission. Students in Taiwan also think that the downloaded digital resources are all legitimately authorized and permitted material as long as they are for academic use and tuition fees are paid (Wu, *et al.*, 2009).

Ironically, an earlier study conducted by McCabe (1993) found out that 55% of academicians are not willing to devote any real effort to documenting suspected incidents of students plagiarising other peoples' work. Plagiarism is using other author's work as your own without proper acknowledgement. As a result of ignorance of the importance of IPR, the issue of plagiarism has become a major concern to many institutions of higher education. Plagiarism, self-archiving on research repositories and respect for commercially owned copyright material are IP issues that can be addressed effectively through a change of attitude and implementation of appropriate policies (Joint, 2006). Information literacy programmes, for example, are essential to promote and enhance students' understanding of intellectual property issues (Joint, 2006).

Methodology and Findings

This study is conducted through a self-administered survey. A questionnaire is designed using the five Likert-scale to elicit information about the perception and implication of IPR among students in LimKokWing University (LKW) and Multimedia University (MMU) in Cyberjaya. A five ordered response level of "1" representing Strongly disagree, "2" Disagree, "3" Neutral, "4" Agree and "5" Strongly agree, options were designed in the questionnaire. 120 questionnaire were distributed and 111 completed responses were used in this analysis.

Prior to any statistical analysis, the cronbach Alpha test was conducted to examine the reliability of the survey. Next, the factor analysis was conducted to identify underlying variables that explain the pattern of correlations within a set of observed variables. The factor analysis is used to determine a small number of variables that explain most of the variance observed in a much larger number of manifest variables.

The alpha tests shown in Table 1 are greater than 0.7, indicating acceptable internal consistency of measure of scale reliability used in this study ((Nunnally and Berstein, 1994).

Table 1. Reliability test

	Alpha (α) score
Perception on IPR	0.7046
IPR Awareness	0.8015

In addition, the KMO measurement of sampling adequacy is also checked to determine sampling adequacy to proceed with the factor analysis. As depicted in Table 2, the KMO value obtained is

acceptable and all the KMO values indicate adequate sampling, as confirmed by the Bartlett's tests.

Table 2. KMO test and Bartlett's Test of Sphericity

	Perception of IPR	Promoting IPR
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (MSA) Value.	0.728	0.738
Bartlett's Test of Sphericity Chi-Square Value	141.582*	339.064*

* significant level at 1%

Table 3 illustrates the rotated sum of squared loadings results for students' perception of IPR and their opinions on how to create a better understanding

on IPR among students. The cumulative rotated sums of squared loadings for perception and awareness of IPR are about 55.4% and 58.5%, respectively.

Table 3. Rotation Sums of Squared Loadings

Perception of IPR	Total	% of Variance	Cumulative %
Plagiarism	2.352	33.595	33.595
Piracy	1.524	21.778	55.373
IPR Awareness	Total	% of Variance	Cumulative %
Information	2.233	20.304	20.304
University and Government	2.133	19.393	39.698
Activities	2.067	18.795	58.493

The component analysis and varimax rotation is conducted to select variables with more than 0.50 (50%) loadings of rotated component matrix. Results of the rotated component matrix are provided in Table 4.

In Table 4, the university students in Cyberjaya perceived copying from their peers, copying information from the Internet and even textbooks, to be submitted as assignments and projects as infringing IPR. In addition, piracy by unauthorised copying and downloading of songs, videos, images, CDs and DVDs are all perceived as infringement of IPR.

There are three ways to promote awareness of IPR among university students. Firstly, these students

feel that more *information* should be made available on social networks like facebook, personal blogs, and chat rooms. A user friendly guide on how to file for IP as well as information on IPR in mass media and university's site and intranet will provide the much needed information about IPR to students.

Secondly, active participation of relevant *government bodies and universities* will also promote IPR awareness among university students. Lastly, talks, seminar, contests and training on IPR are some of the *activities* suggested in order to encourage IPR awareness among university students.

Table 4. Rotation Component Matrix

Perception	Component	
	Plagiarism	Piracy
I do not cut and paste information obtained from the Internet in my assignment and projects.		0.684
I do not photocopy textbooks to be used in my course of study.		0.632
My assignments, projects and reports belong to me and it should be protected as an IP.		0.765
Downloading songs, videos and images from the Internet is against the law.	0.770	
Buying pirated softwares, CDs and DVDs is a serious offense.	0.735	
Distributing others' work and information via file sharing programme is wrong.	0.667	
It is wrong for us to sell or buy counterfeit goods	0.803	

Table 1 continued

Component			
Awareness	Information	University and the Government	Activities
Provide information about the importance of IPR via the Internet (eg facebook, chat, blogspot)	0.862		
Provide information about the importance of IPR via mass media (eg magazine, newspaper, television)	0.764		
A user-friendly guide on how to file for IP.	0.618		
Provide information regarding copyright and IPR on the university's intranet.	0.523		
The Government should provide funding to raise awareness on IPR.		0.707	
The Government could help in enforcing IPR.		0.695	
All relevant university activities eg invention, new creation, project, and thesis should be copyrighted.		0.745	
Organise talks and seminars.			0.638
Hold contest (e.g: short film contest) to build awareness of IPR.			0.573
Organize a workshop on IPR awareness in the University.			0.817
Promote awareness through IP education and training.			0.738

Conclusions

The aim of this study is to examine the perception and awareness of IPR among university students. Firstly, university students perceived plagiarism and piracy as infringement of IPR. These perceptions of IPR are not entirely incorrect as sometimes information overloads in the Internet and some articles and writings published online are merely opinions and quotations extracted from another unknown source.

In addition, software, music and videos piracy, as well as photocopying of books and written texts are infringement of IPR, especially when they are copyrighted. This unethical of piracy work can be apprehended when there is no complementary supply of affordable photocopying services, inexpensive CDs and DVD players, as well as easy accessible of pirated goods.

Secondly, provision of adequate information, active participation of government bodies and university's authorities, as well as IPR awareness activities are three factors suggested by our respondents on how to encourage IPR awareness among them. Indeed, education is the key to create awareness among students, who will be the future leaders of the nation, about acknowledging and respecting others' intellectual work. A clear understanding of the importance in IPR will reduce the cost of monitoring and punishing those who does not. Active participation of government bodies, the private sector and institutions of higher education in upholding IPR are crucial in sending the right message to the younger generation on how to protect their own IPR and respecting others' as well.

Although this study only focuses on two private universities in Cyberjaya, the findings provide a good indicator about the perception and awareness of IPR on university students in Malaysia. LKW is a leading university in drama, arts and creative technology programmes, while MMU is the first private university in Malaysia that excels in management,

engineering, information technology, law and creative media programmes. Nonetheless, future study could be extended by making a comparison on IPR issues between colleges and universities, as well as between public and private universities in Malaysia.

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