# The Analysis Report of Majors and Occupations Preference of 2025 DSE Students

**High School**

The following summary report presents the major findings extracted from the survey results collected by High School, including students’ major and occupation preferences, the influence of STEM education and Greater Bay Area (GBA) development on their preferences, and students' approaches to stress management. (Total respondents: 150)

* **Majors Preference**

|  |  |  |  |
| --- | --- | --- | --- |
| Rank | **Popular Majors** | **Male Popular Majors** | **Female Popular Majors** |
| 1st | Therapy | Therapy | Therapy |
| 2nd | Psychology | Finance | Psychology |
| 3rd | Medicine / Surgery | Investment | Medicine / Surgery |
| 4th | Investment | Medicine / Surgery | General Education |
| 5th | Pharmacy | Psychology | Pharmacy |

|  |  |
| --- | --- |
| Rank | **Unpopular Majors** |
| 1st (=0) | Religion |
| 2nd (=1) | Visual Art |

The data reveals that both male and female students share a strong preference for Therapy, Medicine/Surgery, and Psychology, with Therapy consistently ranking first. However, notable gender differences emerge: female students prioritize Psychology and Pharmacy, while male students show a stronger interest in Finance and Investment. The top five majors reflect broader societal trends toward healthcare and business fields. Unexpectedly, Religion and Visual Art are the least preferred majors across all students, suggesting a limited appeal for these disciplines. The findings highlight shared academic interests while underscoring distinct gender-based preferences, particularly in business versus health-related fields.

* **Occupations Preference**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rank | **Popular Occupations** | **Male Popular Occupations** | **Female Popular Occupations** | |
| 1st | Therapist | Artificial Intelligence (AI) | | Therapist |
| 2nd | General Education | Banking / Finance | | General Education |
| 3rd | Psychologist | General Education | | Psychologist |
| 4th | Banking / Finance | Therapist | | Specialist |
| 5th | Medical Service | Medical Service | | Pharmacy |

|  |  |  |
| --- | --- | --- |
| Rank | **Unpopular Occupations** |  |
| 1st (=0) | Fireman | |
| 2nd (=1) | Entertainment / Music | |

The data reveals that both male and female students prioritize caregiving and education-oriented professions, with "Therapist" and "General Education" ranking highly across all groups. Notable gender differences emerge, however, as female students show a strong preference for psychology and healthcare roles ("Psychologist," "Pharmacy"), while male students favor technology ("Artificial Intelligence") and finance ("Banking / Finance"). The least preferred occupations, such as "Fireman" and "Entertainment/Music," are uniformly disliked, aligning with broader societal trends. The unexpected inclusion of "AI" among male students' top choices highlights a growing interest in tech fields, while the dominance of caregiving professions among females reflects persistent gendered aspirations. Overall, the findings underscore enduring career patterns while revealing shifting gender dynamics in occupational preferences.

* **Influence of STEM Education**

***(Results analyzed from the average of STEM participants and non-STEM participants)***

|  |  |  |
| --- | --- | --- |
| **Effectiveness of STEM Project** | **Strongly Improve** | **Partially Improve** |
| **Leadership** | 8.2% | 49.2% |
| **Teamwork** | 9.8% | 52.5% |
| **Creative Thinking** | 16.4% | 55.7% |
| **Science Knowledge and Understanding** | 21.3% | 59.0% |
| **Problem Solving Skills** | 13.1% | 65.6% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **STEM Majors Preference** | **Have attended STEM (A=)** | | **Have not attended STEM (A=)** | **Difference** |  |
| **Engineering** | 12.5% | 7.4% | | 5.1% |  |
| **Science** | 20.3% | 14.8% | | 5.5% |  |
| **Total** | 32.8% | 22.2% | | 10.6% |  |

