Analysis of the Percentage of Total Exams Passed by Third Year Students of CamEd Business School

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INTRODUCTION

CamEd Business School offers a four year Bachelor of Accounting & Finance (BA) that allows students to also earn the international CAT qualification. BA students start taking the CAT exams in their second year for the following papers: Recording Financial Transactions (FA1), Management Information (MA1), Maintaining Financial Records (FA2) and Maintaining Costs and Finances (MA2). Third year students take the exams on Foundations of Financial Accounting (FFA/F3), Management Accounting (FMA/F2), Accountant in Business (FAB/F1), Managing Finances (FFM) and CBL/F4. Fourth year BA students take Foundations in Audit (FAU) and Cambodian Tax/F6. Of these 11 exams, nine are computer- based while 2 are paper-based. The passing score for CAT exams is 50. The BA students' CBE scores are usually used as basis for their final exam which is a component of their final grade for these papers.

But how many students passed these exams? The questionnaire was distributed in November 2016 and the students were asked to indicate the number of computer-based exams they have taken and how many exams they passed. In CamEd, there are BA students who are employed; some are attending two schools; their study hours per week also vary. This study attempts to analyze the percentage of the total exams passed by third year students and to find out whether there is significant difference in the pass rates of students under these different circumstances.

STATEMENT OF THE PROBLEM

This study aims to determine the percentage of total computer-based exams (CBE) passed by third year students as of November 2016. Specifically, it aims to answer the following questions:

1. What is the percentage of exam passed by CamEd third year students as of November 2016?

2. What is the mean percentage of exam passed by the third year students who are in any of the following circumstances:

    1.1 Employed,
    1.2 Not employed,
    1.3 Enrolled in CamEd and in other school
    1.4 Enrolled only in CamEd,
    1.5 Study on their own three hours or less per paper per week, and
    1.6 Study on their own more than three hours per paper per week.

3. Is there a significant difference between the percentage of the total exams passed by students who are employed and not employed?

4. Is there a significant difference between the percentage of the total exams passed by students who are also study in other school and those who study only at CamEd?

5. Is there a significant difference between the percentage of the total exams passed by students who study three hours or less and those who study more than three hours per paper per week?

STATEMENT OF THE HYPOTHESES

H_{o1} There is no significant difference between the percentage of total exams passed by students who are employed and not employed.

H_{o2} There is no significant difference between the percentage of total exams passed by students who are also enrolled in other school and those who study only at CamEd.

H_{o3} There is no significant difference between the percentage of total exams passed by students who study ≤ three hoursper week per paper and those who study ≥ three hours per paper per week.

LIMITATION OF THE STUDY

This study looks into the percentage of exams passed by the 3rd year students of CamEd as of November 2016, the time when data for this study were collected. Only majority of the students participated in this survey.

This study used a questionnaire in gathering the data and relies only on the information given by the respondents. Some information could not be verified with CamEd records since there were respondents who did not fill in their name and student ID number in the questionnaire.

METHODOLOGY

Study subjects

The respondents of this study were 248 students which is 62% of the total third year students. The questionnaire was distributed to all the students in seven groups but only 248 students completed it. The distribution of respondents is shown in Table 1.

Table 1. *Distribution of Respondents*

Groups	Total number of students per class	Sample		
		Male	Female	Total
Group A	46	5	23	28
Group B	55	13	11	24
Group C	53	15	28	43
Group D	63	16	32	48
Group E	38	10	20	30
Group F	36	9	16	25
Group G (26 BA)	106	14	36	50
Total	397	82	166	248
Percentage	100%			62%

DATA GATHERING AND DATA ANALYSIS

A one-page questionnaire was used to gather the data. For data analysis, mean and percentage were used. Two independent t-test was also used to determine the significant difference between the percentage of exam passed by various groups: i) employed and not employed students, ii) those who study in CamEd and other school and those who study at CamEd only, and ii) those who study ≤ three hours per week per paper and those who study ≥ three hours per paper per week.

