

System Admission Test and Licensure Examination for Teachers: The Case of Passed and Conditional Groups

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Abstract: A vast body of studies has a propensity towards considering system admission test (SAT) scores as one collective variable that influences the licensure examination performance. The current article revisits this research area and further takes a step forward in analysing the influence of SAT score grouped into two categories as passed and conditional. This study is a comparative analysis of the Licensure Examination for Teachers (LET) performance according to SAT groups of a cohort of 86 elementary education graduates from the Bachelor of Elementary Education (BEEd) Department at the College of Education (CoEd), Mindanao State University, General Santos City (MSU GSC), Philippines. The Mann-Whitney U Test was mainly used as a statistical tool. The results showed that the majority of the students with passed SAT scores obtained a good level of LET performance and those with conditional SAT scores attained a fair level of LET performance. It was further revealed that there is a statistically significant difference in the LET performance of the students with passed and conditional SAT scores. Based on these pieces of evidence, this current research presents three essential instructional accommodations that may be considered to improve the future LET trajectory of the students. The recommendation for future research is also offered.

Keywords: Admission test, Board examination, Teacher education, Higher education, LET

1. Introduction

The SAT score is considered by many educators and researchers as indicative of passing the licensure examination. It is suggested that achievement in the SAT presents an early glimpse of future success in the licensure examination. This interesting point has been the center of many educational narratives and empirical studies.

By practice, most schools accept all students who have passed the SAT. Hence, in most studies, the unit of analysis by ability level is almost homogeneous and there is no effort to analyse SAT scores by separate groups. These researches treat admission test scores as one variable and determine its influence on the board examination performance in the different professions (e.g. see Efurd, 2012 on dental hygiene; Visco, 2015 on teacher education; Bayliss Thomas, & Eifert-Mangine, 2017 on physical therapy; Dagdag, 2018 on agricultural technology).

However, in the current context of this inquiry, the BEEd Department of the CoEd does offer program admission opportunities to students who have passed and conditional SAT scores based on the typically 75 points cut off. This policy is enshrined on the special mandate of the MSU GSC to integrate disadvantaged students especially those from indigenous communities. This inclusive statement attests to the strong commitment of the institution to assist in the development of its immediate communities of service.

However, over the past years, the BEEd Department expressed concern as to the disparities in the LET performances of its students. For instance, in 2015, 44 out of 135 students failed the LET. It did not significantly improve in 2016 and 2017 as 50 out of 154 and 33 out of 157 failed the LET. The recent record in 2018 further showed that 36 out of 141 failed the LET. These numbers indicate a concern that should be addressed. A predictor variable put forward by researchers in the analysis of this concern is the SAT scores.

The purpose of this study is not to single out students with passed or conditional SAT scores but to look for empirical evidence that would serve as a strong basis for the development of instructional interventions. The intention is practical in the sense that by mapping out teacher board examination performance according to SAT scores, relevant instructional approaches may be reached to the advantage of the students. This study will also provide an alternative view for researchers who have traditionally looked at the admission test as a single variable rather than as ability groups, thus deepening the body of knowledge in the area of interest.

This article analyses the SAT scores grouped as passed and conditional and the LET performance. Specifically, it answered the following questions:

1. What is the level of LET performance of the students with passed SAT scores?
2. What is the level of LET performance of the students with conditional SAT scores?
3. Is there a significant difference in the LET performance of the students with passed and conditional SAT scores?

2. Literature Review

The licensure examination is a significant measure to ensure the quality of teacher education. It presents a quality measure to determine the graduates who have the required minimum degree of competence to practice the teaching profession in the field. Most professions conduct licensure examinations to screen qualified graduates into their respective fields. The licensure examination, in the case of teacher education, is an initial gauge of competence in teaching (Knowles, Plake, Robinson, & Mitchell, 2001; Acosta & Acosta, 2016).

The quality regulation for the Philippine institutions of teacher education is partly managed by the Professional Regulation Commission (PRC). Its responsibility is to deliver an assurance that graduates have completed their college degrees are prepared to meet the expectations within the different professions, including the teaching profession. The PRC supervises the professional board examinations and administers what is called licensure examination in different fields like LET in the teacher education (Arcelo, 2003).

The LET was mandated through the approval of Republic Act 7836 or otherwise known as the "Philippine Teachers Professionalization Act of 1994" on December 16, 1994. The enactment of the law did not suggest that the teachers in the Philippines were not "professional." It rather attempted to enhance not just the competence of the teachers, but also the excellence in education and the whole educational system. By improving teacher competence, it is expected that the students will innately follow the advancement of those individuals who lead them.