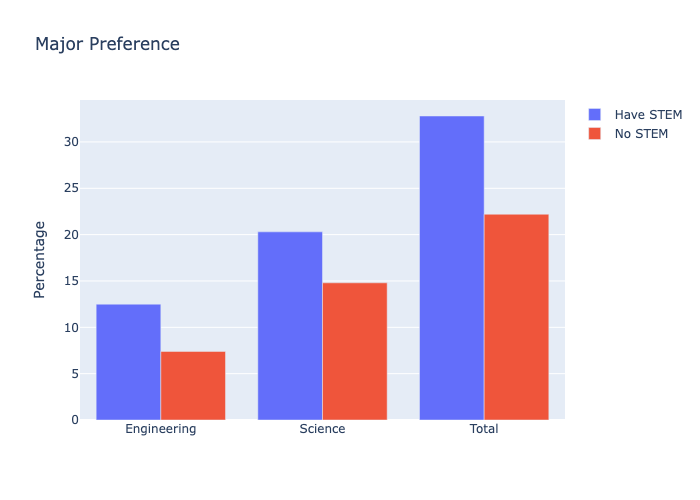
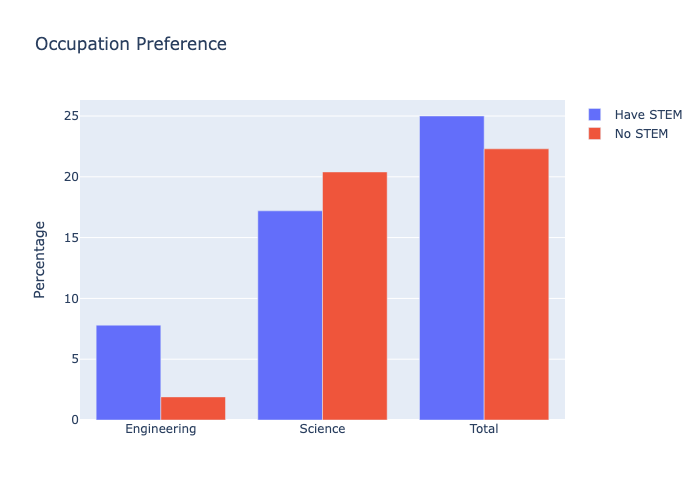
**\**Engineering* majors include Computer Engineering, Mechanical/Electrical, Aviation Engineering and Science Engineering\***

**\**Science* majors include Physics, Chemistry, Biology, Biochemisty, Environmental Science, Mathematics, Statistics, Actuarial, Computer Science and Artificial Intelligence (AI)\***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **STEM Occupations Preference** | **Have attended STEM (A=)** | | **Have not attended STEM (A=)** | **Difference** |  |
| **Engineering** | 7.8% | 1.9% | | 5.9% |  |
| **Science** | 17.2% | 20.4% | | -3.2% |  |
| **Total** | 25.0% | 22.3% | | 2.7% |  |

**\**Engineering* occupations include Computer Engineering, Mechanical/Electrical, Aviation Engineering, Science Engineering, Manufacturing\***

**\**Science* occupations include Information Technology, Data Science, Artificial Intelligence, Biochemistry, Laboratory, Environmental Science\***

* **Conclusion**

STEM education has a significant positive impact on participants, particularly in fostering leadership, teamwork, creative thinking, and problem-solving skills, with notable improvements in STEM-related knowledge. Attendees show stronger preferences for STEM majors (Engineering and Science) and occupations (Engineering), though Science preferences are slightly lower among attendees. Overall, STEM programs enhance STEM career interest and skill development, though gaps in certain areas (like Science occupations) highlight opportunities for targeted improvements.

* **Influence of Greater Bay Area Development Policy**

***(\*Results analyzed from respondents with high GBA familiarity and respondents with low familiarity)***

|  |  |  |  |
| --- | --- | --- | --- |
| **GBA Majors Preference** | **Familiar with GBA** | **Unfamiliar with GBA** | **Difference** |
| **Business** | 32.3% | 30.2% | 2.1% |
| **Science** | 18.5% | 17.0% | 1.5% |

**\**Business* majors include Accounting, Aviation management, Economics, Finance, Logistics, Hotel & Tourism Management, Human Resources, Investment, Managment, Marketing, Risk Management, Property Management)**

**\**Science* majors include Physics, Chemistry, Biology, Biochemistry, Environmental Science, Mathematics, Statistics, Actuarial, Computer Science, Artificial Intelligence)**

|  |  |  |  |
| --- | --- | --- | --- |
| **GBA Occupations Preference** | **Familiar with GBA** | **Unfamiliar with GBA** | **Difference** |
| **Business** | 26.2% | 28.3% | -2.1% |
| **Engineering** | 6.2% | 3.8% | 2.4% |
| **Science** | 20.0% | 17.0% | 3.0% |

