



Exploring the Influence of Assessment Item Bank Utilization to the Academic Performance of Accountancy Students

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Abstract— The researchers explored how the utilization of item banks influences the academic performance of accounting students. This study employed qualitative research and used phenomenology as the research design. Purposive sampling was incorporated in choosing the participants of this study; a total of fifteen (15) fourth-year Bachelor of Science in Accountancy students of Don Honorio Ventura State University were chosen and interviewed using a semi-structured interview. The results showed that while using the item bank helps students achieve their learning objectives and progress academically, there are numerous factors that hinder the students from engaging with this resource effectively. This study emerged with the following main themes: 1) how item banks affect accounting students' learning process; and 2) how item banks affect students' integrity and ethical behavior. The following recommendations were made regarding the use of assessment item banks: 1) students should see item banks as additional academic tools to enhance their knowledge and abilities; and 2) students should put more emphasis on using test banks to improve academic performance than just using them for convenience or unfair advantage.

Index Terms— accountancy, academic performance, assessment, learning process, test banks.

1. The Problem and its Background

A. Introduction

The Licensure Examination for Certified Public Accountant (LECPA), according to the Professional Regulation Commission, was ranked 5 out of 10 of the hardest professional examination for the accountancy degree program. The LECPA's historical passing rate demonstrates a downward trend that began in May 2016 of 42.84% and continued until October 2019 with 14.32%, (Esaga et al., 2022). The nationwide passing rate in May 2022 is 22.29%, which is 7.01 percentage points more than the 15.28% in the October 2021 LECPA. Despite this improvement, the rate is still quite low. In contrast, the first-quarter 2022 CPA examination passing rates for the American Institute of Certified Public Accountants, the country's premier professional association for CPAs, were 46.35%, 57.33%, 44.95%, and 60.03%, or a combined estimated average passing rate of 52.16%. Given this, the CPA licensing test truly requires more time and effort due to the

substantial amount of knowledge that the examinee must acquire (Asadon, 2022). Despite the challenges that come with accounting subjects, students maintain a positive attitude towards it, as stated by Tan in 2014. Their approach to studying their courses can be ascribed to their optimism. Indeed, getting a CPA license requires perseverance in pursuing that objective—more so, studying diligently in college—as well as having a positive outlook and attitude towards accounting. If combined with effective study habits, a positive outlook on accounting may result to an improved academic performance and a higher possibility of passing the board examination. Given the correlation between academic performance and obtaining the CPA license, this study will investigate a potential factor that may influence student's academic performance: the utilization of test banks.

Education serves as an avenue for the development of an individual, as it pertains to the holistic learning process in which students are able to grasp knowledge and develop various skills. On the other hand, school merely provides education. Furthermore, education also relates to the act or process of teaching, the application of discipline on the mind, or the cultivation of character (Adesemowo & Sotonade, 2022). It is believed that formal education started in Greece around 4 BCE. In fact, the Greek word "schole," which meaning "leisure" in which the term "school" originated. This sheds light on the prevailing perception at the time, which was that education should be an "enjoyable activity rather than a chore". Today, education is considered as a fundamental human right, where the government is ensures that all children have access to education despite of their background circumstances. The tools used in education have also improved. Among the first educational tools the Romans utilized were wax tablets. Pen and paper have practically been replaced in schools today by digital tablets and electric stylus. Since the printing press, digital technology—which includes computers and the internet—represents the second major technological revolution. The possibility for teaching and learning in more interesting and approachable ways has been dramatically transformed by such technology, enabling the possibility for "leisurely learning," as

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the Greeks intended (Chen, et al., 2022).

As the pandemic hit in 2020, technology entered to hinder and reverse the suspension of education. The shift from an offline to an online learning environment has been significant for schools. Instructors may now hold audio-visual lessons with students through applications that conduct online meetings, like Zoom and Google Meet. Digital mediums made it easier to administer tests, complete questionnaires, and turn in assignments. These made it possible for the regular teaching-learning cycle to continue without significant disruption. Online learning tools and assignments were made easily accessible to students by firms like Google and Microsoft, as well as portals like Moodle and Learning Management Systems (LMS). In the previously described portals, students could interact with instructors and provide feedback, and instructors could respond to students. Sharing online resource files to help improve students' academic learning has also become prevalent due to digital learning platforms. Images, PDFs, academic papers, links to YouTube videos, audiobooks, and more are some examples of these resources. Given the help of these resources, students were able to learn beyond the confines of a traditional school curriculum and acquire a broader perspective in the context of learning. Examples of engaging and dynamic content include thought-provoking expert-led tech talks, educational research papers that depict real-world events, and other images or videos that break down complex subjects into digestible and humorous forms (BeSingular, 2021). Through the help of online learning resources, students are exposed to a higher degree of simulation that can be tailored to each student's level of competency. Students can review course material as frequently as necessary and learn at their own pace with daily access. They are able to comprehend the material and have greater autonomy over their learning process since the learning materials can be personalized to meet their needs (Broadbent & Poon, 2015). The learning curve improves significantly by this compared to solely relying on instructor-led teaching. The value of education that the students receive is thereby continually increased. According to the constructivism theory, people create their own perceptions and understandings of their surroundings. Students can collaborate and communicate with peers and experts more while using e-learning portals and technologies. In order to create a dynamic online environment, teachers can also employ a variety of teaching and communication strategies, including case studies, storytelling, streamed films, discussion groups, and bulletin boards. This allows for an interaction that is akin to that which occurs in a small group setting, which enhances the educational environment while promoting critical reasoning. Due to the discussions they participate in, students who use e-learning platforms tend to become more engaged with the material; this is further supported by the fact that there is no monopolizing of attention in an online setting (Nelson, et al., 2014).

Students, teachers, instructors, and professors continue to gain from the advantages that online modal learning has brought to the scene now that onsite discussions are not subject to constraints (Gautam, 2020). Additionally, the Internet is a valuable addition and a source of expanding ideas. The

reliability of the materials from the Internet and the students' general ability to use them are two things that may limit the students. Teachers' role are therefore vital because they set an example for their students during the training phase and influence how they behave. These factors make it more important than ever for educators to include modern technology into their lessons so that students can follow their lead and use it for learning. For instance, teachers take on a more active role by ensuring student's learning in the utilization of mobile devices in a classroom set-up. Needless to say, teachers' competencies with regards to the information and communication technology continue to be a critical component of education development because they face challenges in incorporating new technological solutions into their daily practice, serving as role models, and motivating students to use technology and the internet as learning tools (Szymkowiak, et al., 2021).

Every human being has the fundamental right to access information, but this does not mean that there are no restrictions. Teaching and learning resources were often viewed as essential intellectual property that faculty and learners could access for academic pursuits. These days, an increasing number of organizations and people share these digital materials online beyond financial, technical, or legal constraints. Open Educational Resources (OER) make education more accessible. Open access in education began in 2001 with the Massachusetts Institute of Technology's (MIT) Open Course Ware (OCW) program, which posted the majority of course materials online and made them freely available to everyone, anywhere in the world. Numerous prominent academic institutions adopted their model, amplifying their influence inside the academic field and among information seekers. At the 2002 UNESCO Open Courseware Forum for Higher Education, the concept of Open Educational Resources was first introduced, asserting the concept of "open sharing of knowledge and digital resources for teaching, learning, and research" (Cosan, 2021).

Open Educational Resources (OER) are educational materials and tools that have been created and made available for free public use. They can be modified and republished with permission (UNESCO, 2019). OER, in its most basic definition, pertains to any educational materials that are accessible for use by teachers and students that are free of charge. Furthermore, the license is the primary important distinction that OER has over any other educational material. Accordingly, OER is only a teaching tool with a license that permits adaptation and reuse without requiring prior consent from the copyright owners (Butcher et al., 2015).

The use of digital media in the modern era offers numerous advantages to both teachers and students. These advantages include the capacity to create and send educational materials through email, administer exams online, interact with students in real time, and provide remote students with online course instruction (Savage & Simkin, 2010). According to Boitshwarelo, Reedy, and Billany (2017), there is an enormous opportunity "to creatively make use of a diversity of assessment approaches to support and evaluate student learning in higher education" given the abundance of digital medias and the

widespread of information. It is not an entirely new idea that digital technologies may revolutionize evaluation. Due to their potentially advantageous features such as providing customized, quick, or interesting assessment experiences, innovative tools and technologies are often viewed as providing up new opportunities.

