

Chapter 6 Empirical Results and Analysis

6.1 Consumption Experience, Sourcing and Reasoning

The distribution of the students concerning their consumption experience, sourcing and reasoning in the survey data set were summarized in Table 6.1 to Table 6.4.

6.1.1 Consumption Pattern of Pirated ODPs

In terms of their usage of pirated ODPs, out of 302 students, only 7.3% reported that they did not buy or use, 25.5% use pirated copy but did buy it while the remaining 67.2% admitted to buy and used pirated ODP (Table 6.1).

Table 6.1 Consumption Pattern

USAGE	COUNT	%
Did not buy or use	22	7.3
Use but did not buy	77	25.5
Buy and use	203	67.2
Total	302	100

These figures indicate widespread students' involvement in piracy as only 7.3% did not involved in piracy while the remaining 92.7 % involved to a varying extent. This implies that the percentage of students using pirated ODPs is higher than percentage of students using pirated software reported in Brunei (Rahim, et al, 1999), Hong Kong (Wong, et al 1990). However, the percentage of students buying pirated ODPs were lower than percentage of students buying pirated software as reported in Hong Kong (Moores and Dhillon, 2000)

6.1.2 Main Reason for Buying Pirated Software

Close to 75% of the student cited "*original are too expensive*" as their main reason for buying pirated software while "*easy availability of pirated copy*" is the main

reason for almost 16% of the students, with the remaining student cited peer influence (5.9%)and “*low risk of being caught*” (3%) as their main reason (see Table 6.2). This means that most students perceived high price of original and the abundant supply of pirated version as their reason to get pirated copy while legal risk were the least relevant reason.

Table 6.2 Main Reason for Buying Pirated ODPs

REASONS	COUNT	%
Originals are too expensive	153	75.4
Low risk of being caught	6	3.0
Most people I know buy pirated copy	12	5.9
Pirated copy is easily available	32	15.8
Total	203	100

There is strong agreement from respondents in term of buying pirated ODPs in the context of high availability of pirated ODPs, low risk for buying and the high cost of legal ODPs. These finding seems to be in line with Moores and Dhillon’s (2000) finding that legislation are not the key factors in the buying of pirated software, but simply the perception that vendors are charging too much.

6.1.3 Main Reason for Using Pirated Software

As for reason to use pirated software, there is strong agreement from the students in term of using pirated software due to cost reason (61%) followed by availability (25%) and comparable quality of pirated copy to originals (14%) (Table 6.3). Again, as in their reason to buy pirated software, price and supply factor plays an important part in most students’ decision.

Table 6.3 Main Reason to Use Pirated ODPs

REASONS	COUNT	%
Cost	172	61.4
Availability	69	24.6
Quality is comparable to originals	38	13.6
Others	1	0.4
Total	280	100

6.1.4 Source of Pirated Software

As expected, most of the students (almost 80%) get their copy of pirated software by borrowing from friends, with only 12% being downloaded from the internet with the remaining student either use it at cyber cafe or work/ study place (Table 6.4). The result implies that students are more prone to piracy because they know where to get the copy and can easily do so (from friends).

Table 6.4 Respondent's Access To Pirated ODPs

	COUNT	%
Borrow from friend	61	79.2
Use at work/ study place	5	6.5
Use at cybercafe	2	2.6
Download from the internet	9	11.7
Total	77	100

6.1.5 Students' Involvement, Feeling and Future Commitment

Only 35% of the student admitted feeling guilty about piracy, thus unsurprisingly almost 83% say they will continue to use pirated software. However, less than half (45.7%) has copied software illegally (Table 6.5).

Almost 41% of those who do not copying did not do so for a simple reason that they do not know how to copy. . Close to 30% of those who did not make a copy however did not do so simply because they rather buy pirated ODPs, and another 19.5%

was because they would rather buy original ODPs with the remaining students are either do not have the copying facilities or because they can always borrow from someone (Table 6.6).

Table 6.5 Respondents’ Involvement, Feeling and Future Commitment

Questions	YES	%	NO	%	TOTAL
Have you ever copied any software illegally?	138	45.7	164	54.3	302
Do you feel guilty about pirating	98	34.9	183	65.1	302
Will you continue to use pirated software?	250	82.8	52	17.2	302

This result implies that the intensity of illegal copying among students could be much higher if not due to the fact that many of them do not know how to make a copy themselves.

