



FACTORS AFFECTING PHARMACY BOARD EXAMINATION RESULT, AS PERCEIVED BY GRADUATES OF BACHELOR OF SCIENCE IN PHARMACY AT SAINT DOMINIC COLLEGE OF ASIA WHO TOOK THE BOARD EXAMINATION

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ABSTRACT

Education is a form of learning in which a group of people's talents, skills, and behaviors are handed down from generation to generation through teaching, training, study, or simply autodidacticism. Pharmacy refers to the science and practice of preparing and standardizing drugs. Its scope includes medicinal plant husbandry, chemical compound production, and medicinal agent interpretation. This study aimed to identify the factors that have an impact on the result of the board exam. This is to help future pharmacists get rid of these factors for them to be able to pass the Licensure exam. In gathering the data, we selected those respondents who passed and didn't pass the exam that graduated from Saint Dominic College of Asia using Purposive-Convenience Sampling. The main objective of the sample is to produce a sample that can be logically assumed to be representative of the population. A survey questionnaire was formed by the researchers that went through validation and reliability testing. The survey questionnaire is composed of profiles of the respondents and sentences that are connected to the variables that affect board exam results. For the online data collection, the researchers turned the survey questions into Google forms. The result of the study shows that the Review Technique and Examination Day are very important factors that affect the board exam result. Therefore, students must do their part to enhance their skills in studying to have a better outcome in the exam by strengthening their weaknesses during reviewtime.

KEYWORDS: Board Exam, Pharmacy, Pharmacists, Factors.

INTRODUCTION

The Bachelor of Science in Pharmacy is a four-year degree that includes general education, core courses, and professional pharmacy courses, as required by the Pharmacy Law, as modified. Students can get technical recruitment guidelines, recruitment guidelines, and member protection measures, public health, regulatory pharmacy, manufacturing, pharmacy, and research through this curriculum. That's why this course has a board exam because it is needed to assure that a student will be able to exert his/her full potential in the field serving other people.

One of the final barriers a candidate must overcome in the licensing process is the licensing examination. The ultimate responsibility of a board is to guarantee that the examination fulfills technical, professional, and legal requirements and safeguard the public's health, safety, and welfare by evaluating applicants' ability to perform competently. When a candidate passes a licensing test, the board must feel confident in awarding the license, ensuring the public that the licensee is at least minimally prepared to practice at the time of the first licensure.

The Professional Regulation Commission (PRC) is responsible for administering, implementing, and enforcing the country's regulatory laws and policies governing the regulation and licensing of the various professions and occupations under its jurisdiction, as well as improving and maintaining professional and occupational standards and ethics and enforcing the laws and regulations that govern them (RA 8981).

Taking the board exam is not just about reviewing the past lesson most especially in studying pharmacist we have a lot of subjects that need time and are very crucial in terms of its composition in the boards. A licensure examinee must be able to face the hindrances or factors that can affect his/her performance on the board exam. Student academic performance assessment has gotten a lot of attention in the past; it's one of the most difficult elements of academic literature, and it's influenced by social, psychological, economic, environmental, academic, and personal variables. These characteristics have a significant impact on student achievement, but they differ from person to person and nation to country. (Mallari et al., 2018).

MATERIALS AND METHODS

The sample

The respondents for this research are composed of 26 pharmacists, both male, and female, and they are categorized based on their demographic profile, such as gender, age, marital status, and the type of pharmacy profession that they are practicing.

Sampling procedure

This study utilized purposive-convenience sampling. The main objective of a purposive sample is to produce a sample that can be logically assumed to be representative of the population. In this study, to be qualified as

respondents, the sample population should be licensed Pharmacists or those who already passed the board examination. Convenience sampling means that the participation of the respondents is based on their willingness and availability to participate.

The instruments

This study utilized a 60-item 5-point Likert scale survey questionnaire that assesses and measures Work-Life Balance and Work-Related Stress. The survey questionnaire underwent validation and reliability scoring with subject matter experts.