One of the most significant courses in business school studies is accounting, and its relevance has grown even more since the nationalization and indigenization policies were implemented. These policies have led to a significant increase in the need for accountants. Achieving self-reliance and sustainable development is the foundation of accounting education. In order to prepare students for meaningful careers, business education and vocational education play a crucial role in acquiring the knowledge, skills, understanding, attitude, and competencies necessary for employment as well as self-employment in an ever-changing world. The process of providing systematic instructions to students, accountants, and other accounting professionals can be characterized as accounting education. Accounting is one of the vocational disciplines provided in postsecondary institutions. Its goal is to prepare students for the acquisition of skills necessary for keeping track of and documenting financial transactions in an office (Akpan, 2021).

Every activity has been influenced by the effects of rapidly changing demographics, shifting economic conditions, scarce resources, development, and technological advancements (Davis, 2015). The world is changing around us in a dynamic and rapid ways. Similar to how accountants work in practice, business practices are also always changing and evolving. This leads to considerable changes in the accounting profession. As a result, accountants face progressively complex challenges as a result of the shifting corporate environment (Handoyo & Anas, 2019). Accountants are now considered "knowledge workers" due to changes in business operations and technological advancements, which have an impact on the newly acquired skills required of them (Dellaportas and Hassall, 2013). According to Taipaleenmäki and Ikäheimo (2013), accounting is a dynamic field where concepts, technologies, and activities related to both financial accounting (FA) and management accounting (MA) are always developing and reinventing themselves. The complex nature of accounting has been increasing daily. These modifications make it impossible to continue using the knowledge that has already been acquired; instead, recognizing and updating knowledge are now prerequisites (Kumar, et. al., 2017).

As a professional accountant who will uphold the accounting profession's core values and look out for the best interests of the clients they serve, every Bachelor of Science in Accountancy (BSA) student is expected to become a Certified Public Accountant (CPA) in the future (CMO 3, s. 2007). For this reason, BSA students will receive training and development aimed at helping them become professional accountants who are both ethical and capable of passing the licensing exam. The CPA Core Competency Framework was created by the American Institute of Certified Public Accountants (AICPA, 1999) and offers a set of skill-based competencies that are required from the students taking the course of accountancy.

The three main competencies this framework offers are: broad business perspective competencies which relates to the environment and communication of accounting services; technical skills that enhance accounting services; and personal competencies associated with an individual's attitude and behavior conducting accounting services (Rufino, 2016).

Leading professional accounting bodies have identified adaptability, agility, innovative thinking, and lifelong learning as essential skills for chartered accountants to possess in light of the rapidly evolving professional landscape of this profession (AICPA, 2011). In response to the rapid evolution of knowledge, technology, business practices, and government regulations affecting the accounting profession globally, the Task Force on Accountancy and the Philippine Board of Accountancy (BOA) developed the Core Competency Framework for the Philippine Accountancy Profession in 2005 (Mendoza, 2013). The well-defined set of core competencies and entry-level qualification requirements for Filipino CPAs are contained in this framework. This was based on the standards or guidelines published by IFAC and in line with the core competencies of the AICPA. The "knowledge", "skills", and "values" that a BSA student should possess to enter the profession and competently navigate the challenges of the rapidly evolving business world comprise the core competency framework (Rufino, 2016). Students must obtain fundamental skills through their university programs, which should, among other things, be created to support and enhance lifetime learning skills. In order to be a lifelong learner, a student needs to be able to use deep learning techniques and tactics, self-regulate their own learning, and motivate oneself internally when outside factors are absent. Instructors must establish the conditions necessary for this to happen, and occasionally this calls for the intentional use of various learning aids (Malan and Stegmann, 2018). Barac and Du Plessis (2014) conducted an investigation into undergraduate programs accredited by the South African Institute of Chartered Accountants (SAICA), a professional accounting body. They discovered that the majority of the time, lifelong learning is influenced by the continuous update of study materials in response to changes in the law, accounting and auditing standards, and information technology, for the purpose of helping students realize that these changes will occur on a regular basis during their professional careers.

Lifelong learning is a process. As is often understood, it encompasses all of a person's learning experiences throughout their life, not only the lessons taught to them in from educational institutions, as well as a method of reading books and retaining concepts. Additionally, it is a never-ending process that may offer them new perspectives and guidance. Education seeks to impart knowledge and skills to improve each student's talents and capacities, to bring competence, and to mentor them with a positive attitude and values (Borsoto et al., 2014).

Performance, as defined by Atsiaya Siah and Maiyo in 2015, is the degree to which an action is carried out or not. The relevance of something stands out due to its social significance. In the language of education, a student's academic achievement represents their performance, which is the result of their study

habits, which are developed and reinforced through schooling. Developing effective study habits is relevant and beneficial for both academic work and job actualization. Study habits comprise actions and abilities that can boost motivation and turn studying into a highly productive process that ultimately results in enhanced learning (Hashemian and Hashemian, 2014). This ability can also be described as any task that makes it easier to study a subject, solve problems, or memorizing information in the materials (Arora, 2016). Studying is therefore comparable to a structured subject-matter mastery program. The main goals of studying are to develop habits and knowledge that will help one analyze concepts, form judgments, come up with new ideas, and hone existing ones. Therefore, the foundation for achieving success in any academic endeavour is study, interpretation, and application. Everybody studies in a different way. Many times, students' poor academic performance is the result of their bad study habits (Atsiaya Siahi and Maiyo, 2015). Based on the research that Jafari and others in 2019, conducted with medical science students at Kermanshah University of Medical Sciences, found a direct and significant correlation between study habits and academic achievement.

Academic performance describes a student's method of studying and completion of assigned assignments. Cumulative GPA, which takes into account both class and topic accomplishments, is typically used to evaluate it (Hamid, 2020; Junco, 2015). Research papers are taken into consideration as markers of academic progress, and the cumulative grade point average (CGPA) based on prior exams can be used to evaluate academic performance (Aslam *et al.*, 2013). Academic soundness can also be enhanced by learning new information and giving effective presentations to the class. Different interactive teaching approaches are used in educational settings to make the most out of class time and assist students in applying what they have learned. The weekly tasks and discussion posts can be used in online learning environments to get students involved outside of the classroom and emphasize real-world applicability (Hamid, 2020).

One of the most effective techniques available to professors to shape how students behave and how they adapt to accounting courses is assessment. On the other hand, students are more likely to focus on the areas of course that will be evaluated. Moreover, students' perceptions of how their courses are graded are connected to how they use innovative resources for learning (Máté and Darabos, 2017). In order to provide students with a better, higher-quality learning experience, student evaluation and assessment have become essential procedures in all educational institutions. A vital component of improving quality is getting student feedback on their experiences with any given educational system, including its programs, individual course units, and overall learning environment (Bay & Subido, 2014). In order to evaluate students' capacity to apply knowledge, skills, and abilities that are pertinent to living and working in a "volatile and rapidly transforming world" as well as to consolidate learning across knowledge areas, powerful assessment types like problem-based learning, authentic learning tasks, and case studies rank highly (Scott, 2016).

Assessment innovation is a crucial topic, whether or not technology is used. It is thought to be particularly vulnerable in the context of summative assessment, which is subject to strict controls, held accountable to the public, and has a significant impact on the student being evaluated (Oldfield *et al.* 2013). From the perspective of the student, the assessment feedback serves as the curriculum, and the scores or marks that students obtain indicate how well the curriculum is working. University students therefore aim to receive the highest marks possible in each course they take each semester. From the perspective of instructors, assessment feedback is communication and/or information that is provided in a variety of ways with the goal of inspiring students by telling them how well they have performed and where they may still make improvements. Formative feedback is feedback from assessments that students apply to improve their learning and performance. The same knowledge can help lecturers adapt their teaching methods to better meet the needs of their students. Summative feedback, on the other hand, is evaluation that summarizes the final assessment of the quality of the students' work. For this reason, both instructors and students gain from the information gathered through feedback assessments. Feedback would become an essential component of teaching and learning in higher education if it were used for these reasons (Isa and Azero, 2013). In the course of Principles in Financial Accounting, students who used the daily evaluations had better grades, according to a 2014 study by Bush and Walsh.

Multiple-choice (MC) items in automated assessment enable time-efficiency, quick feedback to students without evaluation bias. Indeed, without the instructor's direct involvement, students can use digital practice exams whenever, wherever, and as often as they like. However, the validity and reliability of the test, in addition to the item quality, are also highly regarded by automated assessment (Beerepoot, 2023). Most instructors suggest what textbook to use by the students. Additionally, the vast majority of textbooks come with widely utilized supplementary exam banks. On the other hand, only roughly 14% of the 2,700 questions in the huge sample are being evaluated for quality by the instructor. According to Richman and Hrezo (2017), quality multiple choice questions are hard to create, which makes instructors more inclined to rely on test banks provided by publishers.

