

Assessing Exam Readiness: An Analysis of the 2023 Simulated Civil Service Examination Outcomes

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ABSTRACT

Evaluating student competency prior to official civil service licensing is essential for designing targeted preparatory programs and increasing public service eligibility. Grounded in cognitive learning theory and instructional design frameworks, this study analyzed student performance in the 2023 Simulated Civil Service Exam (Professional Level). Utilizing a quantitative diagnostic-descriptive research design, test results were evaluated for N = 51 student examinees across multiple academic departments using descriptive statistics and sectional benchmark evaluations (passing score benchmark = 80). Findings revealed an overall passing rate of only 9.80% (5 out of 51 takers), with an institutional mean score of 72.96. Examinees showed relative strength in the Verbal section (mean = 42.31/70, or 80.22%), led by Sentence Correction (mean = 7.51/10). Moderate scores were recorded in General Information (75.54%) and Numerical Reasoning (74.73%). Conversely, examinees struggled in the Analytical section, registering the lowest overall mean score of 10.43/20 (63.04%), with double-word analogies emerging as the weakest sub-area (mean = 2.67). The findings also revealed a statistically significant difference between overall student test performance and the standard passing mark of 80 points. The examinees achieved an institutional average score of 72.96, 7.04 points below the passing benchmark, with only 5 of 51 takers (9.80%) meeting or exceeding the standard. Standard undergraduate coursework proved insufficient for exam readiness, revealing critical deficits in abstract relational reasoning and logical analysis. Institutional recommendations include establishing structured civil service review programs, integrating higher-order relational reasoning exercises into general pedagogy, and embedding targeted diagnostic refresher modules into senior-year curricula.

Keywords: Civil service examination, student competency, diagnostic evaluation, analytical reasoning, educational assessment

INTRODUCTION

We conducted simulated pen-and-paper civil service examinations for the subprofessional and professional levels to assess our students' competence and prospective eligibility to enter public service. We will use the results to design a review program for students taking the civil service exams slated for next year.

Statement of the Problem

This study aimed to assess students' performance in the 2023 Simulated Civil Service Exam (Professional Level) to identify strengths, weaknesses, and key areas needing intervention for future examination review programs. Specifically, it sought to answer the following questions:

1. What is the overall passing rate and average score of the examinees?
2. How do scores compare across different academic departments?

3. What is the performance level across the different exam sections (Verbal, Analytical, Numerical, General Information) and their sub-areas?
4. Is there a significant difference between student test performance and the standard passing mark of 80 points across all evaluated examination sections?

Scope and Delimitation

The study covers the results of 51 student examinees across various academic departments who took the professional-level simulated civil service examination in 2023. The exam evaluated four main sub-domains: Verbal, Analytical, Numerical, and General Information.

The findings are limited to the 51 takers from the participating departments and focus on identifying performance gaps to inform institutional review program design.

Review of Related Literature

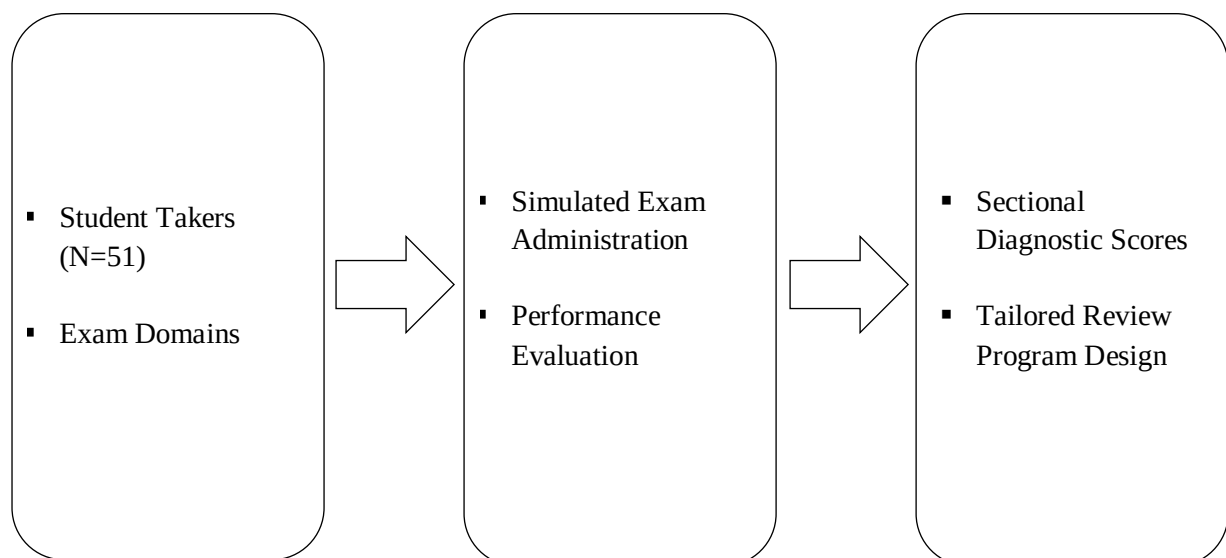
Verbal analogies are heavily influenced by knowledge and complexity factors. Knowledge refers to components relevant to understanding word meanings, while complexity pertains to defining the correct relationship among options (Roccas & Moshinsky, 2018). Furthermore, while analogies serve as effective explanatory tools in instruction, they must be used cautiously because they act as a double-edged sword (Styles, 2003). Effective instructional use requires a strong, well-structured relationship between the analog and its target.