RESULTS AND DISCUSSION

Table 1: Frequency distribution per demographic profile.

Demographic profile		Frequency	Percent
Board Examination Status	Passers	20	77
	Non-Passers	6	23
	Total	26	100
Sex at Birth	Male	5	19
	Female	21	81
	Total	26	100
Marital Status	Single	24	92
	Married	2	8
	Total	26	100
Type of Pharmacy Profession	Community Pharmacist	14	54
	Hospital Pharmacist	9	35
	Others	3	12
	Total	26	100
Years in the Pharmacy Profession	1 to 3	23	88
	4 to 6	3	12
	Total	26	100

The table above shows the frequency distribution per demographic profile. For board examination status, 20 or 77 percent are board passers and 6 or 23 percent are non-passers.

For sex at birth, 5 or 19 percent are male respondents while 21 or 81 percent are female respondents. For marital status, 24 or 92 percent are single respondents, while 2 or 8 percent are married respondents.

For the type of pharmacy profession, 14 or 54 percent are community pharmacists, 9 or 35 percent are hospital pharmacists, and 3 or 12 percent are non-pharmacy-based professions.

For years in the pharmacy profession, 23 or 88 percent of the respondents practice the profession for 1 to 3 years, while 3 or 12 percent of the respondents practice the profession for 4 to 6 years.

Table 2: Mean score for school factor per demographic profile.

Demographic profile		Mean	Verbal Description	Verbal Interpretation
Examination Status	Passer	4.14	Agree	Important Factor
	Non-Passer	4.33	Strongly Agree	Very Important Factor
	Total	4.18	Agree	Important Factor
Sex at Birth	Male	3.92	Agree	Important Factor
	Female	4.24	Strongly Agree	Very Important Factor
	Total	4.18	Agree	Important Factor
Marital Status	Single	4.19	Agree	Important Factor
	Married	4.10	Agree	Important Factor
	Total	4.18	Agree	Important Factor
Type of Pharmacy Profession	Community Pharmacist	4.25	Strongly Agree	Very Important Factor

	Hospital Pharmacist	4.07	Agree	Important Factor
	Others	4.20	Strongly Agree	Very Important Factor
	Total	4.18	Agree	Important Factor
in the Pharmacy Profession	1 to 3	4.15	Agree	Important Factor
	4 to 6	4.40	Strongly Agree	Very Important Factor
	Total	4.18	Agree	Important Factor

*Legend: **Important Factor**= Effective teaching, course management, and facilities are important factors in passing the board examination; **Very Important Factor**= Effective teaching, course management, and facilities are very important factors in passing the board examination*

The table above shows the mean score for school factors per demographic profile. For board examination status, sub-levels of demographic profile with a verbal description of "agree" and verbal interpretation on "important factor" are the following: passer from board examination status, male respondents, both single and married respondents, hospital pharmacists, and pharmacists who are 1 to 3 years in the profession. The rest of the sub-level obtained a mean score which is verbally described as "strongly agree" and verbally interpreted as a "very important factor."

The purpose of licensure, according to Castle (2004), is to identify those persons who can process minimal competencies relevant to a certain occupation. Individuals are expected to have gained these competencies in the classroom, according to the national curriculum and content coverage of the topics supplied by the government. If the national curriculum and content coverage of the topics offered by the government are followed correctly, graduates' licensure performance may improve (p. 16 as cited in Canang R. n.d).

Table 3: Mean score for Health-Related factor per demographic profile.