A question bank, often referred to as an "item bank" (Thompson, 2020), is a substantial, methodical collection and arrangement of exam questions that is compiled and maintained by an institution for use by instructors, students, and assessors in order to partially satisfy the objectives of the teaching-learning process. Globally, people use online test banks. These are pre-packaged online materials that are occasionally offered by educational institutions and are intended for use by lecturers when constructing assessments. Online test banks are appealing because they are frequently developed by the same publisher as the course associated textbook, making them focused on the key ideas covered in that particular textbook. The test banks include a wide range of questions and can offer notes on a particular response provided by students directly, frequently along with precise page references to the textbook (Campbell, 2021).

However, many are concerned about the quality of test questions and the suitability of multiple-choice question (MCQ) format assessments for assessing knowledge and skills relevant to the twenty-first century, given the power of profit-driven publishers wield over assessment practices in higher education (Vista & Care, 2017). The concept that fast evolving technologies and globalization have led to fundamental changes in the nature of learning and education in the twenty-first century is commonly captured by the term "twentieth century learning" (Kereluik, et.al., 2013).

The way instructors and students teach and learn has changed significantly since the internet was incorporated into the educational system. A quick and simple internet search, test takers can anonymously browse through a large number of test questions and, in certain situations, even view their actual exam ahead of time. This integration has ushered in a new era of education where students have developed ways to access them (Wotapka, 2018).

There are several potential consequences to using test banks. According to Rothschild's article from 2023, test bank use among students has sparked worries about equity, academic integrity, and intellectual property among others. In one instance, the publisher of a textbook frequently sends a copyrighted test bank with additional multiple-choice or problem-based questions and answers to a professor who adopts it for use in the classroom. Professors may use these publisher test banks (PTB) to develop exams for a number of purposes. It is possible that instructors are unaware that students have access to these same PTBs as the majority of which may be easily accessed online (Cheng & Crumbley, 2018). Therefore, the primary goal of the assessment on the learnings of students is compromised when both instructors and students rely on the same online resource. Purchasing educational materials presents ethical and legal questions for students. Students who buy test-bank or solution manual materials online are typically doing so in order to improve their scores, but they may not be aware of the legal ramifications of doing so. They are gaining access to restricted and frequently stolen intellectual property. As a result, even though these students may believe that their actions are less harmful than actually purchasing stolen products, they are nevertheless participating in unlawful conduct. The lack of complexity of doing so and the minimal chance of being caught are other considerations that could affect the decision to make such purchases. A response from students would be that, in most western democracies, "citizens can do anything that is not clearly declared as illicit activity". In an ethical perspective, many students might not define "acquiring and using a test bank" as immoral or "cheating." Using a test bank as a study tool is one example of such a conduct, if faculty members do not expressly prohibit it in their curricula. According to Savage and Simkim (2010), who were the first to note that students have access to PTBs on the internet, it is also plausible to argue that students are not aware that they are purchasing copyrighted materials and are, therefore, making a decision based on needs rather than legal concerns (Cheng and Crumbley, 2018).

The use of test banks could have a big impact on accounting

education and the profession as a whole. Employers require new hires to possess a certain level of basic accounting knowledge. Students who simply memorized test answers could find it difficult to pass licensing examinations or obtain low evaluations. This may harm their opportunities of advancement and, in the end, reflect adversely on the universities from which they received their degrees (Cheng, 2018). It constitutes academic dishonesty for college students to utilize technology to obtain unlawful information. This can take many different forms and occur both within and outside of the classroom. This habit is encouraged by the Internet in particular, which makes it easier, faster, and more convenient than it was in the past (Bain, 2015). Since accountants serve the public in tracking investments and avoiding financial and legal mistakes, the public expects a greater level of integrity from accounting professionals, making academic dishonesty a particularly serious issue in the accountancy program (Jelinek, 2018). The conventional approach to addressing unethical corporate practices and cultivating moral company leaders was to focus on education. It appears reasonable to start with education as research indicates that unethical college students are likely to carry over their unethical behavior into the workplace (Keiper et al., 2020). Given the potential harm to the accounting and auditing professions as a whole, cheating associated to test bank use is a major worry during exam. According to Tarah et al. (2016), college students who successfully cheat not only have a poor comprehension of the subject matter but also have a higher probability of committing unethical acts in order to advance in the accounting field after graduation. It has been alleged among universities that their educational institutions are unsuccessful in developing strong ethical principles among students that will help them in their professional endeavours (Anzilago, et al., 2023). For example, it was discovered that KPMG personnel had cheated on training exams (SEC, 2019). For these reasons, dealing with online course cheating is essential to preserving the integrity of accounting education, as is the growing adoption of online degree programs by accounting firms and the frequency of online assessments in higher education (Grossman & Johnson, 2017). In response, according to a research study conducted in 2020 by Kohlbeck and Golden, the use of rephrased test banks is believed to minimize academic dishonesty. The findings also support the idea that students find it difficult to identify the answer online when faced with a paraphrased test bank question because the question is not available in its entirety.

Review courses for Certified Public Accountants (CPAs) offer practice questions to individuals. These practice questions are unlikely to be precisely the same questions that students encounter on the current CPA examination, even though they might be the same questions that were used in earlier exams, alike in topic coverage, and possibly comparable in terms of writing. Therefore, regardless of how they learned the course material, students who comprehend the subject being tested on the exam should perform better than those who do not (Cheng, 2018). However, by using PTBs to sharpen their comprehension of the course topic, students may be able to recognize the right answers to PTB questions not just because

they are familiar with the question but also because they comprehend the subject matter being tested. PTB cheaters frequently commit the answers to PTB questions to memory in addition to particular textual cues. From the example provided by Wotapka in 2018, a student encounters a multiple-choice question concerning the amount of income tax deducted from the bonuses received by Cubs baseball players. \$6,250 is the answer to the query. Without knowing the underlying accounting concepts, the student could be able to solve the exam question by memorization of the cues "Cubs" and "income tax withheld" in addition to \$6,250. Furthermore, Cheng and Crumbley's study on test-bank utilization by students and their published results suggest that PTBs could be a major obstacle to preserving fairness in the accounting classroom. They pointed out that teachers who employ PTBs might not be able to tell the difference between students who performed well on an exam because they understood the subject matter and those who performed well because they committed the answers to memory. The use of PTB has certain effects on fairness as well. Test banks are used by certain students as study aids, however according to Crumbley (2018), it is unfair to the students who do not have access to them or who would not use them for moral or ethical reasons. Since during class evaluations often comprise a significant portion of students' grades, students who do not use PTBs likely receive lower test scores. This could affect students' course grades and overall GPA, and, perhaps ultimately, their job prospects. He and Cheng wrote that students who do not use PTBs can "suffer real consequences".

Across the globe, accounting is often considered to be one of the most challenging subjects in business degrees. According to Borges *et al.* (2014), it is generally associated with low passing and high failure rates. The use of assessment item banks can make it more difficult to evaluate student learning. The question of effectiveness and integrity despite the challenging Accountancy program and availability of test materials draws the researchers' attention to seek answers. Furthermore, the existing body of literature clearly indicates a limited number of studies regarding the influence of test banks on students' academic performance. With this, the researchers will conduct a study that aims to explore the diverse effects of assessment item bank usage on accounting students, specifically, how these resources impact the learning process and academic performance of accountancy students in Don Honorio State University. The results of this study could potentially serve as a foundation for improving the learning experience and academic achievements of future students in the demanding field of accountancy.

B. Theoretical Framework

The researchers adapted Self-Determination Theory (SDT) as a theoretical framework to support the study. According to Garrido (2023), the main focus of SDT is motivation. It discusses how people encourage others to take action as well as how individuals can motivate themselves. External considerations, such as awards, grades, evaluations, or thoughts about what other people might think of them, frequently have

an impact on people. On the other hand, even when people do not get rewards externally, internal factors like hobbies, curiosity, compassion, and personal beliefs can be powerful sources of inspiration. The fundamental idea of SDT is the interaction between extrinsic and intrinsic motivations. SDT also delves into the ways in which a variety of factors can either strengthen or weaken people's sense of autonomy, competence, and relatedness. These qualities are essential for encouraging the best kind of self-driven motivation and activity engagement, which in turn improves performance, perseverance, and creativity. Furthermore, SDT asserts that a person's well-being can be adversely affected to a great extent when these psychological demands are not met or ignored in a social setting (Cherry, 2022).

