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Article

Common Mistakes Students from Uzbekistan Make on the SAT Exam

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Abstract: The SAT (Scholastic Assessment Test) is a crucial requirement for students who wish to study in countries where English is the primary language of instruction. In Uzbekistan, thousands of high school students are seeking educational opportunities abroad and taking the SAT, with the number of applicants expected to rise significantly in the coming years. This study investigates the common mistakes test-takers make and develops strategies to help avoid these pitfalls before the exam. Forty-two students preparing for the SAT participated voluntarily in the survey, which examined mistakes in each section of the test. The findings revealed that complex math problems requiring multiple skills posed particular challenges, highlighting the need for instructional emphasis on problem-solving strategies. Additionally, targeted support is necessary for word problems and advanced topics, such as trigonometry and geometry.

Keywords: Scholastic Assessment Test (SAT), Errors, Uzbek Students

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1. Introduction

The Scholastic Assessment Test (SAT) is a standardized test commonly used for college admissions in the United States. Developed by the College Board, the SAT evaluates a student's reading, writing, and mathematics skills. Educational institutions in the U.S. and worldwide consider SAT scores as part of students' college applications. Since its introduction in 1926, the SAT has undergone several revisions. The most recent update was introduced in 2016. The current test consists of three sections: Evidence-Based Reading and Writing (EBRW), Math, and the SAT essay. Each of the two main sections is scored on a 200- to 800-point scale, resulting in a total SAT score range of 400 to 1600. Previously, the College Board administered SAT subject tests—1-hour multiple-choice exams in specific subjects—but these were discontinued during the COVID-19 pandemic due to declining popularity. Starting with the 2023-24 admission, the SAT was transformed into a digital format, featuring a shortened duration of 2 hours and 14 minutes [4].

Significance of SAT Scores for Uzbekistan Students

As Uzbekistan continues to develop and modernize, its education sector is undergoing significant transformation. One key goal of these education reforms is to provide higher education opportunities to tens of thousands of eligible students each year. Gaining admission to prestigious universities requires students to excel in a highly competitive selection process, where high SAT scores can be crucial for gaining access to top institutions worldwide. Therefore, familiarity with the SAT format and thorough preparation are essential for students aspiring to study abroad. In Uzbekistan, thousands of high school students actively seek educational opportunities abroad and take the SAT. The number of applicants is expected to rise significantly in the coming years. However,

most public high school graduates in Uzbekistan are not adequately prepared for the reasoning skills assessed by the SAT, typically opting for online courses or private tutoring to enhance their preparation.

This study aims to identify common mistakes students make in various sections of the SAT, with the goal of developing a tailored preparation course to help them perform better on the exam. To achieve this objective, the following research question has been formulated:

Research Question: What common mistakes do students in Uzbekistan frequently make on the SAT?

Literature Review

Comprehensive analyses of common mistakes in the SAT have been conducted over the years, as noted in [3], [6], and [7]. Liu et al. examined test-taker behaviors from the 2015-2016 SAT administration, focusing on how grade level and score scale affect the likelihood of making mistakes [7]. Key findings from the research suggest that lower SAT Math scores are associated with a higher probability of providing no response or an incorrect response [6]. Additionally, differences in responses based on grade level were observed; for instance, younger students tended to leave questions unanswered more often, while older students were more likely to miscalculate averages than their younger counterparts. The research analyzed the 2005 SAT Math section [4]. It categorized students' mistakes into 12 types: no response, incorrect response due to common errors, incorrect response due to misunderstanding the problem, arithmetic mistakes, unclear interpretation of graphs/tables, treating answer choices (A/B/C/D) as digits, careless mistakes, misapplication of math concepts, confusion between 'who' and 'whom', mixing up inequality signs, misunderstanding scientific notation, and incorrect unit conversion.

The study identified several common errors students face in the reading and vocabulary sections [9]. These errors often arise from challenges such as inadequate comprehension of the text, mispronunciation of vocabulary words, and difficulties in answering test questions. Even after rereading specific sections, students may still feel uncertain about how to respond accurately. In the vocabulary section, students particularly struggled with words in questions related to inference, vocabulary in context, and the function of words within a passage. These difficulties highlight a broader challenge with vocabulary knowledge and applying that knowledge across various question formats, which may ultimately hinder their overall test performance.

