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

The following summary report presents the major findings extracted from the survey results collected by Springfield 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 |

[LLM OUTPUT PLACEHOLDER]

* **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 | |

[LLM OUTPUT PLACEHOLDER]

* **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**

[LLM OUTPUT PLACEHOLDER]

* **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**

Familiarity with the Greater Bay Area (GBA) development policy slightly increases students' preference for business and science majors, with differences of 2.1% and 1.5%, respectively. In contrast, familiarity decreases preference for business-related careers by 2.1%, while increasing preferences for engineering (2.4%) and science (3.0%) careers. The most notable divergence is in science career preferences, where familiarity with the GBA policy yields a 3.0% higher preference. These trends suggest that policy familiarity may reshape students' perceptions of career opportunities, particularly in engineering and science fields.

* **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 experience notably higher stress from peer comparison, tight study schedules, and their own expectations compared to General School students. Examination results and personal prospects are also significant stressors for both groups, though more so for Individual School students. Conversely, General School students report slightly higher stress from COVID-19 and unstable school timings. Interestingly, stress from parents' expectations and relationships is nearly identical in both groups. The data suggests that Individual School students may face more academic and social pressures, likely due to higher academic expectations or competitive environments. The lower stress from COVID-19 and unstable schedules in Individual Schools could indicate better stability or coping mechanisms for these students. Overall, the findings highlight the prominent role of academic and self-imposed pressures, with potential differences in how students across different school settings perceive external stressors.

* **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 can | 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% | |