In the context of accounting education, autonomy refers to the students' feeling of control and choice over the ways in which they choose to learn, such as whether or not to use test banks. Students' assessment of their competence is based upon their perception of ability to effectively use these resources to improve their learning outcomes. Our research hypothesis is that accounting students who feel more autonomous in choosing to utilize test banks and who perceive increased competence in doing so will be more intrinsically motivated to engage with these resources. Ultimately, this heightened motivation is expected to positively impact their academic performance, as reflected in their grades and overall success in accounting courses. This framework provides a structured lens through which to explore the nuanced relationship between test bank utilization and academic achievement among accounting students.

C. Statement of the Problem

To enhance the performance of Accountancy students in Don Honorio Ventura State University, this study seeks to investigate the various impacts of utilizing test banks on the learning process and academic performance of accountancy students in the said university.

Specifically, this research aims to address the following questions:

1. How does the utilization of test banks as learning resources impact the learning process of the participants?
2. Does the usage of test banks have any influence on the integrity and ethical behaviour of the participants?
3. What recommendations can be made regarding the incorporation of test banks as academic resources?

D. Significance of the Study

This study aimed to provide valuable information on how the utilization of data assessment item bank influences the academic performance of fourth-year accounting students of DHVSU.

For accounting students, the study can guide accounting students to enhance their academic performance by revealing how assessment item banks can be used appropriately. This study could educate students about the various impacts of integrating test banks into their learning experience.

For accounting instructors, such a study could assist accounting teachers in improving their teaching and assessment methods. The study could establish a set of best practices for using assessment item banks to devise formative and summative assessments and to give feedback to students.

For accounting regulatory bodies particularly the Board of Accountancy, such a study would assist policymakers in accounting education to develop evidence-based policies and regulations for the use of assessment item banks.

And, for future accounting researchers, this could provide greater insight to accounting researchers regarding the impact of item banks on student learning and assessment outcomes. This could result in a development of new and improved assessment item banks and some new teaching and assessment strategies.

E. Scope and Delimitation

The study is limited to the fourth year accountancy students at Don Honorio Ventura State University (DHVSU) in the academic year 2023-2024, located in Bacolor, Pampanga. The objective of this study is to understand the effects of test banks utilization to the academic performance of accounting students. The total number of fourth year accountancy students in DHVSU Bacolor Main Campus is One Hundred and Five (105). However, since the researchers are following a qualitative approach in their study, they only took a small sample size from the population. According to Bernard (2013), a sample size range between ten to twenty research participants is sufficient to uncover and comprehend major issues in any study of lived experience. Thus, the researchers selected fifteen individuals from the population to participate in the research. The fourth year BSA students in DHVSU are currently divided into three sections: A, B, and C. The researchers selected five participants from each section using purposive sampling or judgemental sampling. The researchers conducted interviews using questionnaire guides as a way to gather information relevant to obtaining the study's objective.

In addition, it is essential to acknowledge the inherent constraints that limit the study. A delimitation to take note of is that the researchers could not strictly follow the 10-year rule for the citing of references. Due to the scarcity of resources relevant to the study, the researchers were compelled to extend their citations beyond the designated boundary of 10 years. Lastly, it is important to highlight that the primary focus of this study resolved around e-test banks only.

F. Definition of Terms

Assessment Item Bank is a relatively large collection of easily accessible test questions (Millman & Arter, 1984). In this research it is also referred to as test bank, it is a collection of exam questions and answers typically created by textbook publishers or instructors that can be easily accessed by students from the internet.

Academic Performance is the measure of academic success of the students (Brew *et al.*, 2021). In this research, academic performance pertains to the extent to which a student has achieved the goals, criteria, or requirements established by their

educational program, institution, or curriculum.

Accounting Students are learners who are enrolled in an accounting program at a college or university, or who is studying accounting independently in order to pursue a career in the field of accounting (American Accounting Association, 2023). In this research, the term accounting students denotes individuals who are enrolled in the course of Bachelor of Science in Accountancy.

2. Research Methodology

A. Research Design

The aim of this research study is to learn how assessment item banks utilization impact the academic performance of accounting students. The researchers will be employing qualitative research to conduct inquiries from participants in order to have an in-depth understanding of the lived experiences in their usage of accountancy-related assessment item banks, which may also be called test banks. The research design that will be used is phenomenology, which the researchers believe is best suited for this study because according to Alhazmi and Kaufmann (2022), this research design can be a tool that can help researchers engage in flexible activities that seek to understand phenomena.

According to Bliss (2016), phenomenological research necessitates that the researcher concentrate on human experiences in order to gather thorough details that serve as a foundation for a thoughtful structural analysis that will ultimately disclose the essence of the experiences. Furthermore, Alhazmi and Kaufmann (2022) noted that two types of phenomenological approaches are observable in the literature on qualitative research: interpretive phenomenology and descriptive phenomenology as these two approaches overlap in the research methods. Subjective experiences and interpretations that people ascribe and how they relate to it are, in fact, central concepts of both descriptive and interpretive phenomenology.

This research method provides an opportunity for researchers to gain an insight and an understanding of the aspects of their lived experience. This method is essential to the study because the research objectives include understanding the effects of assessment item banks to academic performance of accountancy students. The researchers dug deep into the respondents' experiences and perceptions regarding assessment item banks and their potential effect on their academic performance.

In order to obtain the aforementioned objectives, the researchers, using the phenomenology research method, conducted interviews in order to gain insights of their potential respondents' perceptions over assessment item banks. The researchers sought to understand the effects that assessment item banks may have on academic performance by using interviews as a medium to obtain information in order to understand and analyze the essence of their experiences.

B. Participants

The researchers used purposive sampling, a method also

commonly referred to as judgmental sampling. Using a non-probability sampling technique called purposeful sampling, the researchers consciously selected the participants based on their informed judgment of which individuals or instances will be beneficial in addressing the study's main subject matter (Creswell, 2013).

In this specific study, the chosen participants were fourth-year BSA students enrolled at the DHVSU. The selection of these participants was rooted in the extensive consideration of their prior academic journeys, particularly during their freshman years. The researchers have made a deliberate choice to focus on fourth-year students who have traversed a substantial part of their academic pathway, as their cumulative experiences and educational progression may offer a more comprehensive understanding of the research topic.

These fourth-year BSA students were distinct in that they have engaged with test banks as a key component of their learning materials. By examining their experiences, insights, and perspectives related to the utilization of test banks, the goal of the study is to gain a deeper and more knowledge of the consequences and utility of this particular teaching tool.

C. Research Instrument

The researchers created a set of open-ended questions to gain in-depth knowledge with regards to the topic being explored. The researchers tailored the questions to cater these three main points: 1) impact of test bank utilization in the learning process of the participants; and 2) influence of test banks on the integrity and ethical behaviour of students. These questions functioned as an interview guide for a semi-structured interview, a method of gathering information in which individuals are presented with a series of open-ended questions supplemented by follow-up inquiries to delve deeper into their responses and the subject under investigation. In contrast to highly focused interviews, semi-structured interviews strike a balance between allowing individuals to respond in their own manner, similar to unstructured interviews, while still providing a structured framework for easier comparison. Employing this interview enabled the researchers to acquire new information and examined the thoughts and convictions of participants concerning a specific subject, resulting in reliable and comparable qualitative data. Because it uses predetermined queries, it is also preferable because it guarantees the interviewers' preparedness and competence during the interview (George, 2022).

D. Data Collection

In this research project, the researchers gathered information by conducting interviews aimed at exploring the perspectives and experiences of the study participants concerning the utilization of test banks as academic resources. Prior to commencing the process of gathering data through face-to-face interviews, the researchers obtained written permission and approval from all relevant individuals. This involved seeking consent from the Dean of the College of Business Studies at DHVSU, which is the institution both the researchers and participants were affiliated with, and successfully secured

approval from the validators for the research instrument that was used in gathering information. Furthermore, the researchers obtained written informed consent from the study's participants, consisting of fifteen (15) fourth-year students at the university. The selection of these students was based on the researchers' informed judgment regarding who could provide the most insightful input into the main research question. This informed consent process ensured that participants fully comprehended the study's purpose, their voluntary participation, and the confidentiality of their responses.

Once permissions and approvals were in place, the data collection occurred through personal interviews, with the time and location arranged at the convenience and comfort of the participants. The researchers conducted semi-structured interviews, during which they posed a set of prepared guide questions. However, they also provided participants with the flexibility to freely express their thoughts and experiences. These interviews were conducted one participant at a time to safeguard the confidentiality of each individual's responses, which were utilized in this study.