2. Materials and Methods

Research design

A descriptive survey is used as a research method in this study. McCombes defines descriptive research as a structured quantitative approach used to describe traits, patterns, and categories within a particular population [8]. In this type of research design, surveys are used as a primary tool for data collection without altering any variables. In this study, the researcher employed a descriptive survey design, as it provides a structured way of documenting the research participants' frequent mistakes made in taking the SAT. Additionally, the survey was chosen due to its practicality for new researchers in terms of both human and financial resources. An incidental or convenient non-probability sampling technique was used due to the ease of access to research participants [1].

Research Population

The research and its objectives were announced to students preparing for the SAT at the Education Center, where the researcher works as a mentor. Students who expressed a willingness to participate were invited to join the study. Out of more than one hundred students, 42 signed up to participate. Regarding age, 30 students were between 17 and 18 years old, seven were aged 15 to 16, 4 were 19 to 20, and one was 26. Regarding their grade levels, 26 participants were in 11th grade, one was in 10th grade, and the remaining 15 had already graduated from high school. When examining their language learning experiences, 30 students had been learning English for 3 to 5 years, while seven had studied English for 6 to 8 years, and five had studied English for 9 to 10 years. Regarding

the SAT-taking experience, 24 participants took the test once, 12 took it twice, and only one took it three times.

Research Instrument

A survey consisting of four parts was designed to gather information. The first part consists of four questions designed to collect demographic information. The second part consists of five questions regarding the SAT experience. The third part consists of four questions designed to assess students' test-taking strategies and identify any challenges they may encounter. Finally, the fourth part includes three open-ended questions that allow participants to describe any additional problems they have faced. Before distributing the survey, it was piloted with five students who had recently taken the SAT and two SAT mentors from the education center. This pilot ensured that each question was interpreted as intended and that the survey effectively addressed issues encountered during the tests. After incorporating participant feedback, adjustments were made to the language and structure of several questions to enhance clarity and conciseness.

Research Procedure

The final version of the survey was designed on Google Forms, and the link was shared with the participants. Before taking the survey, participants were assured that their answers would remain confidential and that the results would be used solely for research purposes. The students were given 3 days to complete the survey at their convenience. After 3 days, the survey was closed, and the results were analyzed.

3. Results and Discussion

This section presents the key findings, interpretations, and comparisons of the questionnaire to previous research.

As illustrated in Figure 1, more than half of the students found questions involving multiple concepts—essentially complex mathematical problems—to be challenging. Additionally, 39% of students reported difficulties with word problems, while 34.7% struggled with advanced math topics such as trigonometry and complex numbers. Geometry, measurement, problem-solving, and data analysis posed moderate challenges, with just over one-third and nearly one-fifth of students indicating difficulties, respectively. In contrast, algebra and functions were deemed the least difficult, with only 12.2% of students expressing struggles in these areas. These findings are consistent with those of [1]. One potential explanation for this trend is the complexity of multi-concept problems, which require students to integrate various mathematical skills, often increasing cognitive demand. Word problems, in particular, necessitate translating everyday language into mathematical terms, which can be incredibly daunting for students who struggle with reading comprehension or breaking down problems into their constituent parts.

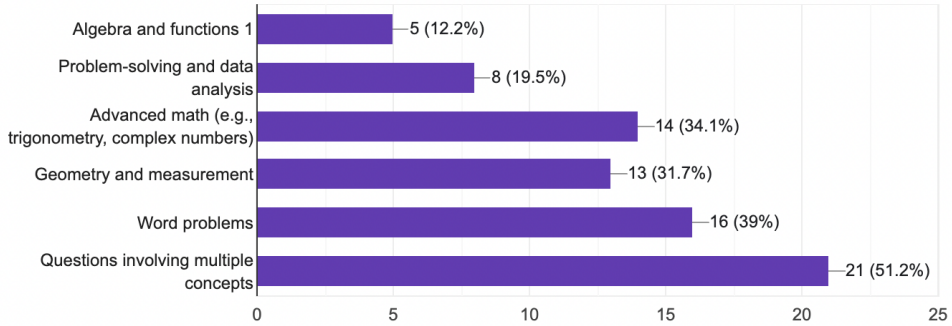

Figure 1. Types of questions students find most difficult in the Math section.