Theoretical Framework

This study is grounded in cognitive learning theory and instructional design principles regarding domain-specific aptitude assessment. Evaluative performance across standardized sub-tests (verbal, numerical, analytical reasoning, and general knowledge) provides diagnostic measures of fundamental competencies required for civil service entry.

Conceptual Framework

The conceptual model follows an Input-Process-Output (IPO) system:



METHODOLOGY

Research Design

This study utilized a quantitative diagnostic-descriptive research design to analyze student test performance across multiple exam sections.

Research Steps

The research process began with administering a simulated pen-and-paper civil service examination designed to evaluate students' competencies across various core subject areas. After students completed the test, we systematically scored and aggregated responses across all primary sections and specific sub-topics to capture detailed performance metrics. The collected data were then tabulated, allowing precise computation of departmental and sectional averages to highlight achievement patterns across cohorts. Finally, a diagnostic analysis of these calculated averages was conducted to identify key learning gaps and provide data-driven insights to guide the structural design

Data Collection and Sample Selection

The study included a sample of 51 students from various academic departments who actively participated by taking the simulated civil service examination.

Data collection used a standardized simulated examination designed to measure key administrative competencies. The test instrument comprised a total of 150 items distributed across four main domains: Verbal (70 items), Analytical (20 items), Numerical (40 items), and General Information (20 items)

Data Analysis Methods

Descriptive statistics, including total frequency, percentage passing rates (benchmark score = 80), and sub-test mean scores, were computed to describe performance.

Research Hypothesis and Validation

The research evaluated whether student test performance differed significantly from the standard passing mark of 80 points across all evaluated examination sections.

To validate this, participants' individual and sectional test results were systematically compared against the official passing threshold of 80 to determine if the observed variations in student scores represented statistically significant differences from the required standard. Examining these differences helped measure overall student proficiency, identify areas of satisfactory performance, and pinpoint critical competency gaps across the sub-tests.

Study Limitations and Ethical Considerations

A primary limitation is the small sample size (N=51), which limits the generalizability of the findings beyond this specific institutional cohort. Consequently, the results reflect the tested group's performance patterns rather than the wider student population.

To address ethical considerations, the study maintained strict data privacy protocols throughout the research. All student test scores and performance metrics were analyzed anonymously and presented solely as aggregated data, ensuring that individual identities and specific scores remained confidential and protected.

RESULTS AND DISCUSSION

SOP 1. What is the overall passing rate and average score of the examinees?

The passing score for the simulated civil exam is 80. Out of 51 takers, five (5), or 9.80%, passed the simulated exam. The overall average score is 72.96.

SOP 2. How do scores compare across different academic departments?

An analysis of the examination results reveals notable variation in performance across the different academic departments.

Only five departments produced examinees who successfully met or exceeded the official passing threshold of 80 points.

The highest score overall was achieved by a student from BSA 3 with a rating of 81.39, followed closely by BS CRIM 3 at 81.23. The remaining successful examinees were from BSBA FM 4 (80.43), BSED 4 (80.36), and BSN 1 (80.18).

Across the entire cohort of 51 participating students from all departments, these five individuals were the only takers to pass, yielding a low passing rate of 9.80% and an overall institutional average score of 72.96.

SOP 3. What is the performance level across the different exam sections (Verbal, Analytical, Numerical, General Information) and their sub-areas?

Performance analysis across the exam shows varying levels of mastery across the four main subject domains.

Examinees performed best in the Verbal Section, with an overall mean score of 42.31 out of 70 items, or 80.22%. Within this section, Sentence Correction emerged as the strongest sub-area with an average score of 7.51, followed by Reading Comprehension (6.67), Vocabulary (6.55), Paragraph Organization (5.86), Sentence Completion (5.69), Synonyms (5.57), and Error Identification (5.02). Antonyms was the most challenging topic in the verbal category, with the lowest sub-area average of 4.47.

Performance in General Information and Numerical Reasoning hovered at moderate levels. In the General Information Section, which evaluated knowledge of the Philippine Constitution, RA 6713, human rights, environmental management, and current events, test takers averaged 10.22 out of 20 items (75.54%). Meanwhile, the Numerical Section yielded a mean score of 19.78 out of 40 items (74.73%), reflecting students' abilities in mathematical calculation and problem-solving.

Conversely, examinees struggled most in the Analytical Section, which recorded the lowest overall average score across the entire examination at 10.43 out of 20 items (63.04%). Takers failed to reach passing thresholds across all sub-areas in this category: Logical Reasoning recorded an average score of 4.92, single-word analogies averaged 2.86, and double-word analogies registered as the lowest sub-area in the entire examination with a mean score of 2.67.