Table 6.6 Major Reason for Not Copying

REASONS	COUNT	%
I would rather purchase original CD/VCD/DVD/Software	32	19.5
I would rather purchase pirated CD/VCD/DVD/Software	48	29.3
I do not know how to copy	67	40.9
I don't have the necessary equipment	7	4.3
I can always borrow from someone	7	4.3
Others	3	1.8
Total	164	100.0

However, on positive note, copying is mostly for personal use (85.5%) and for friends and relatives (13%) with only less than 1.5% are for commercial purpose (Table 6.7).

Table 6.7 Major Purpose for Copying

PURPOSES	COUNT	%
Personal use	118	85.5
For friends and relatives	18	13.0
For sale/commercial purpose	2	1.4
Total	138	100.0

Most of the students attribute the problem of widespread piracy to the high price of originals (53%). Another 14% of them blame weak enforcement of laws and low censure while others perceived it as due to abundant supply of pirated copy (13%) and the profitability of the illegal business itself (11%). Only 10% blame it on consumer's attitude. This reveals that most of the student does not see the problem as an ethical problem involving themselves, instead viewing it as a matter of cost, profits and enforcement weaknesses. Furthermore, it's an indication of inadequate ethical education on copyright concerning ODPs usage.

Table 6.8 Reasons for Widespread Availability Of Pirated ODPs

REASONS	COUNT	%
Weak enforcement/ Low censure	42	13.9
High profitability of the business	32	10.6
High price of originals	159	52.6
High availability of pirated copy	40	13.2
Consumer's attitude	29	9.6
Total	302	100

6.2 Location and Characteristics of Pirated ODPs' Purchase

6.2.1 Location of Purchase

To determine their major illegal source of supplies, we also ask the respondent about their purchase location. As can be seen from Table below, “pasar malam” (night market) is the major source of supply for all type of ODPs except for Business and Entertainment Software; respondents reported shopping complexes as their main source for these software.

Table 6.9: Purchase Location of Pirated ODPs

Type		Purchase Location					Total
		Night Market	Morning Market	Shopping complexes	Direct selling	Others	
Music VCD	Local	46 (65.7)	3 (4.3)	16 (22.9)	3 (4.3)	2 (2.9)	70 (100)
	Foreign	56 (60.2)	12 (12.9)	20 (21.5)	3 (3.2)	2 (2.2)	93 (100)
Movie VCD	Local	59 (67.0)	3 (3.4)	17 (19.3)	5 (5.7)	4 (4.5)	88 (100)
	Foreign	77 (66.4)	5 (4.3)	21 (18.1)	9 (7.8)	4 (3.4)	116 (100)
Movie DVD	Local	16 (51.6)	1 (3.2)	6 (19.4)	4 (12.9)	4 (12.9)	31 (100)
	Foreign	27 (45.0)	3 (5.0)	20 (33.3)	4 (6.7)	6 (10.0)	60 (100)
Business Software		2 (7.7)	2 (7.7)	21 (80.7)	0 (0.0)	1 (3.8.)	26 (100)
Entertainment Software		6 (17.6)	0 (0.0)	27 (79.4)	0 (0.0)	1 (3.0)	34 (100)

*Percentage in parentheses

This might be due to assurance provided by these vendors, where students might find it is easier to get refund in the event of defect or incompatibility of the software since these vendors are permanent as oppose to constant moving of night market vendors. Buying

from shopping complexes vendors also gives students ample time to try their products to determine its quality and compatibility because these vendors operates on longer hours unlike both morning market and night market which does not offer such benefit.

6.2.2 Quantity and Value of Purchase

Total and average quantity of pirated ODPs purchased was shown in Table 6.10. Keeping in mind that, since it involves items purchased in the last 6 month, the price and quantity stated are best regarded as an estimation to the best of students’ knowledge

Table 6.10: Total Quantity (unit) and Total Value of ODPs Purchased in the Last 6 Month

Type of ODPs	Total Quantity (Unit)		Total Value (RM)	
	Original	Pirated	Original	Pirated
Local Music CD	71	277	1872.70	1781.00
Foreign Music CD	121	438	4043.60	2455.60
Local Movie VCD	54	392	1014.30	2520.00
Foreign Movie VCD	100	646	2169.20	4846.00
Local Movie DVD	20	77	513.90	745.00
Foreign Movie DVD	39	263	1472.10	2749.00
Business Software	0	73	0.00	531.00
Entertainment Software	0	88	0.00	783.00
SUMS TOTAL	405	2254	11085.80	16410.60