E. Ethical Consideration

The study conducted an interview using the questionnaires created by the researchers. Furthermore, during the interview process, the researchers ensured that all individuals have given their consent regarding their participation in the study and are fully informed regarding their role as an interviewee. The participants who took part in this study are voluntary and are not forced, having the right to withdraw anytime from their participation without any repercussions.

In addition, the privacy and confidentiality of each participant are secured in adherence to the Data Privacy Act of 2012. All information and data gathered from the said interview are protected from any unauthorized access. Furthermore, the researchers ensured the proper usage, solely for the objectives of the research study and disposition of gathered data. The researchers-maintained transparency and objectivity in handling all the information gathered, including the results derived from it.

F. Data Analysis

Thematic analysis is the process of identifying patterns or themes within qualitative data. According to Braun & Clarke (2006), as it "provides core skills that will be useful for conducting many other kinds of analysis" it should be learned first among qualitative methods (p. 78). It was created over the course of the 20th century in a variety of areas, including work in physics, by Gerald Holton (1973) as cited by Mihás (2023 in his study). It involves both deductive and inductive processes. On the other hand, this study used the inductive thematic analysis approach, which does not start with theoretical frameworks or notions. They begin with merely provisional topics and gradually include them into a developing codebook. Researchers come up with a great deal of topics, whether general and particular, during the first round of data evaluation, often known as "open coding" or first-cycle coding (Charmaz, 2014; Saldaña, 2021). Open coding, which is frequently

descriptive, incorporates both the study's objectives and the participant's responses. Thematic analysis, however, goes beyond simple description or first understanding. From this wide range of concepts, researchers work their way up the conceptual ladder to create conceptual clusters using concise, evocative language.

The purpose of a thematic analysis is to find themes—that is, significant or intriguing patterns in the collected data—and then utilize those themes to discuss the research or make a point. A strong thematic analysis understands and makes sense of the facts, going much beyond a mere summary. One common mistake is to base the themes on the primary interview questions (Clarke & Braun, 2013). This usually indicates that the data have been only compiled and arranged rather than being analyzed.

A key component of reliable qualitative research is data analysis. According to Maguire and Delahunt (2017), the qualitative researcher is frequently referred to as the research instrument because of the researcher's ability to comprehend, characterize, and interpret experiences and perceptions, which is essential for determining meaning in specific situations and contexts. The researchers applied thematic analysis to participants' data by following the guidelines outlined by Braun and Clarke. Six processes make up this iterative process: (1) familiarizing oneself with the data; (2) creating codes; (3) generating themes; (4) reviewing themes; (5) defining and labelling themes; and (6) providing report.

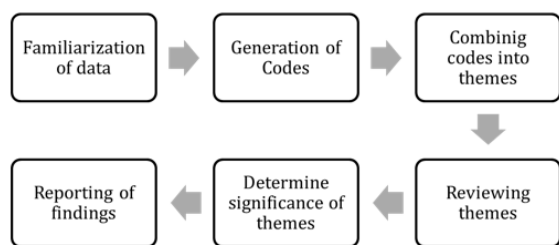


Fig. 1. Clarke & Braun (2013) Six step data analysis process

3. Findings and Discussion

This section presents the findings from the data gathered with regards to how assessment item bank utilization influences the academic performance of accounting students. It delves particularly on how it affects the learning process and ethical behavior of the students. Accordingly, themes were identified and discussed following the qualitative data analysis of data gathered during the interview. This chapter concludes with the presentation of the framework that the researchers developed based on these emerging themes.

A. Impact of Test Bank Utilization to the Learning Process of Accountancy Students

The integration of education and technology has the learning experience of students significantly progressed. Along with this, test banks have become prevalent among accountancy students during their academic endeavors as it is perceived that learning outcomes of students can improve through its effective utilization. This section focuses on how test banks affect the learning experience of students. Most of the participants were able to state that the use of test banks as a supplementary resource for their study contributes in understanding concepts and applying these concepts by answering and solving question items from the test banks which allows them to track their learning progress from its provided answer key. Five themes have emerged through qualitative data analysis to give an overview of how test banks influence students' learning process; learning enhancement, self-regulated learning, mastery of concepts, building confidence and time efficiency. Exploring these factors provides an insight wherein the use of test banks goes beyond mere set of questions, becoming an integral tool in the learning journey of the students.

1) Mastery of Concepts

The goal of studying accounting is not the memorization but the repeated application of the concepts they have learned. Since accounting concepts are interconnected, taking the time to fully grasp each one before progressing will establish a solid groundwork for mastering advanced principles (Cote, 2020). Based from the experiences of students, incorporation of test banks in their learning process helps them in the retention of what they have learned and further enhancement of their skills. With a percentage of 73%, the responses of participants have shown that test banks contribute in the mastery of accounting concepts.

"I remember the concepts better, and when there are exams, solving them becomes somewhat easier." -P8(C)

"A good review method in attaining retention." -P1(B)

"It would be really effective to me if I could practice more by answering test banks, I can really understand the topic if I would answer more." -P13(C)

"I develop muscle memory" -P5(A)

"Problem solving skills are further honed." -P6(C)

As recognized by P13(C), engaging more deeply with the test banks lead to a deeper understanding of the topic. P8(C) have also mentioned how practicing with test banks improved the retention of key concepts and how it sharpened problem solving skills, becoming more equipped in taking exams. In a study conducted by Winget and Persky in 2022, students who studied a topic and had an opportunity to restudy the material or retrieve information through assessment, the students have better retention on the information they have retrieved. This implies

Table 1
Impact on learning process

Themes	Participants	Percentage
Mastery of Concepts	P1(B); P2(A); P4(B); P5(A); P6(C); P7(C); P8(C); P9(A); P11(C); P13(C); P14(B)	73%
Self-regulated Learning	P1(B); P2(A); P3(B); P4(B); P9(A); P10(A); P12(B); P14(B); P15(A)	60%
Learning Enhancement	P1(B); P2(A); P3(B); P5(A); P6(C); P7(C); P8(C); P9(A); P10(A); P11(C); P13(C); P14(B); P15(A)	87%
Time Efficiency	P7(C); P8(C); P9(A); P12(B)	27%
Self-confidence	P9(A); P13(C); P15(A)	20%

that testing effect is a great way for retrieval practice, which is the focus of mastery learning, as it improves learning and metacognition.

2) *Self-Regulated Learning*

Self-assessment is a reflective process where students use criteria to evaluate their performance and determine how to improve. 60% of the participants have shown that the use of test banks became a means to assess their knowledge and skills, monitor their progress and to adjust or implement new strategies if needed. Participants have shared that test banks provide not only answers but also detailed explanations and solution formats that enable them to gauge their comprehension, thereby identifying areas for improvement and reinforcing their grasp on material.

"Self-reviewing students can assess themselves using test banks since most of these have explanations on their answers, as well as solution formats to explain how they have come up with such answers."-P1(B)

"Test banks make good study habits efficient since you will have an idea where to focus more after you assess yourself." - P3(B)

"To assess my existing knowledge, learning, and understanding on a certain topic."-P15(A)

Responses of P1(B), P3(B), and P15(A) highlighted how self-reviewing students can effectively evaluate their understanding by using test banks as their assessment tool. Test banks complement study habits as they can pinpoint immediately the areas that needs more focus. This is in line with the study of Siegsmund in 2017 where the process of self-assessment allows students to recognize the relationship between their behaviors and outcomes, and apply that knowledge to shape and influence their future learning endeavor.

3) *Learning Enhancement*

It has been observed by the participants that the test questions found on test banks have various complexity and level of difficulty. Answering test banks helps them to understand a lesson even if it was not extensively covered by the professors. Since test banks normally come with pre-existing answers, students can promptly evaluate whether they have missed an information or have been lacking in understanding the topic after a discussion. Through the incorporation of test banks as one of supplementary resources in learning the course materials, 87% of the participants have shown that it resulted in an enhanced learning and better academic performance.

"Test banks are significant additional because I get to see or solve problems with various complexity or level of difficulty." P1(A)

"When answering the test bank questions, I find that I understand the lesson better, even if it wasn't thoroughly discussed by the professor. P8(C)

"By practicing through test banks, my ratings have improved." P3(B)

"I use test banks as reviewers. For example, since the lessons are being discussed per chapter, after each discussion, I make sure that I have a specific test bank allocated for that chapter. Then I read or review it to see if I can get some answers. Since

correct answers are already provided in the test bank, I can check if I do really understand the lesson or I am still lacking."-P14(B)

"It becomes a tool or resource for better learning, wherein, we get to learn, not just effectively but also efficiently."-P15(A)

"After trying to solve problems in the test banks, I gain a clearer understanding of how to apply the theoretical aspects of accounting."-P6(C)

In a study of Rivers in 2021, it also shows that even if learners initially fail to retrieve information, receiving feedback allows learners to correct their errors and strengthen their memory of the correct information. This process emphasizes the effectiveness of active learning strategies that incorporate retrieval practice and feedback mechanisms.