These findings reveal several critical pedagogical and institutional implications regarding student readiness for civil service entry. First, with a passing rate of only 9.80% and an institutional average score of 72.96, the results underscore an urgent need to establish formal, structured civil service review programs prior to actual examinations. Relying solely on standard undergraduate coursework is insufficient to prepare students for the rigorous requirements of standardized public service examinations. Second, the severe performance drop in the Analytical Section (63.04%), particularly in double-word verbal analogies (2.67), indicates a crucial deficit in abstract and relational reasoning skills. Future review programs and general education curricula must prioritize explicit instruction in logical reasoning, component-relationship identification, and problem-solving strategies rather than simple rote memorization.

Furthermore, although verbal competencies were a relative strength (80.22%), low scores in specific sub-domains like Antonyms (4.47) and Error Identification (5.02) suggest a need for deeper vocabulary enhancement and precise grammatical mastery. As highlighted by Roccas and Moshinsky (2018) and Styles (2003), educators across departments should actively integrate well-structured analogies as instructional tools to strengthen students' capacity to parse complex relationships without inducing confusion. Finally, sub-optimal scores in Numerical Reasoning (74.73%) and General Information (75.54%) imply that students require continuous reinforcement in fundamental mathematical application, national governance standards (RA 6713), the Philippine Constitution, and current events. Integrating short diagnostic assessments or refresher modules into senior-year curricula across all academic programs could help bridge these knowledge gaps well before graduation.

SOP 4. Is there a significant difference between student test performance and the standard passing mark of 80 points across all evaluated examination sections?

An evaluation of the test data demonstrates a significant difference between student test performance and the standard passing mark of 80 points across the evaluated examination domains. The null hypothesis is therefore rejected.

Overall, examinees fell short of the required benchmark, with an institutional average score of 72.96, 7.04 points below the 80-point passing threshold.

Of the 51 student takers, only five (9.80%) met or exceeded the passing mark, while the remaining 46 (90.20%) did not reach the standard.

Furthermore, performance varied significantly across specific exam sections when evaluated against the 80-point benchmark. The Verbal Section was the only domain to surpass the target, with test takers achieving a passing mean score equivalent to 80.22% (42.31 out of 70 items).

Conversely, the remaining three sections fell short of the required standard. Results in the General Information and Numerical sections hovered at moderate levels below the benchmark, yielding averages of 75.54% (10.22 out of 20 items) and 74.73% (19.78 out of 40 items), respectively. The Analytical Section showed the largest negative variance from the passing threshold, posting the lowest performance across the entire examination with an average score of only 63.04% (10.43 out of 20 items).

SUMMARY

This study evaluated the performance of 51 students across various academic departments who took the 2023 Simulated Civil Service Exam (Professional Level). With a required benchmark score of 80 points, only 5 of 51 examinees passed, for an overall passing rate of 9.80% and an institutional average score of 72.96. Successful examinees came from five academic programs: BSA 3 (81.39), BS CRIM 3 (81.23), BSBA FM 4 (80.43), BSED 4 (80.36), and BSN 1 (80.18).

Performance across the four main examination domains varied significantly. Takers performed best in the Verbal Section with an overall average score of 42.31 out of 70 items (80.22%), where Sentence Correction was the strongest sub-area (7.51), and Antonyms was the weakest (4.47).

Performance in General Information (10.22 out of 20 items; 75.54%) and Numerical Reasoning (19.78 out of 40 items; 74.73%) remained at moderate levels.

In contrast, examinees struggled most in the Analytical Section, which posted the lowest average score of 10.43 out of 20 items (63.04%). Test takers failed all sub-areas in this category, recording their lowest performance overall in double-word analogies (2.67).

CONCLUSION

The findings indicate a substantial readiness gap among students prior to taking official civil service examinations. Relying solely on regular undergraduate coursework is insufficient to achieve competitive examination scores. While students demonstrate satisfactory foundational ability in general verbal competencies, they exhibit notable deficits in abstract relational reasoning, logical analysis, numerical problem-solving, and governance-related general information. Consequently, targeted institutional interventions and specialized preparatory mechanisms are needed to bridge these learning gaps and improve students' eligibility for public service careers.

RECOMMENDATION

Based on these findings, several strategic actions are recommended to enhance student preparedness for official public service examinations.

First, the institution should establish formal Civil Service Review Programs with structured review modules tailored to identified high-deficit areas, particularly Analytical Reasoning (single- and double-word analogies) and Numerical Problem-Solving.

Second, faculty across all departments should be encouraged to refine classroom pedagogy by incorporating well-structured analogies and higher-order relational exercises into regular instruction. This will strengthen students' foundational capacity to analyze complex verbal and logical relationships in their everyday coursework.

Finally, targeted refresher modules and diagnostic tests can be embedded directly into senior-year undergraduate curricula. These units should cover key general knowledge areas, including the Philippine Constitution, RA 6713, current events, and mathematical reasoning, ensuring that graduating students systematically reinforce critical competencies well before taking official examinations.

ACKNOWLEDGMENT

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AI DECLARATION STATEMENT

This paper was structured and formatted using AI assistance based on raw diagnostic results provided by the researchers.

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