



Factors affecting exam performance in senior cycle students in core subjects



Introduction:



Our study aims to investigate the factors that contribute to senior cycle students' (5th and 6th year students) exam results in core subjects (Maths, English and Irish.) The factors we will be analyzing include study methods, hours of sleep and mental health condition.

Desk Research:



Previous research carried out has shown some of the factors that can affect a student's overall academic performance. The stressors on Irish teenagers sitting state examinations are heightened in the PISA (2018) report with 44.8% reporting that they often or always felt they would never do as well as others in exams. 51.6% worry about what would happen if they failed an exam, and 43.1% stated they felt nervous and stressed when thinking about doing exams. (May 2020- Department of Education and Skills) We are aiming to figure out if these levels of anxiety can increase academic performance or hinder a student's success. We are also aiming to evaluate what conditions are best for successful studying. Do students who listen to music packed with lyrics perform badly in exams? Do students who have a hobby outside of school like music or sport perform better because of the break from study, or does having a hobby reduce valuable study time? These are just some of the factors that we have decided to investigate. Our overall aim is to discover the 'key' to success in core subjects, and whether external factors really can affect a student's performance.

The LC grading system

Points	Higher	Your % marks	Ordinary	Points
100	H1	90-100	O1	56
88	H2	80-89	O2	46
77	H3	70-79	O3	37
66	H4	60-69	O4	28
56	H5	50-59	O5	20
46	H6	40-49	O6	12
37	H7	30-39	O7	0
0	H8	0-29	O8	0

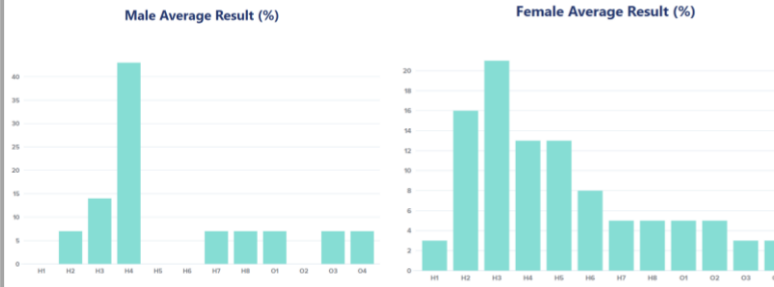
+25 Bonus points for H1-H6 maths

LCVP link modules: Distinction 66 Merit 46 Pass 28

The main subject of our project was to carry out a survey of senior cycle students in our school. We surveyed 185 students and collected a sample size of 52 students, both male and female, from 5th and 6th year groups. These students offered a wide range of academic performance, from H1 average students to O8. They answered questions, firstly about their past exam results. They then responded with information such as how long they study for, where they study, and how many hours of sleep they get. The survey was conducted over a period of 4 weeks from December 2020 to January 2021. The students' results were based on their recent Midterm and Christmas examinations held in 2020. We decided to limit our data to just the core subject results for a number of reasons. Firstly, every student studies them, but if we evaluated all of their subjects, it would be very difficult as each student has different optional subjects. Also, the 3 core subjects are the basis of any student's academic performance.



Survey:



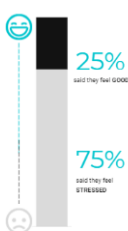
Y axes = 0-40%, 0-20%

On average, girls scored higher than boys in their core subject exams. The modal result for males was a H4 while for girls it was a H3. No male surveyed got a H1 average, but 3% of females did.

The students who stated that school made them 'stressed' had a higher average exam result. The average in 'non-stressed' students was a H6. In 'stressed' students it was a H4. 81% of 'stressed' students got a H5 or above. Just 46% of 'non-stressed' students got a H5 or above.



75% of people studied stated that school negatively impacts their mental health and wellbeing.



89%

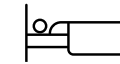
89% of students who got a H4 or above either studied in silence or listened to instrumental music. In lower performing students, 50% of them listened to music with lyrics. Students that studied while watching Netflix also on average got an O1. This was quite unsurprising. As our study and previous evidence suggests, high-packed media like lyrical music or the distraction of Netflix hinders academic performance. The mind is bouncing back and forth between the words of the song/programme and the words one is studying, so it is harder to absorb information.



We also surveyed students about their hobbies. The averages per hobby were as follows:
1. Boxing – O2
2. Camogie- H6
3. Dance – H5
4. Farming – O4
5. Hurling – H5
6. Music – H4
Students that had no hobby outside of school on average got a H7. Students who played music, as can be seen, earned the highest average (H4).



- Hours of Sleep
- <5 hours of sleep: H7
 - 6-7 hours: H3
 - 7-8: H4
 - 9+: H4



Students who got on average 6-7 hours of sleep on school nights performed the best, on average getting a H3 score. Getting less than <5 hours of sleep per night badly affected students' performance, with the average result in this category being just a H7. Interestingly, our study showed that too much sleep can also hinder performance. Students who got over 9 hours of sleep got an average of one grade lower, a H4.

Students who used Audio study methods, such as recording themselves speaking and listening back, on average earned the highest results of a H2. Students who explicitly watched videos as their study method got the lowest average: an O1. Unsurprisingly, students who relied on 'cramming' got an average score of a relatively low H5.

Most used study method	Average result
Audio Listening	H2
Cramming	H5
Reading aloud	H5
Flashcards	H6
Writing things out	H6
Watching videos on topics	O1

Conclusion

Overall, we found there were many factors that contributed to the students' exam performance. We found some key factors (shown on the right) that contribute to the best exam performance possible. We found that the students who perform the best are;
Students who get 6-7 hours of sleep
Students who use audio study techniques
Students who study in silence or to instrumental music
Students who play an instrument
Students who experience some amounts of stress

Of course, some of these factors are subjective. Some students may find that audio does not work for them, or that listening to lyrical music helps them to recall more information. However, in our sample, this was the 'recipe' for the best student. Clearly, some, if not all, of these factors can be incorporated into a students' academic life to ensure that they are achieving their best possible results.