However, despite this effort to raise the standards of education by professionalising teaching and subsequently conducting a licensure examination, Navarro (2003) expressed a lament that significant difficulties challenging tertiary education in the nation have constantly emerged with the mass graduation of unprepared college graduates who do not exhibit minimum competence to address the labor needs of the country. This is manifested in the trends of the contemporary results of the national passing rates in the board examination for teachers.

Aside from the dismal results of the national passing rate, Cepeda (2017) reported the survey conducted by Philippine Business for Education. It was revealed that around 50% of the teacher education institutions or schools that offer teacher education programs in the country have been performing inadequately in the licensure examinations from 2009 to 2017. The study showed that 497 out of 1,024 teacher education institutions that had graduates who took the LET elementary level achieved ratings below the national passing rate.

It must be understood that more than immediate causes, the performance in any licensure examination depend on various factors related to previous student cognitive outcomes. As such, many studies have been conducted over the years to understand how these factors influence success in board examinations across different fields. Bayliss et al. (2017) stated that underlying factors of performance in the board examination are important. There are an array of reasons connected to performance in the licensure examination, one of which is the SAT score of the students.

Results of different Philippine studies in the context of SAT scores and LET are disparate. For instance, a study relating SAT scores and LET performance has been performed by Dagdag, Sarmiento, and Ibale (2017). It yielded a result that SAT scores did not predict LET performance. Contrary to that result, Labastilla (2017) also studied the degree of association between AT scores and LET performance. This is supported in the studies of Pascua and Navalta (2011), Soriano (2012), and Solis-Foronda (2017). The results pointed out that the AT scores is a good correlate of the LET performance. Despite this contrast, these efforts prove the importance of SAT scores in the discourse and research about LET performance.

The ability of SAT scores in influencing success in board examination performance in the Philippines has also been explored in other disciplines. The work of Dagdag (2018) correlated SAT scores and licensure examination performance in agriculture. The research outcomes showed that SAT scores were a good predictor of the licensure examination performance. This focus has been also given attention in the field of nursing (Ong & Palompon, 2012), accountancy (Aquino, 2013), and criminology (Barrera, Cagang, & Capistano, 2014). These studies suggest that a strict admission policy is a fundamental approach associated with a high level of licensure exam performance of students.

When it comes to international perspectives, no studies on admission test scores and performance in board examination specifically for teachers have been done. But looking into the rich body of the area, this research interest has been explored in other disciplines. For example, Kume and Horbacewicz (2018) explored the relationship between SAT scores and the national physical therapy licensure examination performance. Their results support the use of components of SAT scores as predictors for success on the board examination.

The same results of the association between AT scores and licensure examination performance have been repeated in many studies in different disciplines mostly domains of allied health and medical professions (e.g. see Efurd, 2012 on dental hygiene; Gullo, McCarthy, Shapiro, & Miller, 2015 on medical education; Moniyung, 2015 on nursing education; Bayliss et al., 2017 on physical therapy). A different result contradicting this trend was uncovered by Siemens (2012). He discovered that SAT as a variable was not predictive of passing the licensure examination on the first try.

However, considering the unique context in this study, SAT scores organised as ability groups rather than a single variable has not been explored in the reviewed studies. Thus, this study attempts to closely examine analyse SAT scores grouped as passed and conditional in relation to LET performance.

3. Methods

3.1 Research Design

This study is a comparative analysis of the LET performance of students with passed and conditional SAT scores. A quantitative comparative research design was entailed. It is a research design that focuses on exploring the reasons behind existing differences between two or more groups. It is used when the grouping variable is natural and intact (Frey, 2018). Based on these features, quantitative comparative research design is appropriate for this study.

3.2 Study Sample

This study purposefully selected a cohort of BEEEd students who graduated from the CoEd, MSU, GSC. They were selected based on their information as having taken the MSU System Admission

and Scholarship Exam in 2012 and who finished the coursework of the program to eventually take the LET in 2016.

The population is taken as the ideal sample. The target population for this study was 134 (100%) students. However, in the process of consent, only 93 (69.40%) participants responded favorably. This number of respondents was further reduced to 86 (64.18%) students as those whose records are not complete were removed from the master list.

3.3 Research Venue

The research venue of this study is the BEd Department in the CoEd of MSU, GSC, Philippines. One of the mandates of the university is the integration of three major tribes into society. As such, it accepts disadvantaged students who may not have passed the SAT on the condition that they undergo intensive bridge program in tool subjects to prepare them for the demands of the university.