. For comparison purposes, total and average quantity of original ODPs was also shown. As can be seen, total quantity of pirated ODPs are significantly more than its originals for all types of ODPs. Consequently, on average, each student buy more of each type pirated ODPs compared to its original equivalents. Foreign movie VCD clearly the most sought after among the many type of pirated ODPs, although among original ODPs, foreign music CD were clearly the favourites. Clearly, in total respondents buy more Foreign ODPs as compared to Local ODPs for both originals and pirated version. Surprisingly, no

students buy original Business Software and Entertainment Software. This was perhaps due to exorbitant price of these two products. On average, each student spent more on pirated ODPs except for Music CD. Although in total quantity of purchase for each type of pirated ODPs exceeds total quantity of originals ODPs by a considerable margin, this is not the case for purchase value. Total purchased value of original were exceeding pirated for some of the ODPs. This was because of difference in price between original and pirated ODPs, where price of originals were significantly higher than the pirated versions. On average, each student spent RM16 for pirated foreign movie VCD in the past 6 months, but spent only less than half the amounts for originals version. In fact, except for Music CD, on average each student spent double on pirated ODPs as compared to its originals equivalent.

6.3 Types of Pirated Software Used/ Currently Use

Table 6.11 Types of Pirated Software Used/ Currently Use

No	SOFTWARES	Count	No	SOFTWARES	Count
1	Microsoft Office	217	15	Electronic Workbench	18
2	Microsoft Windows	206	16	Microsoft Visual C++	14
3	Norton Antivirus	123	17	Statistica	12
4	Adobe Photoshop	121	18	Auto CAD	11
5	Macromedia Flash	73	19	UBS Accounting	8
6	ACD See Viewer	72	20	Shahzam	6
7	SPSS	58	21	Mc Afee Antivirus	4
8	Macromedia Dreamweaver	52	22	Argus Lab	2
9	Matlab	43	23	Visual Basic	2
10	Microsoft Project	39	24	Chinese Star	1
11	Picture Publisher	30	25	Phyton	1
12	Econometric Views	28	26	Sophos Antivirus	1
13	Pro Engineer	25	27	Swish Flash Editor	1
14	Corel Draw	23	TOTAL		1196
AVERAGE SOFTWARES PER STUDENT#					3.96

#assuming each student does not have more than one copy of any software.

As shown in Table 6.11, Microsoft’s office application and operating system is the most popular pirated software in the students’ collection of software used currently or in the past. This is hardly surprising given the usefulness of these two softwares. In addition, students are not being exposed enough to alternative (and free) softwares to utilized. On average, each student has in their collection 4 types of software.

6.4 Legal and Policy Awareness

The survey shows that more than half (60.3%) of the respondent perceived copyright infringement as the same as stealing (Table 6.12). On positive note, this shows that at least most of them they do see copying illegally is as unethical as stealing, and as such give a bad connotation to the term illegal copying itself.

Table 6.12: Legal and Policy Awareness

QUESTIONS	YES		NO	
	Count	%	Count	%
Do you think that illegally copying software is the same as stealing?	182	60.3	120	39.7
Do you know that buying or using pirated CD/VCD/DVD/Software is against the law?	264	87.4	38	12.6
Are you aware of the Copyright Act 1987?	153	50.7	149	49.3
Do you know that under Copyright Act 1987, making a copy for purposes of non-profit research and private study is considered as NOT illegal?	147	48.7	155	51.3
Are you aware that making a back up copy of a computer program for personal use is considered NOT illegal as long as the copy is made from original copy?	169	56.0	133	44.0
Are you aware that our government will impose a ceiling price on CD/VCD/DVD?	155	51.3	147	48.7