Demographic profile		Mean	Verbal Description	Verbal Interpretation
Board Examination Status	Passer	4.25	Strongly Agree	Very Important Factor
	Non-Passer	4.58	Strongly Agree	Very Important Factor
	Total	4.33	Strongly Agree	Very Important Factor
Sex at Birth	Male	4.40	Strongly Agree	Very Important Factor
	Female	4.31	Strongly Agree	Very Important Factor
	Total	4.33	Strongly Agree	Very Important Factor
Marital Status	Single	4.33	Strongly Agree	Very Important Factor
	Married	4.25	Strongly Agree	Very Important Factor
	Total	4.33	Strongly Agree	Very Important Factor
Type of Pharmacy Profession	Community Pharmacist	4.33	Strongly Agree	Very Important Factor
	Hospital Pharmacist	4.32	Strongly Agree	Very Important Factor
	Others	4.33	Strongly Agree	Very Important Factor
	Total	4.33	Strongly Agree	Very Important Factor
Years in the Pharmacy Profession	1 to 3	4.31	Strongly Agree	Very Important Factor
	4 to 6	4.47	Strongly Agree	Very Important Factor
	Total	4.33	Strongly Agree	Very Important Factor

*Legend: **Very Important Factor**= Mental, Physical and Emotional fitness are very important factors in passing the board examination*

The table above shows the mean score for the health-related factors per demographic profile. Across all demographic profiles, the obtained mean score has a verbal description of "strongly agree" and verbal interpretation of "very important factor."

According to the University of Oklahoma's Suicide Prevention Resource Center, mental health conditions can affect many aspects of students' lives, including their quality of life, academic performance, emotional and physical health, and college experience satisfaction, as well as their relationships with friends and family

members. Students' long-term careers, earning potential, and general health may be harmed as a result of such circumstances. Students' energy levels, attentiveness, reliability, mental capacity, and optimism can all be affected by mental health issues, resulting in poor performance (Suicide Prevention Resource Center, 2002).

Table 4: Mean score for review center factor per demographic profile.

Demographic Profile		Mean	Verbal Description	Verbal Interpretation
Board Examination Status	Passer	4.13	Agree	Important Factor
	Non-Passer	4.43	Strongly Agree	Very Important Factor
	Total	4.20	Strongly Agree	Very Important Factor
Sex at Birth	Male	3.92	Agree	Important Factor
	Female	4.26	Strongly Agree	Very Important Factor
	Total	4.20	Strongly Agree	Very Important Factor
Marital Status	Single	4.18	Agree	Important Factor
	Married	4.40	Strongly Agree	Very Important Factor
	Total	4.20	Strongly Agree	Very Important Factor
Type of Pharmacy Profession	Community Pharmacist	4.21	Strongly Agree	Very Important Factor
	Hospital Pharmacist	4.13	Agree	Important Factor
	Others	4.30	Strongly Agree	Very Important Factor
	Total	4.20	Strongly Agree	Very Important Factor
Years in the Pharmacy Profession	1 to 3	4.16	Agree	Important Factor
	4 to 6	4.47	Strongly Agree	Very Important Factor
	Total	4.20	Strongly Agree	Very Important Factor

*Legend: **Important Factor**= Active Facilitation, Instructor's Competence, Review Materials and Review Management are important factors in passing the board examination.; **Very Important Factor**= Active Facilitation, Instructor's Competence, Review Materials and Review Management are very important factors in passing the board examination.*

The table above shows the mean score for the Review Center factor per demographic profile. Sub-levels of the demographic that obtained mean scores which have a verbal description of "agree" and a verbal interpretation of "important factor" are the following: passer for board examination status, male respondents, single respondents, hospital pharmacist, and 1 to 3 years in the pharmacy profession. The rest obtained mean scores that are verbally described as "strongly agree" and verbally interpreted as "very important factor."

According to the fading theory, a memory's trace or mark

in your brain is similar to a path one makes in the woods when you travel the same path over and over. If one does not continue on that route, it will ultimately become overgrown and disappear. Similarly, if one does not examine facts he/she has learned, they will be forgotten. After 14 days, students lost more than 90% of the content from the lecture, according to research on recall after listening to a seminar. As a result, without evaluation, the majority of knowledge will be lost from memory. The best way to study for an exam is to keep the memory fresh on an ongoing basis (Keeley, 1997, as cited in Buck County Community College, 1997).

Table 5: Mean score for examination day factor per demographic profile.