**\**Business* occupations include Advertising, Administrative/Management, Asset Management/Stock, Banking/Finance, Hospitality/Tourism, Human Resources, Insurance, Property/Real Estate, Risk Management, Start-up Business\***

**\**Engineering* occupations include Computer Engineering, Mechanical/Electrical, Aviation Engineering, Science Engineering, Manufacturing**

**\**Science* occupations include Information Technology, Data Science, Artificial Intelligence, Biochemistry, laboratory, Environmental Science\***

* **Conclusion**

Students familiar with the Greater Bay Area (GBA) policy show slightly higher preferences for Business and Science majors compared to those unfamiliar with the policy, with differences of 2.1% and 1.5%, respectively. In career preferences, familiarity with the GBA policy correlates with a 3.0% higher preference for Science-related occupations, a 2.4% higher preference for Engineering, and a 2.1% lower preference for Business careers. These trends suggest that awareness of the GBA policy may influence students' academic and career choices, particularly increasing interest in Science and Engineering. It also implies that students who are less informed about the GBA policy may lean more toward Business-related careers. These findings could inform education and career guidance policies, emphasizing the need to raise awareness about the GBA development strategy to better align students' aspirations with regional economic opportunities.

* **Appendix**
* **Majors Preference (Top 7 Ranking)**

|  |  |
| --- | --- |
| Rank | **Popular Majors** |
| 1st | Therapy |
| 2nd | Psychology |
| 3rd | Medicine / Surgery |
| 4th | Investment |
| 5th | Pharmacy |
| 6th | Finance |
| 7th | General Education |

**Occupations Preference (Top 7 Ranking)**

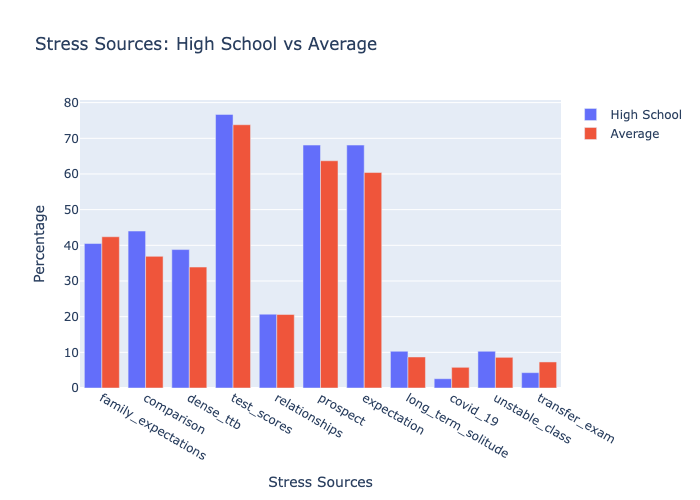
|  |  |
| --- | --- |
| Rank | **Popular Occupations** |
| 1st | Therapist |
| 2nd | General Education |
| 3rd | Psychologist |
| 4th | Banking / Finance |
| 5th | Medical Service |
| 6th | Pharmacy |
| 7th | Specialist |

* **Stress Factor**

|  |  |  |  |
| --- | --- | --- | --- |
| **Factor** | **Individual School** | **General** | |
| Personal | 67.9% | | 64.8% |
| External | 32.1% | | 35.2% |