In addition, almost 90% of the students interviewed know that buying or using pirated ODP is against the law. However, only half (50.7%) of respondents are aware of Copyright Act 1987. Apart from that, less than half of respondents (48.7%) realized that making a copy for purposes of non-profit research and private study is considered as not illegal, while only 44% did not aware that making a backup copy of a computer program for personal use is considered NOT illegal as long as the copy is made from original copy. Meanwhile 155 (51.3%) of respondent does aware of Malaysian government's proposal to impose ceiling price on ODPs. However, when asked to state the proposed ceiling price level, only 31% out of these 155 students get the right answer for local music CD and 32.9% for VCD (Table 6.13 below). In addition, when further asked to state when is the exact date of ceiling price implementation⁹, out of these 155 respondents get it wrong, while 86.2% out of 138 students state the right year (2004) of the CP

Table 6.13: Awareness on Ceiling Price Proposal

Question 3.7 How much is the proposed ceiling price for:	Right Answer		Wrong Answer		Total
	Count	%	Count	%	
Local Music CD	48	31.0	107	69.0	155
Foreign Music CD	38	24.5	117	75.5	155
VCD	51	32.9	104	67.1	155
Question 3.8 When is the proposed date of implementation?	88	56.8	67	43.2	155

⁹ The ceiling price control was supposed to take effect on Jan 2004 but was deferred twice (first to April and then to July 2004). As such we took all the 3 dates as a right answer.

6.5 Logistic Regression Result

Logistic regression results are presented in Table 6.14. The results indicate that gender and computer ownership (COMP) played a significant role in determining students’ propensity to buy pirated ODPs.

Table 6.14: Maximum Likelihood Estimates of Propensity to Buy Pirated ODPs

VARIABLES	PARAMETER (Standard Error in Parentheses)		Odd Ratios
Age	-0.0756	(.0402)	0.9272
Gender	0.9649*	(0.3022)	2.6246
Marital Status	0.2322	(0.4793)	1.2614
Religion			
Buddhism	0.2497	(1.1056)	1.2837
Hinduism	-0.5604	(1.2167)	0.5710
Christian	-0.0872	(0.9760)	0.9165
Others	-0.9707	(1.1728)	0.3788
Ethnicity			
Chinese	-0.2601	(1.0964)	0.7710
Indian	0.0836	(1.2047)	1.0872
Others	0.2630	(0.8663)	1.3008
Educational Level	0.0783	(0.1210)	1.0815
Discipline			
Science and Technology	0.1888	(0.4705)	1.2078
Business and Economics	0.3381	(0.5218)	1.4023
Arts and Social Sciences	-0.4094	(0.5438)	0.6641
Computer Ownership	0.8599*	(0.3371)	2.3629
Level of Computer Knowledge	1.22E-05	(0.1853)	1.0000
Perception	-0.2585	(0.2768)	0.7722
Intercept	1.3181	(1.0565)	
Pseudo R ²	10.21%		
Numbers of Observation	302		

Note: *Significant at 1% level test

Male students (GENDER=1) were found to be more likely to buy pirated ODPs than their female counterparts. More specifically, male students were 2.6 times likely to buy pirated ODPs than female students, other things remaining the same. This result is in line with earlier findings with regards to software piracy. Those who own a computer were also found to be more likely to buy pirated ODPs as compared to those who do not own a computer. The result suggest that students who own a computer are 2.37 times likely to buy pirated ODPs than students who do not have a computer, *ceteris paribus*. This was probably because in a campus setting, students have limited budgets; they could not afford to buy other types of ODPs playing devices such as CD player or VCD player but compares to other ODPs playing device computer is a straight choice given its multiple capability to perform their academic tasks as well as entertainment tasks like playing music CD and VCD. Therefore, students with own computer are more likely to buy pirated ODPs simply because they have the device to use the ODPs. None of the other variables are statistically significant according to the Wald test. However, the overall model is significant at the .01 levels according to the model chi-square statistic. The model also correctly predicts 73.51% of the case.

6.6 Willingness to Pay (WTP) for ODPs

In this section, we investigated the willingness to pay for both originals and pirated copies of ODPs. Table 6.15 provides summary statistics for WTP for Original ODPs and Pirated ODPs. As illustrated by the table, mean WTP for all types of pirated ODPs were substantially lower than originals. However, WTP for originals ODP varies in a wider range than its pirated equivalent as shown by the standard deviation. In addition, the minimum and maximum WTP for all type of originals ODPs were higher than the

pirated copy. The WTP for all types of ODPs were also shown graphically through Figure A-Figure H in Appendix B. It clearly illustrated that WTP for originals were higher than WTP for pirated in almost all the students.