FINDINGS

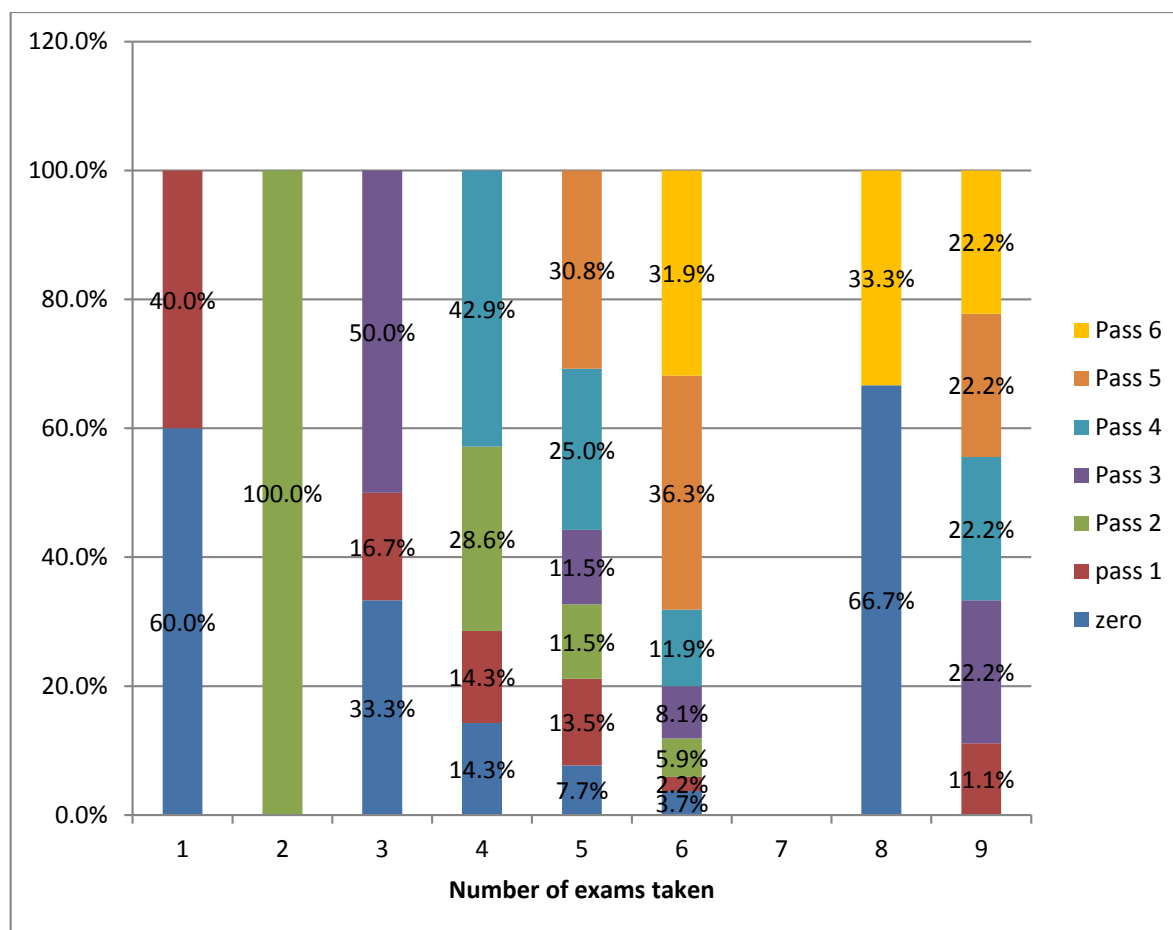1. <u>Percentage of exam passed by CamEd third year students as of November 2016.</u>

The data in Table 2 show that 20 students (8.97%) have not passed any exams they have taken. Six students took their first exam but failed. Two students have taken three exams, one student has taken four exams, four students have taken five exams, five students have taken six exams and two students have taken eight exams but failed in all. Seventeen students (7.62%) passed one exam; 19 (8.52%) students passed two exams; 20 (8.97%) passed three exams; 34 (15.25%) students passed four exams; 67 (30.04%) passed five exams; and 46 (20.63%) passed six exams.

The data further present that 70 (31.4%) students passed all the exams they have taken. Four students have taken one exam; three students have taken two exams; one student has taken three exams; three students have taken four exams; 16 students have taken 5 exams and 43 have taken 6 exams and passed them all.

Figure 1 shows that for students who have taken nine exams, 11.1% have passed only 1 exam, 22.2% passed two and the same percentage passed four, five and six exams.