4) *Time Efficiency*

The study of course materials is part of the learning routine of accountancy students. Therefore, time management plays a crucial role. This relates to the responses of P7(C), P8(C), P9(A) and P12(B) having a percentage of 27%.

"...By practicing answering test banks helps me to be efficient in answering during the actual exam within the given time."-P7(C)

"It assures me that I fully understand what I studied plus I'm more confident and at peace to move on to other topics so my pace in studying is quite fast." - P9(A)

The responses of participants from P7(C) and P9(A) showed that test banks can aid students in applying their knowledge and effectively preparing them for the actual examination. Students can allocate their limited time to answer test questions, thus enhancing their preparedness. The frequent answering of multiple tests encourages students to reflect on their progress and determine where to concentrate more during their studies which tends the "students to spend less time studying on already-mastered concepts" (Murphy, et. al. 2023) for effective learning experience. In addition, time efficiency has to do with how students use their time answering test questions during an exam; by using test banks to practice, students can grow more accustomed to the format and subject matter of the real exam (Krzic and Brown in 2022).

5) *Self-Confidence*

Answering numerous evaluation tests, especially in accounting can be challenging. Students have to answer a substantial number of test questions during the preparation for exam and actual examination, for the same objective—to assess their knowledge (Scott, 2016). The use of test banks, based from the gathered responses of P9, P13, and P15 with the percentage of 20%, contribute in building confidence when answering multiple question sets. In fact, students are able to answer such questions knowing that they are prepared adequately. One of the participants state that it boosts the confidence when being able to answer consecutive questions correctly. Furthermore, one participant suggested that using test banks more frequently as a practice tool leads to effective learning.

"It varies from person to person. Personally, I find practicing by answering test banks to be more effective than methods like memorization. It boosts my understanding if I would answer

more... Since there are a lot of complex questions in the exam, it really help me to boost my confidence in answering them and to understand the topic more.” -P13(C)

“I use test banks to assess my existing knowledge, learning and understanding regarding certain topic, through this I gain not just knowledge but also confidence in the upcoming examination.... It built my confidence through answering correctly the questions in the test banks.” -P15(A)

Aligning this with Boitshwarelo et. al.’s study in 2017, answer keys from test banks serve as immediate feedback that provides students an access to correct answers which enables them to have formative assessment on their progress and identify the areas they excel and what to improve. In here students are becoming self-reliant as it promotes self-evaluation that builds their confidence which reflects on their performance during examination (Guilding et. al., 2021).

B. The Influence of Test Banks on the Integrity and Ethical Behavior of Accountancy Students

The subsequent analysis will highlight the various factors that influenced the integrity and ethical behavior of accountancy students. Several themes emerged from the process, with the majority pertaining to the test banks’ disadvantages that potentially impaired their integrity and ethical behavior as students. The most common response to questions regarding their ethical behavior and dilemma revolved around the test banks’ negative effect on their study habits. Although the participants agreed that the use of test banks were advantageous in certain aspects, such as their ability to make the participants more resourceful in their review materials, there were also drawbacks that were derived from them. Namely, the participants’ preference to prioritize familiarity over concepts and their lack of effort in studying. In addition, students voiced their concerns regarding test banks’ limited coverage and reliability in terms of accuracy. On the other hand, some participants stated that they didn’t encounter any ethical dilemmas towards test banks, arguing that there were no unethical implications behind them unless the intention to use them was for anything other than review.

1) Negative Influence on Study Habits

The first two themes, namely Familiarity over Concepts and Lack of Effort, will be consolidated in one section, as both have an implication regarding the participants’ study habits.

1. Familiarity over Concepts

As shown in the table above, a whopping 80% of the participants voiced their concerns on how they opt to familiarize themselves with the contents of the test banks over the concepts. Instead of studying the concepts behind the questions and solutions in the test banks, participants turned to

memorization as a way to study for upcoming exams. In fact, many of the participants stated that if they knew their professors were going to source online test banks into their classroom assessments and tests, their urge to turn to relying on test banks was strong. Some believed that if they familiarize themselves with the questions and solutions, they would have a better chance in passing.

“I recalled a time that before an exam, I just memorized answers. I was really hoping that it would pop up in our exams, so I feel like the integrity or purpose of the test bank was lost.” -P12(B)

“It’s just pure memorization, no more understanding.” -P4(B)

“From my experience, there are instructors that make exams directly out of the test bank since they are readily available, especially online. Sometimes you don’t even know if you should study still or just memorize answers because [the exams] literally look like a copy of the test banks.” -P14(B)

“I tend to memorize test banks than mastering the concepts itself if I know that the professor is getting those questions in a test bank.” -P13(C)

The responses from participants P12(B), P4(B), P14(B), and P13(C) highlights the disadvantage that test banks have over their integrity and ethical behavior as students. The participants felt that simply memorizing the test banks instead of studying the concepts behind the content was the source of their ethical dilemma.

2. Lack of Effort

Another theme that connects to the negative effects on study habits that test banks have over the participants is lack of effort. With a frequency of 9 and an overall percentage of 60%, these participants voiced how test banks had impaired their overall study habits. In connection with the sub-section above, the participants felt as though their discipline and will to learn was compromised with the influence of test banks. Since some of their professors derive their exams from test banks, the participants felt as though there was no point in learning the concepts when they can just simply study the test banks per se.

“I am lacking with discipline in learning because I focus too much on test banks. I don’t read books, nor do recitation. I go straight to test banks.” P15(A) added, “I lost a lot of things. My discipline. What’s the sense in studying books when I can just familiarize myself with the questions.” P15(A) further added, “Test banks are becoming my basis. Whatever questions in them are the only ones I know. As if I prioritize test banks over test books.”

“Yes, I feel guilty. There’s times where I don’t want to solve it, so I just look at the solution given. Sometimes you feel it’s not enough, and you don’t try to learn anymore.” -P6(C).

Table 2
Influence on integrity and ethical dilemma of accountancy students

Themes	Participants	Percentage
Familiarity over Concepts	P1(B); P10(A); P12(B), P13(C); P14(B); P15(A); P2(A); P3(B); P4(B) P6(C); P7(C); P9(A)	80%
Lack of Effort	P10(A); P11(C); P12(B); P14(B); P15(A); P3(B), P6(C), P7(C); P9(C)	60%
Outdated and Inaccurate	P10(A); P11(C); P13(C); P15(A); P5(A); P6(C); P7(C); P9(A)	53%
Limited Coverage	P2(A); P3(B); P5(A); P12(B); P10(A)	33%
Resourcefulness	P11(C); P14(B); P15(A); P3(B); P5(A); P7(C)	40%
Intention	P1(B); P10(A); P11(C); P12(B); P13(C); P7(C); P9(A)	47%
No Ethical Dilemma	P2(A); P3(B); P4(B); P5(A); P6(C)	33%

"I just search the problem given by the prof' in Google, and then I use the solution I find and never make my own nor try to solve it on my own." -P8(C) also said, "I think I'm taking away my ability to learn or to encounter new problems in order to understand the topic better."

The excerpts above explain their ethical dilemma on test banks negatively affecting their study habits. With the availability of test banks and their connection with their exams, many of them disregard their old study habits and instead, restrict their learning on whatever content is in the test banks they possess. As mentioned by Participant P15(A), the old studying methods involved reading textbooks and participating in classroom recitations. However, with the influence of test banks, discipline was lost in learning and prioritized test banks over text books. Meanwhile, participant P8(C) mentioned how they lost their will to learn upon knowing they can simply Google the problems and copy the solutions, especially with how easily accessible test banks are on the internet.

Lack of Effort, along with Familiarity over Concepts, are themes that revolve around the negative effects that test banks have over the participants' study habits. The presence of test banks and their prominent influence in onsite exams are what pressured most of the participants into studying and relying on test banks solely, preventing themselves from learning beyond the contents of test banks. This is in line with the study of Cheng and Crumbly in 2018, titled "Student and professor use of publisher test banks and implications for fair play", which mentioned how some professors rely on PTB's to create exams. And since PTB's are readily accessible on the internet, students can access the same PTB's that professors can source for their assessments. With both parties relying on the same site, the purpose of assessing the learnings of the students is impaired. In another study by Wotapka in 2018, he stated how the integration of the internet into the education system has provided ways for students to access test questions that professors might also use for their exams, giving students a glimpse of the potential questions they could encounter ahead of time. Similar phenomenon was experienced by the participants of this study, particularly in the case of professors using test banks as their exams for the students. With that in mind, the participants opt to simply review the test bank itself and disregard learning the concepts overall.