As shown in Figure 2, nearly half of the students struggle primarily with either double passages or literary passages. Following these, historical documents, speeches, and social science passages pose challenges for 29%, 27%, and 24% of students, respectively.

The connection between these findings is clear: lengthy passages intimidate students, and the same applies to long math problems. In essence, texts with a high word count, combined with multiple concepts that need to be solved, are often the ones students find most challenging. Literary passages are particularly complex, likely due to their use of older vocabulary and intricate sentence structures. Another possible reason I have observed is that students may not read books regularly.

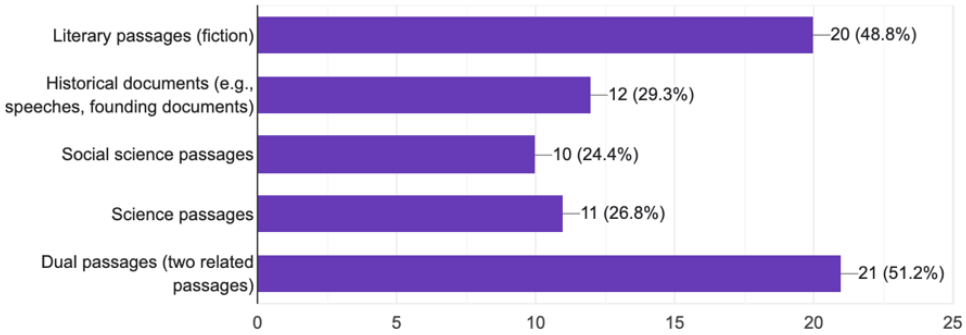

Figure 2. Types of passages students find most difficult in the Reading Section.

For the types of questions students find difficult in the reading section, the data in Figure 3 indicates that almost two-thirds of the students struggle with the contextual meaning of vocabulary. Following that, more than half of the students experience difficulties with inference questions. Data interpretation and main idea questions are listed below, with proportions of 27% and 22%, respectively. [9] found similar results, which could be attributed to students' limited exposure to English in real-life contexts. Another possible reason might be a lack of practice with context clues. Students may not have been trained to infer the meanings of unfamiliar words from surrounding text, a skill often emphasized in native English-speaking education systems.

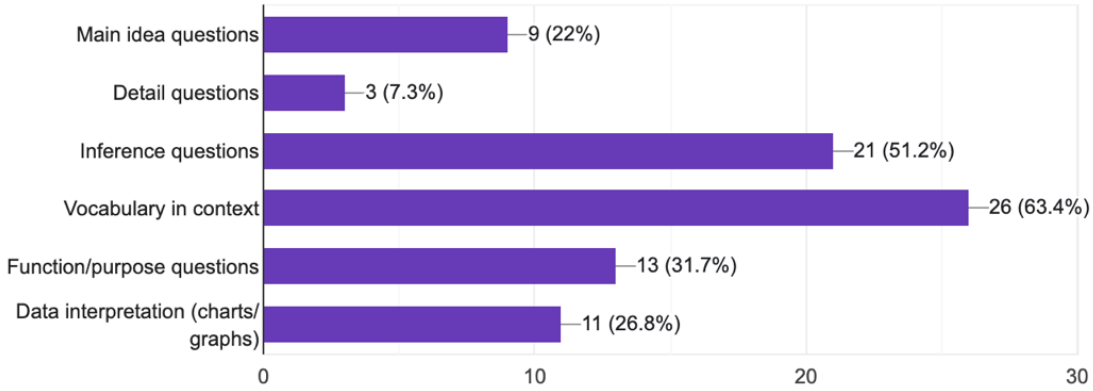

Figure 3. Types of questions students find most difficult in the Reading Section.