Table 6.15 Descriptive Statistics: WTP For ODPs

Type Of ODPs	N	Minimum	Maximum	Mean	Std. Deviation
Original Music CD- Local	302	3.00	50.00	17.1447	9.1859
<i>Pirated Music CD-Local</i>	302	2.00	15.00	6.0437	2.5036
Original Music Cd-Foreign	302	5.00	130.00	22.1063	13.0750
<i>Pirated Music Cd-Foreign</i>	302	2.00	58.00	7.0272	4.3398
Original VCD-Local	302	5.00	50.00	14.7526	6.9801
<i>Pirated VCD-Local</i>	302	2.00	50.00	6.0338	3.4512
Original VCD-Foreign	302	5.00	60.00	18.1247	8.7734
<i>Pirated VCD-Foreign</i>	302	2.00	66.00	6.7142	4.3555
Original DVD-Local	302	3.00	80.00	21.8103	12.2183
<i>Pirated DVD-Local</i>	302	2.00	30.00	8.8735	3.8453
Original DVD-Foreign	302	5.00	129.90	26.6116	16.4976
<i>Pirated DVD-Foreign</i>	302	2.00	35.00	9.9364	4.5632
Original Business Software	302	5.00	1000.00	63.2013	110.2788
<i>Pirated Business Software</i>	302	2.00	150.00	13.1583	13.8472
Original Entertainment Software	302	5.00	500.00	36.8702	40.9575
<i>Pirated Entertainment Software</i>	302	2.00	150.00	11.2841	12.6494
Numbers of Observation	302				

6.6.1 Percentage of Student to Buy Originals

In view of government's proposal to introduce ceiling price for ODPs, it is therefore appropriate for us to investigate the percentage of respondents that will likely switch to original ODPs or remain as buyer of pirated ODPs. As can be seen from Table below, only 18% of respondents are willing to pay at or above the ceiling price (CP) rate for local Music Cd while the remaining 82% only willing to pay below the CP. Assuming

those who are willing to pay above CP will buy original if the price control were imposed, the result suggests that only about one fifth of the student will buy original local music CD. Although CP for foreign music CD was set by the government is higher than the CP for local music CD, the percentage of students willing to pay at or above CP is higher for foreign music CD (with almost 26% will likely to switch to original) as compared to local music CD (18%). Similarly, there is higher percentage of students willing to pay at or above CP for foreign video CD as compared to local video CD. Such a low percentage of students willing to pay at or above ceiling price provides support to earlier finding that piracy is insensitive to price cut, as shown by price a low price elasticity, which indicates that copies and originals are not perfect substitute (Holm, 2000).

Table 6.16: Percentage of Student Willing To Pay (WTP) at Ceiling Price (CP) Level.

Types of Optical Disc Products		WTP at or above CP (%)	WTP below CP (%)
Music CD	Local *	17.9	82.1
	Foreign**	25.8	74.2
Video CD	Local***	51.3	48.7
	Foreign***	69.9	30.1

Note: * CP was set at RM21.00
 ** CP was set at RM29.00
 ***CP was set at RM14.00

6.6.2 Difference in WTP between Original Local and Foreign ODP

We also seek to investigate whether there is any difference in students' willingness to pay (WTP) for local and foreign original ODPs. To do this, we conduct a **Wilcoxon Sign Ranks Test**. If there are no differences between the two samples, then the number of positive signs should be similar to that of the negative ones. Table below summarized the test results:

Table 6.17: Wilcoxon Sign Ranked Test on the Difference in WTP between Original Local and Foreign ODPs

Types of Optical Disc Product	Z	Significance (p level)
Music CD	-11.907	.000
Video CD	-10.866	.000
Movie DVD	-10.910	.000

As shown in the above table, the entire Wilcoxon test exhibits negative values and is significant, which means that WTP for Foreign ODPs are significantly higher than WTP for Local ODPs for all these 3 types ODPs. This finding has several implications. Firstly, it suggest that government's move to set different ceiling prices for local and foreign music CD has a valid reason, given that WTP for local music CD is significantly lower than foreign music CD. Secondly, uniform ceiling price for video CD was not a very wise decision. Results above suggest that CP for local VCD should be set lower than foreign ones. Thirdly, any proposal to set a ceiling price for DVD in the future should ensures that CP be set lower for local DVD than foreign ones.