3.4 Data Sources

The data for this study were mainly through secondary sources. The researcher assembled a set of quantitative information that includes SAT scores and LET ratings. With permission from the respondents, the SAT scores were collected through the university database and the certified LET ratings were asked from participants themselves.

3.5 Data Analysis

Descriptive statistics provided for the minimum, maximum, mean, percentage, and standard deviation for each group. A preliminary test was also performed to check the normality and homogeneity of the group data. The Mann-Whitney U test was employed to determine the difference caused by admission test scores of the graduates grouped into passed and conditional SAT scores. The test was done at 0.05 level of significance. SPSS version 17 was used.

4. Results

4.1 LET performance of students with passed SAT scores

This study initially sought to find out the LET performance of the students with passed SAT scores. The table shows the result.

Table 1. LET performance of students with passed SAT scores

Range of LET ratings	f	%	Description
89.60 and above	0	0.00	Excellent
84.60-89.40	5	07.35	Very Good
79.60-84.40	44	64.70	Good
75.00-79.40	18	26.47	Fair
74.80 and below	1	01.48	Poor

n=68

The result showed that 44 students (64.70%) obtained LET ratings of 79.60 to 84.40 described as good. Furthermore, 18 students (26.47%) earned LET ratings of 75.00 to 79.40 described as fair while 5 students (07.35%) achieved LET ratings of 84.60 to 89.40 described as very good. It can be further gleaned that 1 student (01.48%) has LET rating of 74.80 and below described as poor. No

students got a LET rating of 89.60 and above described as excellent. Overall, the results imply that most of the students with passed AT scores performed good in the LET.

4.2 LET performance of students with conditional SAT scores

This study also sought to find out the LET performance of the students with conditional SAT scores. The table shows the result.

Table 2. LET performance of students with conditional SAT scores

Range of LET ratings	f	%	Description
89.60 and above	0	0.00	Excellent
84.60-89.40	0	0.00	Very Good
79.60-84.40	3	16.67	Good
75.00-79.40	11	61.11	Fair
74.80 and below	4	22.22	Poor

n=68

The result displayed that 11 students (61.11%) have LET ratings of 75.00 to 79.40 described as fair. On the other hand, 4 students (22.22%) gained LET ratings of 75.00 to 79.40 described as poor. It was also found out that 3 students (16.67) attained LET ratings of 84.60 to 89.40 described as very good. No students made LET ratings of 84.60 to 89.40 and 89.60 and above described as very good and excellent respectively. Overall, most of the students with conditional AT scores performed fair in the LET.

4.3 Difference in the LET performance of students with passed and conditional SAT scores

Finally, this study sought to find out the significant difference in the LET performance of students with passed and conditional SAT scores. The table shows the result.

Table 3. LET Performance across SAT scores

LET rating	SAT scores				z	p	df
	Passed		Conditional				
	Mean Rank	n	Mean Rank	n			
	48.77	68	23.58	18	-3.81	0.00*	84

The result of the Mann-Whitney U test revealed that mean ranks of first time LET performance are significantly different between the students with passed SAT scores (Mean Rank = 48.77) and students with conditional SAT scores (Mean Rank = 23.58); $z(84) = -3.81$, $p = 0.00$. It can be implied from the result that on average, students who achieved passed SAT scores performed better in LET than those who obtained conditional SAT scores.

5. Discussion

The case of the current inquiry in MSU GSC provided a unique background for this study. The institution has a special mandate to accept not only students with passed SAT scores but also those with conditional SAT scores. As a result, there are naturally intact groups of students with passed SAT and conditional SAT. This study analysing the LET performance based on categorical groups of SAT scores as passed and conditional can be considered as the first.

On the other hand, a vast body of related studies dealing with SAT scores and licensure examination performance have a propensity for taking SAT as one collective independent variable (Pascua & Navalta, 2011; Efurd, 2012; Ong & Palompon, 2012; Soriano, 2012; Aquino, 2013; Barrera

et al., 2014; Gullo et al., 2015; Visco, 2015; Bayliss et al., 2017; Labastilla, 2017; Solis-Foronda, 2017; Dagdag, 2018; Kume & Horbacewicz, 2018). This can be attributed to the fact that most higher education institutions may only admit students who pass the SAT. Thus, researches must also deal with one homogeneous group of students in terms of SAT.