Figure 4 illustrates the types of questions in the Writing and Language sections. Nearly half of the students struggle with transitions and organization. Additionally, 41% find punctuation difficult. The following most challenging questions are sentence structure and parallelism, with word choice and style closely following at around 25% each.

Based on the findings and my observations of my students in class, one of the main reasons for these common mistakes may be a lack of familiarity with English paragraph structure, which differs from Uzbek writing conventions. Another contributing factor could be a lack of awareness or practice in maintaining cohesion in writing. Creating cohesion and logical progression between ideas in English can be challenging, especially for students accustomed to more linear or different writing structures in Uzbek.

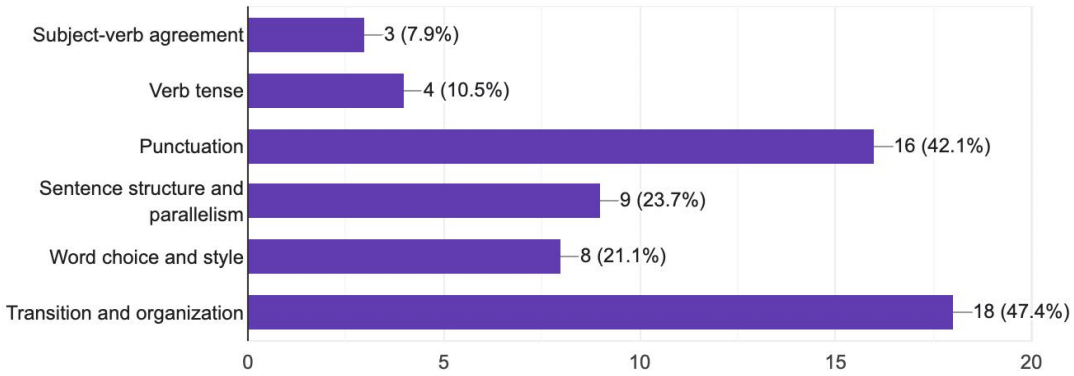

Figure 4. Types of grammar or style questions that students find most challenging in the Writing and Language sections.

Regarding time management, Figure 5 shows that nearly two-fifths of the students sometimes run out of time. The proportions of students who often and always experience time management problems are 17.1% and 7.3%, respectively. This is likely due to pacing issues; some students may spend longer on specific sections, requiring them to balance speed and accuracy on the SAT. However, Bridgeman et al. and Elliott and McKevitt point out that extended time can benefit examinees with a naturally slower pace without compromising the validity of the accommodation or the test [2], [5]. Another reason could be a lack of effective test-taking strategies. Some students may not utilize techniques such as skipping difficult questions to return to them later or answering easier questions first. Finally, test anxiety or the pressure of time limits can cause students to second-guess themselves or freeze during the exam. This is particularly relevant for students who "sometimes" run out of time, as they may hesitate or lose focus under stress.

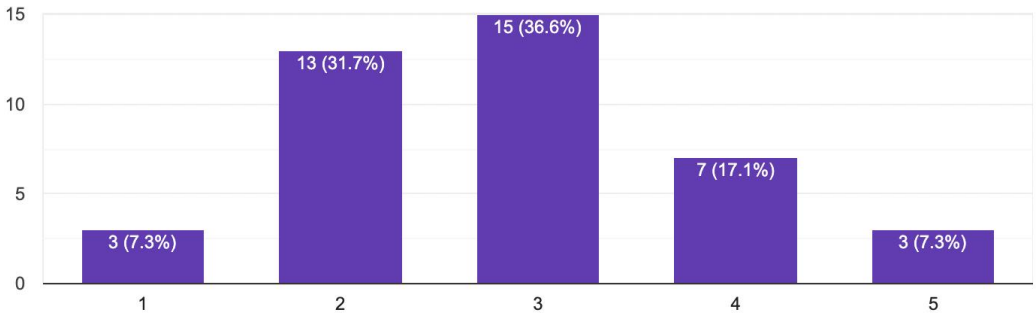

Figure 5. The frequency of running out of time on the SAT.