Demographic Profile		Mean	Verbal Description	Verbal Interpretation
Board Examination Status	Passer	4.44	Strongly Agree	Very Important Factor
	Non-Passer	4.60	Strongly Agree	Very Important Factor
	Total	4.47	Strongly Agree	Very Important Factor
Sex at Birth	Male	4.26	Strongly Agree	Very Important Factor
	Female	4.52	Strongly Agree	Very Important Factor
	Total	4.47	Strongly Agree	Very Important Factor
Marital Status	Single	4.49	Strongly Agree	Very Important Factor
	Married	4.30	Strongly Agree	Very Important Factor
	Total	4.47	Strongly Agree	Very Important Factor
Type of Pharmacy Profession	Community Pharmacist	4.50	Strongly Agree	Very Important Factor
	Hospital Pharmacist	4.39	Strongly Agree	Very Important Factor
	Others	4.60	Strongly Agree	Very Important Factor
	Total	4.47	Strongly Agree	Very Important Factor
Years in the Pharmacy	1 to 3	4.45	Strongly Agree	Very Important Factor

Profession	4 to 6	4.67	Strongly Agree	Very Important Factor
	Total	4.47	Strongly Agree	Very Important Factor

Legend: Very Important Factor= Positive Attitude, Having Enough Sleep, focus in the examination, clear instructions, and moral support are very important factors during the examination day in passing the board examination.

The table above shows the mean score Examination Day Factor per Demographic Profile. Across all demographic profiles, the obtained mean scores are verbally described as "strongly agree" and verbally interpreted as "very important factor." Respondents believed that having a positive attitude, and enough sleep, examination focus, clear instructions, and moral support are very important factors during the examination day in passing the board examination.

Good preparation for the examinations is highly needed. It can give examinees a sense of control and mastery, and it will prevent test anxiety from overwhelming them. But the preparations must be well established from the very start or from the first year up to the final year before the examination; it should not be in the nick of time. In connection to the study, part of the fatal effect in taking the licensure examination is the lack of intensive preparations before taking the test itself that may cause failure.

Table 6: Mean score for review technique factor per demographic profile.

Demographic Profile		Mean	Verbal Description	Verbal Interpretation
Board Examination Status	Passer	4.35	Strongly Agree	Very Important Factor
	Non-Passer	4.73	Strongly Agree	Very Important Factor
	Total	4.44	Strongly Agree	Very Important Factor
Sex at Birth	Male	4.38	Strongly Agree	Very Important Factor
	Female	4.45	Strongly Agree	Very Important Factor
	Total	4.44	Strongly Agree	Very Important Factor
Marital Status	Single	4.45	Strongly Agree	Very Important Factor
	Married	4.30	Strongly Agree	Very Important Factor
	Total	4.44	Strongly Agree	Very Important Factor
Type of Pharmacy Profession	Community Pharmacist	4.51	Strongly Agree	Very Important Factor
	Hospital Pharmacist	4.30	Strongly Agree	Very Important Factor
	Others	4.53	Strongly Agree	Very Important Factor
	Total	4.44	Strongly Agree	Very Important Factor
Years in the Pharmacy Profession	1 to 3	4.43	Strongly Agree	Very Important Factor
	4 to 6	4.53	Strongly Agree	Very Important Factor
	Total	4.44	Strongly Agree	Very Important Factor

Legend: Very Important Factor= Organization, Focused-Review, and Time Management are very important to review techniques in passing the board examination

The table above shows the mean score of review technique factor per demographic profile. Across all demographic profiles, the obtained mean scores are verbally described as "strongly agree" and verbally interpreted as "very important factor." This would mean that organization, focused review, and time management are very important to review techniques in passing the board examination.

Review strategies are methods for reengaging with previously learned material so that it remains fresh in

your memory. They are especially useful when you're studying for a specific goal, such as reviewing for an exam or evaluation.

Students can use study aids or review techniques to not only memorize the information but also to critically think about the key phrases and topics. These can aid with recall on an exam by providing practice with multiple-choice questions and retrieval signals (Dickson, Miller, & Devoley, 2005, as cited in Bord, 2008).

Table 7: Test for significant difference.