6.6.3 Comparison of WTP between Genders

We also conduct Mann-Whitney U Test to see if there is any difference between genders in their WTP. In lieu to earlier findings that male pirates more than female, it is important to see whether their WTP is also higher for male than female. As shown in Table below, there is no statistical support for any differences in term of WTP between male and female for all the pirated ODPs ($p>0.05$). In contrast, for original ODPs there is a significant difference between male and female in their WTP for movie VCD (both local and foreign VCD) and Entertainment Software, although not any difference for other types of ODPs. This was probably because male value original movie VCD and games software more than the female did.

Table 6.18 Results of Mann Whitney U Test on Difference in WTP between Genders

Types of ODPs			Z	p
Original	Music CD	Local	-1.493	0.135
		Foreign	-1.365	0.172
	Movie VCD	Local	-2.054	0.040*
		Foreign	-2.125	0.034*
	Movie DVD	Local	-0.692	0.489
		Foreign	-0.763	0.446
	Business Software		-0.964	0.335
	Entertainment Software		-3.169	0.002*
Pirated	Music CD	Local	-0.726	0.468
		Foreign	-0.45	0.964
	Movie VCD	Local	-0.486	0.627
		Foreign	-0.645	0.519
	Movie DVD	Local	-1.569	0.117
		Foreign	-1.183	0.237
	Business Software		-0.799	0.424
	Entertainment Software		-1.169	0.242

**significant at 5% level test*

6.6.4 Comparison of WTP between Original and Pirated ODPs

Given that the survey result have shown us that most of the student are willing to pay more for an original than a pirated ODP, we seek to investigate whether there is any basis to set price of originals differently from pirated ODP apart from cost factors alone. A pirate does not bear any cost of promotion and marketing, therefore can afford to charge much lower than the producer of originals. As such, we compare the student's Willingness to Pay for Original (WTPO) and their Willingness to Pay for Pirated (WTPP) using Wilcoxon Rank Test. The results are summarized below.

Table 6.19: Results of Wilcoxon Rank Test on Difference between WTPO and WTPP ODPs

Types of ODP	Z	Significance P level (2-tailed)	Mean	
			Original	Pirated
Local Music CD	-14.789	.000	17.1447	6.0437
Foreign Music CD	-14.630	.000	22.1063	7.0272
Local Movie VCD	-14.638	.000	14.7526	6.0338
Foreign MovieVCD	-14.678	.000	18.1247	6.7142
Local Movie DVD	-14.692	.000	21.8103	8.8735
Foreign Movie DVD	-14.878	.000	26.6116	9.9364
Business Software	-14.944	.000	63.2013	13.1583
Entertainment Software	-14.930	.000	36.8702	11.2841

As shown in the table above, there is a clear indication of difference student's WTPO and their WTPP, given a significance results for all types of ODPs. The means are

also shown for comparison, where all the mean of WTPO is far greater than the mean of WTPP. This shows that students do value original ODPs highly compared to pirated ODPs and as such there is valid reason (cost consideration aside) for producers to set price of originals higher than pirated ODPs. Most importantly, it implies that original producers can effectively compete with their illegal counterpart by setting their price at pirated versions plus certain mark up (difference between the WTPO and WTPP). But the difficulty in implementing such pricing methods lies in determining the right mark up, because these marks up vary from one person to the others.

6.7 Open-Ended Responses

Finally, we also asked the students to suggest how the government should reduce the ODPs piracy. Unfortunately, only 67 subjects reply for this part. Although the questions was in an open-ended form, their response can be simplified as follows:

Table 6.20: Open-Ended Response

Suggestions	Count	%
Greater enforcement and constant raids	16	23.9
Reduce price of originals/ Make the price more affordable	13	19.4
A combination of price reduction with law enforcement and consumer education	10	14.9
Set the price of originals at same level with pirated copy	9	13.4
Increased penalty and stricter law	7	10.4
Impose the ceiling price/ impose lower ceiling price	5	7.4
A combination of price reduction and legal enforcement	5	7.4
Provides tax exemption on ODPs	1	0.1
Offer rewards to informants	1	0.1
No answer	235	
Total	302	

Most student calls for greater enforcement effort and lower price. Amazingly, there are even some who suggest that price of originals should be set at a same level as pirated ODPs. This reveals students' lack of understanding on the anatomy of cost involved in the production of originals ODPs as compares to pirated ODPs.