2) *Disadvantages of Test Banks*

The next two themes will be consolidated into one section as well. The two themes in this section pertain to additional disadvantages to test banks that were commonly voiced by the participants.

1. *Outdated and Inaccurate*

The reliability of test banks was another disadvantage that the participants mentioned. Some test banks they find are either outdated or inaccurate, which could potentially hinder their learning if the answers in the test banks are incorrect. Eight out of the fifteen, or 53% of the participants, voiced how they found inaccuracies, typographical errors, irrelevant questions, and errors in the test banks they use. In fact, as mentioned by Gautam in 2020, in his study titled "Advantages and Disadvantages of Online Learning", he stated that one of the

factors that restrict students from learning is the credibility of the resources found online.

"Test banks have flaws as well. For example, some of them don't have correct answers, others have typos, while some don't have answers at all. So if you rely too much on them, there's a tendency where the things you learned in test banks aren't correct." -P5(A)

"Unreliable websites. They have inaccurate answers and errors in their content that can get super misleading." -P7(C)

"Test banks aren't always accurate. Accountancy continuously evolves so there's changes that aren't reflected in the solutions found in test banks." -P9(A)

2. *Limited Coverage*

Another disadvantage that was argued was the limited coverage of test banks. Three participants, namely P2(A), P3(B), P5(A), P10(B), and P12(A) with a percentage of 33%, raised how limited in scope the topics were in the test banks, which prevented them from learning other concepts not covered. With this type of restriction, the participants could not learn all that they wanted to cover.

"It's possible to not cover all the topics you want to learn." -P2(A)

"Not all the topics are covered; the scope is limited and since some students rely on test banks, they often miss out on important materials. -P12(A)

3) *No Negative Influence*

The upcoming section will consolidate three themes related to participants' belief that test banks do not compromise their integrity or ethical behavior. Participants underscore that the acceptability of using test banks hinges on the students' intent. Some participants argued that employing test banks is not inherently geared towards cheating or to have an unfair disadvantage over fellow students, if the students intends it only for review purposes. Under this section, to ensure objectivity of the data analysis, researchers included three emerging themes: resourcefulness, intentions and no ethical dilemma.

1. *Resourcefulness*

The presence of test banks and its accessibility in online platforms offers participants extra academic resources to enhance their understanding and problem-solving skills. Furthermore, they serve as tools for effective practice and self-assessment. The test banks offer a diverse selection of questions and can include feedback on a specific answer given directly by students, often accompanied with exact page references to the textbook (Campbell, 2021).

Six of the fifteen, equivalent to 40% of participants believe that using test banks is acceptable; it demonstrates resourcefulness and a proactive approach to learning by utilizing all available means. The ways in which students apply innovative technologies for educational purposes are related to how they perceive the ways their courses are assessed (Máté and Darabos, 2017). Student evaluation and assessment has become an integral process of any educational institution towards an improved and quality learning experience. Student views about their experience at any educational system, its programs, the component units of the program, and the entire learning environment are essential aspects for quality

enhancement (Bay & Subido, 2014).

“They are great tools for studying. They help students understand the concepts of the lessons.” -P11(C)

“It only shows that you are resourceful enough in reviewing.” -P3(B)

“It enhances our capabilities as accountancy students to answer problems that assess our knowledge.”-P5(A)

2. Intention

Seven of the fifteen participants believe that the user's intention determines whether using test banks positively or negatively affects their integrity and ethical behavior. Intention is primarily a mental event that occurs within our minds, often without external indicators. While we can communicate our intentions verbally, such as saying "I intend/plan to do this and that," it is not always necessary to do so. The actual act of fulfilling the intention can occur externally, such as going to the store or reading a book, or internally, such as thinking about what to say during a lecture. In essence, we form an intention and then act based on that intention, whether the action occurs in the external world or within our minds (Albinski, 2019).

The 47% of total participants emphasize that despite the widespread availability and accessibility of test banks, it is the user's intent that ultimately determines whether they use them as a legitimate academic resource to enhance their performance or as a means to gain an unfair advantage by relying solely on the provided answers without understanding the underlying concepts. Thus, test banks has an implicit role to test students' integrity when utilized and with the proper use, fosters the culture of fairness during examinations of students.

“It is really on the intention of the user to determine its purpose.” -P1(B)

“It is the matter in which they are used that determines their appropriateness.” -P10(A)

“Usually it is the student’s motivation for using the test bank that corrupts as well as the intention.”-P9(A)

“The purpose of using test banks varies depending on your intention and where you will use them.” -P7(C)

3. No Ethical Dilemma

The final theme involves five participants or the 33% of the total number of participants who have not encountered any ethical dilemmas in their use of test banks and do not view such use as unethical.

“No, I haven't had any experience of encountering an ethical dilemma in using test banks.” -P5(B)

“But in ethical sense, I think, I haven't use test banks unethically” -P2(A)

“Actually, I don't see using a test bank as an ethical dilemma.” -P2 (A)

“I haven't encountered yet, any dilemmas related to the use of test banks.” -P3 (B)

These responses could have a relation from the preceding

theme, wherein participants encounters no ethical dilemma as they use the test banks in its intended manner. This relates from the study of Cheng and Crumbley in 2018, wherein on the student’s perspective that test banks can be considered as merely as a learning material and such usage is driven by their needs.

C. Recommendations on Test Bank Usage

The following analysis will delineate the accountancy students' recommendation regarding the integration of a test bank as an academic resource. Various themes have been identified to explain the recommendations put forth by the participants.

1) Employing test banks with ethical considerations and responsible usage

The table reveals a notable trend, with eight out of fifteen participants, constituting 54%, advocating for the importance of upholding ethical considerations and promoting responsible usage when it comes to test banks. This suggests a substantial emphasis on maintaining a conscientious approach in the utilization of test banks among the surveyed participants.

“I think we should focus more on the how we could maximize our learning in the usage of test bank instead of viewing it as a tool we can use for cheating.”- P2(A)

“Use test banks responsibly and ethically and treat those as supplementary study tools and materials” -P3(B)

“Students should use test bank as a tool for self-assessment and review.”- P10(A)

“Use it ethically and responsibly.”- P9(A)

“Students should check the validity and accuracy of the answers in test bank before incorporating it in their studies.”- P6(C)

Responses from participants P2(A), P3(B), P10(A), P9(A), and P6(C) underscore a common theme, emphasizing the recommendation to utilize the test bank in good faith and exclusively for academic advancement. As users, the verification of accuracy should be a crucial consideration when incorporating test banks as academic resources. This indicates a shared perspective among these participants regarding the ethical and focused application of test banks for educational purposes.

2) Guidelines must be established

At four times the frequency and a total percentage of 27%, participants recommended the establishment of guidelines aligned with the utilization of test banks. This signifies a notable inclination among the participants toward endorsing structured frameworks for the use of test banks.

“I think the school must be strict in picking questions in the exams and there must be guideline to follow for both students and faculty especially how test banks are distributed.”- P11(C)

“There must also some punishments for students who used test banks to gain unfair advantage in class.” - P11(C)

Table 3

Recommendations on test bank usage

Themes	Participants	Percentage
Employing test banks with ethical considerations and responsible usage	P2(A); P3(B); P5(A); P9(A); P10(A); P7(C); P12(B); P6(C)	54%
Guidelines must be established	P10(A); P11(C); P13 (C); P14(B)	27%
Modification of test questions	P1(B); P4(B); P6(C); P8(C); P7(C)	33%
Tailor-made test questions	P10(A); P13(C); P14(B); P15(A); P8(C)	33%

“Incorporation of test banks should be collaborated by the dean, chairman and professors since we all know that student cannot be controlled on whatever purpose they will use it.” - P13(C)

The feedback from participants P11(C) and P13(C) collectively advocates for the implementation of guidelines to govern the appropriate utilization of test banks. Proposing the establishment of such guidelines, these participants emphasize that having clear parameters will inform both students and instructors about the boundaries and constraints in integrating test banks into their academic endeavors. This suggests a shared belief in the importance of structured guidance for a responsible and effective use of test banks.

3) *Modification of test questions*

Five participants advocate for the modification of test bank questions when employed in examinations. Representing 33% of the participants, this group suggested that instructors should actively engage in altering questions sourced from the test bank. This approach aims to enable students to assess their learning without the advantage of prior familiarity with the questions that may appear in their examinations. The recommendation underscores the importance of fostering a fair and unbiased assessment environment.