4. Conclusion

In conclusion, this study highlights the most common challenges students encounter in the math, reading, and writing sections, particularly with multi-concept problems, vocabulary in context, and maintaining cohesion in writing. Students found complex math problems that require integrating various skills to be the most difficult, indicating a need for instructional emphasis on problem-solving strategies. Similarly, targeted support is necessary for word problems and advanced topics such as trigonometry and geometry.

In reading, lengthy literary passages presented significant challenges due to unfamiliar vocabulary and complex structures, highlighting the need for increased exposure to challenging texts. Writing difficulties, particularly in areas such as transitions, organization, and punctuation, suggest that students would benefit from additional practice with English writing conventions.

Time management also emerged as a critical issue, with many students struggling to complete their work within the allotted time. This underscores the importance of teaching pacing strategies and addressing test anxiety. By focusing on these challenges through

targeted instruction, practice, and support, student outcomes on standardized tests, such as the SAT, could improve significantly.

Implications for Practice

The research findings have several implications for teaching practice. Firstly, SAT instructors should enhance their teaching programs by incorporating more problem-solving tasks that involve multiple concepts. By doing this, the teachers will create opportunities for students to develop the necessary skills to manage cognitively demanding questions gradually. Scaffolding activities can be particularly effective, as they typically break down complex math problems into smaller, more manageable parts. Once the students master these skills, they may then attempt to solve multi-concept issues more easily, which in turn improves their self-confidence, an essential aspect in taking exams.

Secondly, since English is learned as a Foreign Language in Uzbekistan, students' regular exposure to various genres of reading, mainly literary and historical passages, is essential when it comes to dealing with SAT reading passages. SAT instructions can implement guided reading sessions where the students will have a chance to analyze older texts' lexical and grammatical structures. This can help students enhance their ability to guess the meaning of unfamiliar words from context clues.

For writing, teachers should consider the differences between English and students' native writing conventions. Once they identify the key variations, they can then provide models of cohesive English paragraph structures and involve students in the analysis of essential elements, such as transitions, which can help bridge the gap.

Finally, instructors should also teach students effective time management strategies for taking the test. This could involve teaching explicit test-taking strategies, such as managing time across sections and approaching difficult questions.

REFERENCES

[1] M. Alvi, A manual for selecting sampling techniques in research, 2016.

[2] B. Bridgeman, C. Trapani, and E. Curley, "Impact of fewer questions per section on SAT I scores," Journal of Educational Measurement, vol. 41, no. 4, pp. 291–310, 2004.

[3] M. McDonald, *Comparing the Performance on the Math Inventory (MI) and the Scholastic Assessment Test (SAT)/Practice Scholastic Assessment Test (PSAT) for the Purpose of Monitoring Student Achievement*. Southern Connecticut State University, 2019.

[4] M.-H. Chen, An Analysis of the Redesigned SAT I-Mathematics: Perceptions of Teachers, English Proficient Students, and English Language Learners. Teachers College, Columbia University, 2021.

[5] S. N. Elliott and B. McKevitt, "Experimental analysis of the effects of testing accommodations on the scores of students with disabilities: Design issues and initial results," presented at the American Educational Research Association Annual Meeting, New Orleans, Apr. 2000.

[6] J.M. Han, "Enhancing SAT solvers with glue variable predictions," arXiv preprint, 2020. [Online]. Available: https://arxiv.org/abs/2007.02559

[7] Y. Liu, M. Zuzak, Y. Xie, A. Chakraborty, and A. Srivastava, "Strong Anti-SAT: Secure and effective logic locking," in Proc. 21st Int. Symp. Quality Electronic Design (ISQED), Mar. 2020, pp. 199–205.

[8] S. McCombes, "Descriptive research: Definition, types, methods & examples," Scribbr, Jun. 22, 2023. [Online]. Available: https://www.scribbr.com/methodology/descriptive-research/

[9] K. Rivera-Torres, Evaluating the Complexity of the SAT: Observations and Students' Self-Reports of Challenges and Strategies on the Critical Reading Section of the SAT. University of California, Los Angeles, 2017.