One study conducted by Moniyung (2015) tested the statistical possibility of high SAT and high licensure examination performance. The result illustrated that a point added in SAT boosted the probability of being effective in the licensure examination by nearly five times. This result demonstrates that a higher SAT contributes to the odds of a higher licensure examination performance. This may coincide with the implication put forward by the current research that students with passed SAT scores perform higher than their conditional SAT scores counterparts.

On the other hand, Siemens (2012) investigated if the SAT score was predictive of the licensure examination performance. He drew a contrary result through regression analysis illustrating that SAT score was not predictive of passing the licensure examinations on the initial attempt. He explained that a hitch with finding the links in this study was since most students passed the licensure examination, thus judging if the SAT score is the cause would be hard. Bringing this aspect into this study, most students also passed the licensure examination, but the SAT did cause a difference in the licensure examination.

Furthermore, when looking at other cognitive variables categorised as high and low, grade point average (GPA) of students appears to be related to this study. For instance, Rogers (2009) cited a study that discovered that GPA was significantly higher for those successful on the board examination than those who were not successful. He even found out that even the course grades were also higher for those successful on the licensure examination. Taken in this context of the result, this implied that students with a higher GPA were those more successful on the board examination compared to those with a lower GPA.

On the contrary, the earlier work of Hamerslough (2008) used categories as pass and fail grades to predict the probability of success in the licensure examination performance. He revealed that the pass and fail grades were not statistically significant on the licensure examination performance. Following this result, thus it can also be likely that there is no relationship between SAT scores and the licensure examination performance.

Regardless of the contradictory results, the studies discussed above provide evidence on the difference in the licensure examination of students with high and low GPA. While it may affirm the results of this study on the difference in the LET performance of the students with passed and conditional SAT, it can be argued that GPA and SAT are two different cognitive outcomes taken at two different points in time. This study remains unique on its own, considering its intact groups of students with passed and conditional SAT.

6. Conclusion

This study was guided by its purpose to analyse the SAT scores grouped as passed and conditional and the LET performance. This study provides general evidence that students who achieved passed SAT scores performed better in LET than those who obtained conditional SAT scores.

This conclusion does not find a stricter admission approach as a solution to the problem because it is given that a special mandate of the university is to integrate disadvantaged students from indigenous communities. This work rather suggests that in assisting students with conditional SAT scores to a higher achievement trajectory in LET, instructional accommodations from program entry until exit should be done.

First, there is an existing bridging intervention that enhances students with conditional SAT scores in tool subjects in language, science, and mathematics upon entry to the program. The intervention approach may be reviewed to ensure that the students obtain a rigorous bridging program. Second, while the students are in their coursework in professional education, continuous assessment of their performance should be made. The areas in which they have weaknesses should be constantly monitored as a basis for instructional remediations. Third, upon completion of coursework, an internal LET review for students with conditional SAT scores should be conducted by the department. The focus

of preparation this time should not only include mastery of test competencies but also strategies in taking the examination.

This study is also restricted by its small sample size involving a single batch of students in one program. The current implications should be treated with caution as they can be applied only in the context of this research. Hence, further studies should be conducted expanding the sample size to multiple batches across different programs with licensure examinations. This will validate the results of this study and improve its ability to generalise.