* **Sources**

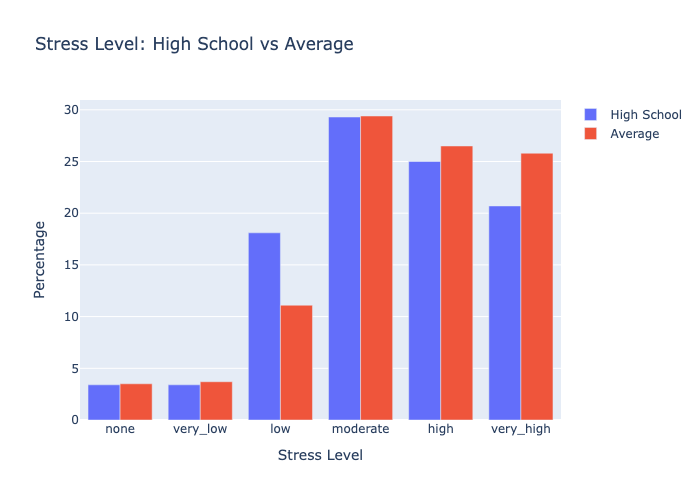
|  |  |  |  |
| --- | --- | --- | --- |
| **Sources** | **Individual School** | **General** | |
| Parent’s Expectation | 40.5% | | 42.4% |
| Peer Comparison | 44.0% | | 36.9% |
| Tight Study Schedule | 38.8% | | 33.9% |
| Examination Results | 76.7% | | 73.8% |
| Relationships | 20.7% | | 20.6% |
| Own Prospect | 68.1% | | 63.7% |
| Own Expectation | 68.1% | | 60.4% |
| Covid-19 | 2.6% | | 5.8% |
| Long Time Alone | 10.3% | | 8.7% |
| Changing Exam Time | 10.3% | | 8.6% |
| Unstable School Time | 4.3% | | 7.3% |



The Individual School students report slightly lower stress from parents' expectations and COVID-19 but higher stress from peer comparison, a tight study schedule, and their own expectations and prospects. Examination stress is also notably higher in the Individual School, suggesting academic pressure is a dominant concern. Relationships and time-related stressors (long time alone, changing exam time, unstable school time) are similarly reported across both groups. This indicates that while general stressors like exams and self-expectations are pervasive, the Individual School students experience heightened academic competitiveness from peers and scheduling demands, likely due to higher academic rigor or unique school demands. The minimal difference in relationship stress implies this is a universal concern across school types. The lower COVID-19 stress in the Individual School may reflect better pandemic adaptation or fewer disruptions in their school context.

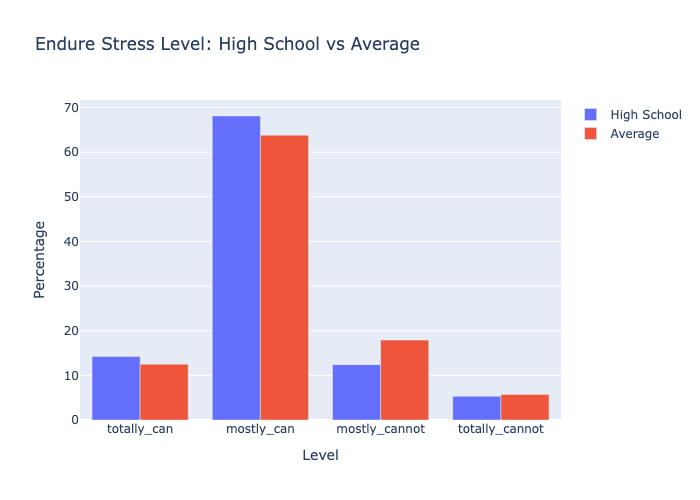
* **Stress Levels**

|  |  |  |  |
| --- | --- | --- | --- |
| **Level** | **Individual School** | **General** | |
| None | 3.4% | | 3.5% |
| Very Low | 3.4% | | 3.7% |
| Low | 18.1% | | 11.1% |
| Moderate | 29.3% | | 29.4% |
| High | 25.0% | | 26.5% |
| Very High | 20.7% | | 25.8% |



* **Endure Stress**

|  |  |  |  |
| --- | --- | --- | --- |
| **Endure Level** | **Individual School** | **General** | |
| Totally cannot | 14.2% | | 12.5% |
| Mostly cannot | 68.1% | | 63.8% |
| Mostly can | 12.4% | | 17.9% |
| Totally can | 5.3% | | 5.7% |



* **Stress Management**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Individual School** | **General** | |
| Do Exercise | 34.8% | | 32.1% | |
| Communicate with Family | 16.5% | | 16.3% | |
| Communicate with Friends | 41.7% | | 34.2% | |
| School Counsellor | 0.0% | | 6.1% | |
| Reschedule Timetable | 12.2% | | 9.9% | |
| Sleep | 44.3% | | 44.5% | |
| Computer Games | 78.3% | | 63.1% | |
| Listen to Music | 76.5% | | 63.7% | |
| No Idea | 7.8% | | 12.5% | |