Table 2: *Percentage of Exams Passed by Third Year Students*

	No. of students	No. of exams taken	No. of exams passed
Have not passed any paper			
	6	1	0
	2	3	0
	1	4	0
	4	5	0
	5	6	0
	2	8	0
Total	(8.97%) **20**		
Have passed one paper			
	4	1	1
	1	3	1
	1	4	1
	7	5	1
	3	6	1
	1	9	1
Total	(7.62%)**17**		
Have passed two papers			
	3	2	2
	2	4	2
	6	5	2
	8	6	2
Total	(8.52%)**19**		
Have passed three papers			
	1	3	3
	6	5	3
	11	6	3
	2	9	3
Total	(8.97%) **20**		
Have passed four papers			
	3	4	4
	13	5	4
	16	6	4
	2	9	4
Total	(15.25%) **34**		
Have passed five papers			
	16	5	5
	49	6	5
	2	9	5
Total	(30.04%) **67**		
Have passed six papers			
	43	6	6
	1	8	6
	2	9	6
Total	(20.63%) **46**		
Overall total	**(100%) 223**		

**Figure 1. Percentage of exam passed based on the total exams taken**

2. Mean percentage of exam passed by the third year students who are:
        1.1 Employed,
        1.2 Not employed,
        1.3 Enrolled in CamEd and in other school
        1.4 Enrolled in CamEd only,
        1.5 Study on their own three hours or less per paper per week, and
        1.6 Study on their own more than three hours per paper per week.

Table 3 shows the mean percentage of exam passed by the students in various circumstances. Students who are not employed have higher percentage of exam passed (70.17%) compared to those who are employed with only 67.47%. Those who are enrolled both in CamEd and in other school have 72.10% of exams passed compared to those who study only at CamEd with 67.58%. Those who study more than three hours have 74.78% of exams passed which is higher than the percentage of those who study three hours or less (66.94%).

Table 3: *Mean Percentage of Exam Passed by the Students in Various Categories*

Status of CamEd student respondents	n	Mean % of exams passed	Std. Deviation	SE Mean
Employed	51	67.47	40.52	5.67
Not-employed	171	70.17	29.01	2.22
Enrolled in CamEd and in other school	72	72.10	30.76	3.62
Enrolled in CamEd only	152	67.58	33.01	2.67
≤ 3 hrs study per week on their own	126	66.94	32.74	2.91
> 3 hrs study per week on their own	87	74.78	28.59	3.06

Figure 2. Comparative graphs of mean percentage of exams passed
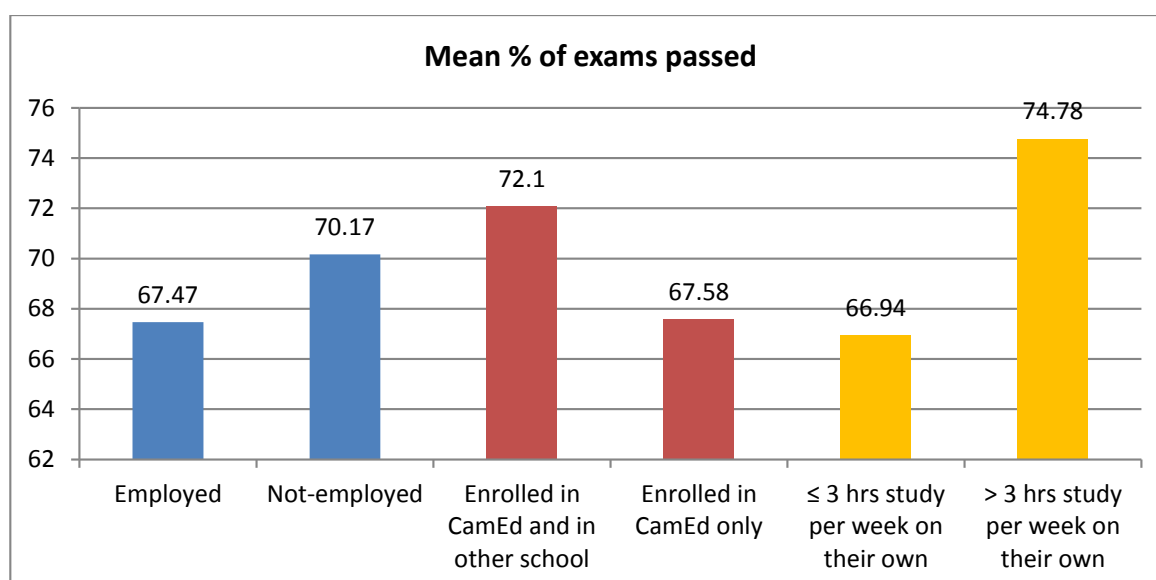
2. <u>Significant difference between the percentage of the total exams passed by students who are employed and not employed</u>

Students who are not employed have higher mean percentage of total exams passed compared to those who are employed, butthe p-value =.597 (t=.529) indicates that there is no significant difference between the scores of these two groups.