7. References

- Aquino, A. (2013). Predictive Validity of CET and Entrance Grades to Academic Achievement and Performance in the CPA Board Examination. *UE Research Bulletin*, 15(1). Retrieved from <http://ejournals.ph/form/cite.php?id=1747>
- Arce, A. (2000). In pursuit of continuing quality in higher education through accreditation: The Philippine experience. In *The ALG Research & Development Report* (pp. 4-5).
- Acosta A.S. & Acosta, I.C. (2016). Does teacher licensure matter? Basic education reform in the Philippine education system. *International Journal of Education*, 8(4), 73-91. <http://dx.doi.org/10.5296/ije.v8i4.10247>
- Barrera, D., Cagang, S. & Capistrano, D. (2014). Academic and Admission Variables as Predictors of Results in the Criminologist Licensure Examination. *PRISM*, 18(1), 65-74.
- Bayliss J., Thomas R.M., Eifert-Mangine M. (2017). Pilot study: What measures predict first time pass rate on the National Physical Therapy Examination? *The Internet Journal of Allied Health Sciences and Practice*, 15(4), 1-12. Retrieved from <https://nsuworks.nova.edu>
- Cepeda, M. (2017, October 02). Half of PH schools for teachers perform poorly in licensure exams. *Rappler*. p. 16
- Dagdag, J. (2018). Predictors of performance in the Licensure Examination for Agriculturists: Bases for a proposed plan of action. *Asia Pacific Journal of Multidisciplinary Research*, 6(2), 113-120.
- Dagdag, J., Sarmiento, C. & Ibale, J. (2017). Examining the factors of Licensure Examination for Teachers performance for program strategy enhancement. *Asia Pacific Journal of Multidisciplinary Research*, 5(4), 34-39. Retrieved from www.apjmr.com
- Efurd, M. (2012). *Predictors of academic success for the National Board Dental Hygiene Examination and the Southern Regional Testing Agency Clinical Exam* (Doctoral dissertation, University of Arkansas, Fayetteville). Retrieved from <https://scholarworks.uark.edu/etd/577/>
- Frey, B.B. (2018). *The SAGE encyclopedia of educational research, measurement, and evaluation*. Thousand Oaks, CA: SAGE. <https://dx.doi.org/10.4135/9781506326139>
- Gullo, C.A., McCarthy, M.J., Shapiro, J.I., & Miller, B.L. (2015). Predicting medical student success on licensure exams. *Medical Science Education*, 25(4), 447-453. <https://doi.org/10.1007/s40670-015-0179-6>
- Hamerslough, R. (2008). *Predictors of success for passing the National Board Dental Hygiene Examination and the California State Dental Hygiene Board Examination* (Doctoral dissertation, La Sierra University, Riverside, CA). Retrieved from <https://search.proquest.com/docview/304817612>
- Kume, V. & Horbacewicz, R. (2018). Predictors of Physical Therapy Academic and NPTE Licensure Performance. *Health Professions Education*, 5(3), 185-193. <https://doi.org/10.1016/j.hpe.2018.06.004>

- Labastilla, I.S. (2017). Admission factors associated with the academic and Licensure Examination for Teachers performances of the graduates from Mindanao State University-Maigo School of Arts and Trades. *International Journal of Management and Applied Science*, 3(9), 34-38. <https://doi.org/10.2139/ssrn.3169642>
- Knowles, K.T., Plake, B.S., Robinson, D.Z., & Mitchell, K.J. (Eds.). (2001). *Testing teacher candidates: The role of licensure tests in improving teacher quality*. Atlanta, Georgia: National Academies Press.
- Moniyung, C. (2015). *Academic and non-academic variables as predictors of NCLEX- RN success among traditional associate degree students at Southern Adventist University* (Doctoral dissertation, Andrews University, Berrien Springs, Michigan). Retrieved from <https://digitalcommons.andrews.edu/dissertations/1571>
- Navarro, R. (2003) *The relevance and responsiveness of the course offerings of the University of Northern Philippines to the manpower needs of Region I* (Unpublished Dissertation, University of Northern Philippines, Vigan, Ilocos Sur).
- Ong, M.B. & Palompom, D.R. (2012). Predictors of Nurses' Licensure Examination Performance of Graduates in Cebu Normal University, Philippines. *Asian Journal of Health*, 2(1), 130-141. <http://dx.doi.org/10.7828/ajoh.v2i1.122>
- Pascua, J. & Navalta, J. (2011). Determinants of LET performance of the teacher education graduates in a state university. *JPAIR Multidisciplinary Journal*, 6(1), 80-102.
- Philippine Teachers Professionalization Act of 1994* (1994, December 16). Retrieved from <https://www.pcw.gov.ph/law/republic-act-7836>
- Rogers, T. (2010). *Preadmission academic achievement criteria as predictors of Nursing Program Completion and NCLEX-RN success* (Doctoral dissertation, West Virginia University, Morgantown, WV). Retrieved from <https://eric.ed.gov/?id=ED515740>
- Siemens, S. (2012). *Predictors of academic success in allied health programs* (Doctoral dissertation, Trident University International, Cypress, CA). Retrieved from <http://search.proquest.com/docview/917460876?accountid=14745>
- Solis-Foronda, M. (2017). Predictors of Licensure Examination for Teachers (LET) performance: A mediation analysis. In *Proceedings of the International Conference on Digital Technology in Education* (pp. 74-88). Taipei, Taiwan. <https://doi.org/10.1145/3134847.3134863>
- Soriano, H. (2009). Factors associated with the performance of USM college of education graduates in the 2007 Licensure Examination for Teachers. *USM Research & Development*, 17(2), 151-159. Retrieved from <http://www.usm.edu.ph/onlinejournal/index.php/USMJJournal/article/view/27/24>
- Visco, D. (2015). Predictors of performance in the licensure examination for teachers of the graduates of higher education institutions in Abra. *International Journal of Management Research and Business Strategy*, 4(1), 181-191. Retrieved from <https://www.ijmrbs.org>