“Professors may use test banks but it must be rephrased as well as altered in different amounts.” -P1(B)

“I find it acceptable to utilize a test bank for examinations, as long as the questions are not directly duplicated. It is advisable for professors to alter the question format or adjust the numerical values, ensuring that students do not solely depend on the specific test bank they used during their preparation.” -P4(B)

“As we are all aware of the use of test banks in our exam preparation, it is recommended that professors make adjustments to the numbers or requirements of the problems if they choose questions from these test banks.” - P6(C)

Participants P1(B), P4(B), and P6(C) emphasize the acceptability of instructors deriving examination questions from the test bank. However, they recommend that questions should not be copied as it is. Instead, they suggest modifying the question structure, adjusting the given amounts, or altering the requirements for the specified problem questions. This approach ensures that students are not merely relying on familiarity with specific problems, but instead, it encourages them to concentrate on the core concepts of each topic. This, in turn, facilitates the enhancement of their critical thinking and analytical skills during examinations. This collective viewpoint underscores the participants' belief in maintaining originality and ensuring a nuanced approach to utilizing test bank materials in the examination setting.

4) *Tailor-made test questions*

A significant portion, comprising thirty-three percent (33%) of the respondents, advocated for the generation of test questions crafted by instructors themselves. Specifically, five participants proposed that instructors should develop their own questions, facilitating a scenario where students can evaluate themselves without any prior familiarity with the questions. This suggestion highlights the participants' emphasis on

promoting originality and unbiased assessment, underlining the perceived value of instructor-generated questions in enhancing the learning experience.

“Professors should learn to construct problems and not just copy pasting those problems in the internet.” - P13(C)

“The dean or the chairperson of the program should ensure that the exam questions provided to students are created personally by the instructors and not sourced from test banks.” -P15(A)

“I think professor should just use test bank question during discussion but when it comes to examinations, they should create their own questions or problems.” -P8(C)

Participants P13(C), P15(A), and P8(C) collectively endorse the idea that instructors should create their own questions. Emphasizing this perspective, participant P8(C) highlights the recommendation that instructors should only integrate test banks during discussions and not in actual examinations. By employing tailor-made questions, instructors can design specific problem sets that target the areas of a topic where students exhibit weaknesses. Exposing students to these tailor-made questions enables them to master the topic, as it provides targeted practice and addresses their specific learning needs. This collective input suggests recognition of the importance of instructor-generated questions for assessments, with varying considerations on the role of test banks in different academic contexts.

D. *The Learning Process of Accountancy Students Flowchart*

The following framework is developed to present in a structured way the themes from the data analysis conducted by the researchers to provide a sound representation how these themes are related and contributes to the academic performance of accountancy students. Furthermore, it provides a further discussion and exploration of the themes that has emerge from the data analysis. Basically, this flowchart intends to systematically present the emerging themes that are discussed from the preceding sections, their relations and roles in the general academic performance of students incorporated by test banks.

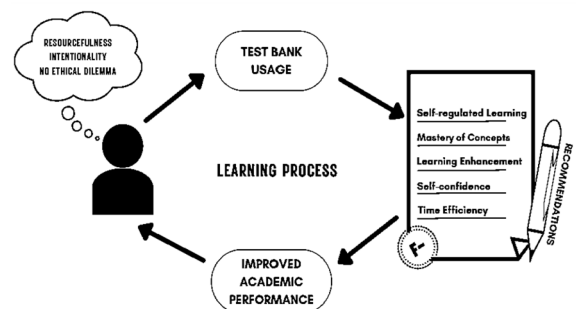


Fig. 2. The learning process of accountancy students incorporated by test banks

This framework explores the role of test banks utilization in the students' learning experiences and subsequently enhances their academic performance. It comprises two main parts; the student's perception and the influence of test banks on their

academic journey. From the student's perspective, symbolized by a bubble thought, the use of test banks does not inherently anchored to cheating, instead test banks are considered a valuable resource that is used during their study. Furthermore, participants argued that intention plays a crucial part when using test banks, as it relies on the student where it is going to be used for thereby mitigating ethical dilemma. However, that is not the case all the time. The majority of the participants admitted that use of test banks tends to test their integrity and affects their ethical behavior especially for the preparation of examinations. This scenario leads to the second component, consisting of three elements; test paper, f-(minus), and a pen. The test paper symbolizes the utilization of test banks along with its positive influences on the student's learning; self-regulated learning, mastery of concepts, learning enhancement, self-confidence and time efficiency. As the test paper considered the final stage to assess the student's learning efforts, with the effective use of test banks as a supplemental study resource, this can lead to positive outcomes. However, despite these good influences, the use of test banks, based from the gathered data can also lead to negative outcomes. Here, the "F-" symbolizes the potential pitfalls of overreliance in test banks; familiarity over concepts, lack of effort, outdated and inaccurate, and limited coverage. In relation to "F-" that denotes failure, it signifies that the misused of test banks can offset the benefits it provides. It depicts the correlation of the positive and negative effects of test bank utilization as these two are the potential effects of test bank usage especially when used ineffectively and students solely rely on it. Lastly, a pen illustrates the recommendations from the participants as they believe it will contribute to the effective use of test banks; ethical considerations and responsible usage, established guidelines, modified test questions, and tailor-made assessments. Similar to a pen which allows the user to write new ideas for better results or strategies, these suggestions are meant to aid students' over-reliance on test banks for learning, enhancing their academic performance.

4. Recommendations and Conclusions

This section provides the conclusions derived from exploring the influence of assessment item bank utilization to the academic performance of accountancy students along with the recommendations that are perceived to be helpful for the effective use of such learning resource material.

A. Conclusion

The incorporation of assessment item banks into the education of accounting students presents both advantages and disadvantages. Test banks offer students valuable opportunities. However, its influence on the student's ethical behavior warrants careful consideration. This study has shed light on the multifaceted impact of test banks.

Participants utilize test banks as one of their materials to help them apply the accounting concepts and standards repeatedly, enhance learning and retention, and to assess themselves that will eventually lead to a deeper understanding of the course material and also to an improved academic performance. Test

banks also serve as useful resources in order for the students to manage their time efficiently and build self-confidence, all of which help them learn and prepare for upcoming examinations.

On the other hand, the influence of test banks on the integrity and ethical behavior of students is driven by disadvantages regarding the test bank's negative impact on the participant's study habits. If the participants were aware that their professors would use online test banks as their exam materials, they are more likely to familiarize themselves with the content of test banks rather than learning the concepts behind them. This inevitably leads to a lack of effort on the part of the participant in learning the materials thoroughly with books and other learning resources. Additional disadvantages were voiced by the participants, namely how outdated, inaccurate, and limited in coverage test banks are.

The participants also made several recommendations to test bank users. Participants call for responsible use, giving priority to ethical considerations and the promotion of academic advancement. The emphasis on the establishment of clear guidelines for the utilization of item banks in the academe and the modification of questions when professors incorporate these into their examinations to promote fair assessments were raised. Moreover, the participants recommended the creation of original test questions by the instructors to ensure an unbiased evaluation, reflecting a distinct approach to test bank usage in academe.

Undoubtedly, the utilization of item banks by accounting students yields favorable results in their educational journey and academic pursuits. However, there are also several factors that hinders effective engagement with this type of resources, this is why it is imperative that the insightful recommendations provided by participants are duly taken into account to ensure that the fundamental purpose of item banks remains unimpeded.

B. Recommendations

The following are the recommendations of the study with regards to the utilization of assessment item banks;

1. Based on the findings, utilizing test banks as an additional study resource assists students in better understanding concepts. By answering questions from the test banks and verifying using the provided key, students can also monitor their learning progress. Therefore, students should view test banks as a supplementary academic tool to improve their understanding and skills. They can maximize the benefits by efficiently mastering concepts, evaluating their progress, and deepening their understanding through practical application.
2. This research underscores that the impact of test banks is contingent upon how individuals incorporate them into their academic pursuits. The study recommends users to prioritize leveraging test banks for enhancing academic performance, rather than seeking unfair advantages or convenience. Furthermore, the importance of maintaining skepticism towards the validity and accuracy of these resources is emphasized. These observations collectively

emphasize the need for users to approach the utilization of these materials responsibly to attain academic success.

- The findings from this study regarding the influence of assessment item banks on student learning and assessment outcomes could be valuable to future accounting researchers. They could conduct a local study within their community to validate the study and emerging framework from a local perspective. Additionally, incorporating insights from academic professors could provide a balanced view of the effects of item bank utilization in the academic field.

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