Demographic profile		p-value	Ho decision	Significance
Board Exam Status	School Factor	.271	Accept	Not Significant
	Health Related Factors	.066	Accept	Not Significant
	Review Center Factor	.148	Accept	Not Significant
	Examination Day Factor	.201	Accept	Not Significant
	Review Technique	.016	Reject	Significant
Sex at Birth	School Factor	.153	Accept	Not Significant

	Health Related Factors	.761	Accept	Not Significant
	Review Center Factor	.214	Accept	Not Significant
	nation DayFactor	.360	Accept	Not Significant
	Review Technique	.847	Accept	Not Significant
Marital Status	School Factor	.741	Accept	Not Significant
	Health Related Factors	.797	Accept	Not Significant
	Review Center Factor	.679	Accept	Not Significant
	Examination DayFactor	.251	Accept	Not Significant
	Review Technique	.343	Accept	Not Significant
Years in the Pharmacy Profession	School Factor	.601	Accept	Not Significant
	Health Related Factors	.724	Accept	Not Significant
	Review Center Factor	.513	Accept	Not Significant
	Examination Day Factor	.363	Accept	Not Significant
	Review Technique	.779	Accept	Not Significant
Type of Pharmacy Profession	School Factor	.602	Accept	Not Significant
	Health Related Factors	.999	Accept	Not Significant
	Review Center Factor	.869	Accept	Not Significant
	Examination Day Factor	.677	Accept	Not Significant
	Review Technique	.511	Accept	Not Significant
*Significant at .05 alpha level				

The table above shows the test for significant differences per factor per sub-level of each demographic profile. Across all sub-levels of the demographic profiles, except for board exam status under review technique, the computed p-values are greater than the .05 alpha level. This would mean that there is no significant difference and the null hypothesis is accepted.

For the review technique under board examination status, the computed p-value is less than the .05 alpha level. This would mean that there is a significant difference and the null hypothesis is rejected. Hence, non-passers believe more that organization, focused review, and time management are more important to review techniques in passing the board examination than board passers.

CONCLUSIONS

Based on the findings, researchers of this study have concluded that,

- When deciding to take a BS Pharmacy course, one must have a high appreciation of science subjects who have maintained very satisfactory grades on these subjects. Since these topics are too broad, as a student, one must be ready to so enrich one's knowledge by reading supplemental medical literature management and subject matters in advance, and not be too dependent on the subjects matters discussed in the classroom.
- Passing the board examination relies mostly on the ability of the student and his dedication with the help of the curriculum and professors teaching those subjects.
- Effective teaching, course management, and facilities are important factors in the success of pharmacy board examinees together with students' participation by continuously enhancing his/her knowledge by being up to date on the current events.

- Instructor's active facilitation and competence and as well as management of materials and reviews for board examination are highly important for examinees to pass the board exam.
- The examinee's positive attitude in the examination, preparation such as a thorough review and examination focus, as well as moral support from family, friends, and the school can aid in positive outcomes of board exam results.
- To pass the board examination in Pharmacy, examinees should consider with high importance being mentally, physically, and emotionally fit.
- Organization focused review, and time management are very important areas to consider to pass the Pharmacy examination.
- Those who failed the board exam will put more importance on focused reviews, organization, and management of time to win the licensure examination for pharmacy.

Recommendations

The researchers recommend the following derived from the result of the study that,

- Students must consistently improve their knowledge during the four-year course by reading in advance the professional subjects of pharmacy, expanding knowledge capacities by performing arithmetic problems, and other relevant topics being presented in the classroom.
- Active involvement in class and laboratory, as well as additional readings and effective application of newly acquired information, will ensure high marks and passage of the board exams.
- With the support of skilled teaching experts, updated materials or learning resources, and laboratory facilities, students' devotion and tenacity in attaining more information via their studies would help in their performance on the board exam.

- d. Examinees should be optimistic, prepared, and stay in attention or focus especially when receiving examination instructions.
- e. Examinees should organize notes for review and at the same time put essential priorities in review and manage one's time.

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