Table 4 : *Mean Percentage and T-Test Values among Compared Groups*

Status of CamEd student respondents	n	Mean % of exams passed	Std. Deviation	SE Mean	T-test value	P value (two-tailed)
Employed	51	67.47	40.52	5.67	t= .529	p=.597
Not-employed	171	70.17	29.01	2.22		
Enrolled in CamEd and in other school	72	72.10	30.76	3.62	t= 1.003	p=.317
Enrolled in CamEd only	152	67.58	33.01	2.67		
≤ 3 hrs study per week on their own	126	66.94	32.74	2.91	t= 1.853	p=.065
> 3 hrs study per week on their own	87	74.78	28.59	3.06		

3. <u>Significant difference between the percentage of the total exams passed by students who are enrolled in CamEd and who study in other school and those who study only at CamEd.</u>

The mean percentage of total exams passed by students who are enrolled in CamEd and at the same enrolled in other school is higher than those who study only at CamEd. It means that those attending two schools passed more exams. However, the p-value =.317 (t=1.003) denotes no significant difference between their scores as shown in Table 4.

To analyse further this result, the mean Aptis and math scores of 40 students who are enrolled both in CamEd and other school (Figure 3) were compared to the mean Aptis and math scores of all respondents. Aptis test is an English language test comprising writing, grammar and vocabulary used by CamEd to assess the English skills of students. The result shows that the former has higher Aptis and math scores than the latter. This suggests that students who are attending two schools may be "brighter" than those who are attending only one school. This result however needs to be verified in a bigger sample size.

Figure 3. Comparative Aptis and math scores of students

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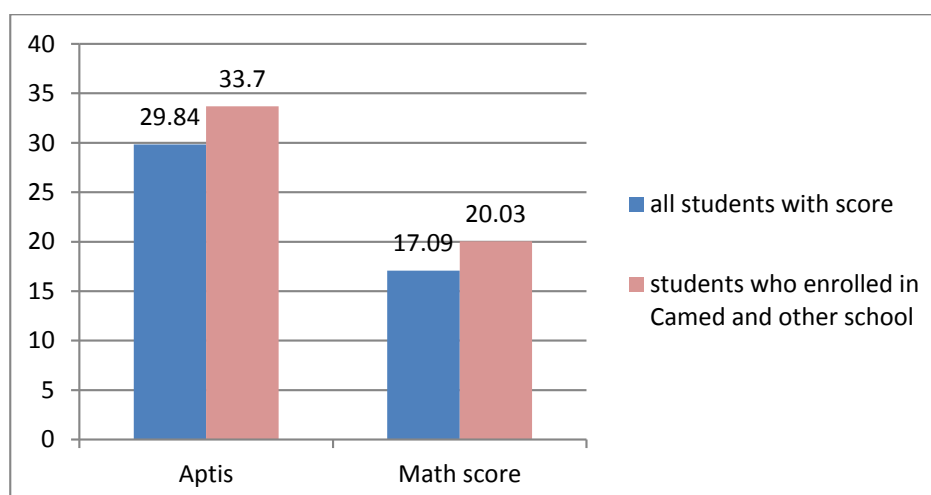
4. <u>Significant difference between the percentage of the total exams passed by students who study three hours or less and those who study more than three hours per paper per week</u>

Students who who study on their own more than three hours per paper per week got higher mean percentage of total exams passed compared to those who study three hours or less. However, at p-value = .065 (t=1.853), the difference between the mean scores is not significant.

CONCLUSION

The following conclusions were drawn based on the findings of this simple study: Students who are not employed have passed more exams than those employed.Those who are enrolled in two schools have passed more exams that those who study only at CamEd. Those who spend longer study hours of more than 3 hours per paper per day have higher percentage of passing more exams. The mean percentages among the groups however are not statistically different. Based on their Aptis and math scores, respondent students who are attending two schools appear to be "brighter" than those who study only in CamEd.

RECOMMENDATION

Since this study covers only the third year students, it is recommended that it will be replicated in a bigger scale with primary data collected using a questionnaire complemented by secondary data from school records in order to validate the findings whether they resemble the attributes of a bigger group of students of CamEd.

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