

Candidate evidence

Why does stress affect sleep quality?

Interdisciplinary Project

Proposal

Candidate name	
SCN	
Centre name	
Assessor name	
Project title	Why does stress affect sleep quality?
Chosen subject	Sciences

Project outline (*what it is you want to do and how will you go about it*)

My aim is to show the science behind why stress affects our sleep quality; I will go about this project by doing daily/weekly research on what hormones are responsible for our sleepless nights. I will also explain the severe consequences that stress has in our daily lives as well as the benefits.

The primary aim is to explore the scientific mechanisms within the human body that link stress to disrupted sleep. The project will focus on the role of the brain and the endocrine system, examining how stress-related hormones influence the body's natural sleep processes. By analysing these biological interactions, It will help me to provide a clear and detailed explanation of how mental and physiological factors combine to impact overall sleep quality.

I will compile information from multiple trusted sources online and use that information to study what hormones from our brains release stress and how they influence different parts of our sleep cycle. Our sleep cycle is as follows: Light Sleep, Deep Sleep then REM (rapid eye movement) sleep - This part of the sleep cycle is where we experience vivid dreaming. A typical sleep cycle usually takes 90-120 mins; people usually undergo this sleep cycle four to six times a night.

To achieve this, a range of reliable sources will be consulted on a regular basis. Research will concentrate on key hormones, such as cortisol, and their involvement in the body's stress response. In addition, the project will examine the structure of the sleep cycle, including light sleep, deep sleep, and REM movement) sleep, and evaluate how stress can disrupt these stages. The information gathered will be carefully analysed and synthesised to show an understanding of both the short-term and long-term effects of stress on sleep and daily functioning.

Information for surveys will be collected from the public, during this project I will demonstrate my collaborative abilities by working a bit more with the public instead of just relying on research alone.

The information that I gather will be placed in an informative presentation and put in posters that will be accessible all over school.

Reasons for choosing this project (eg personal interest, future plans, links to other subjects you are studying/ have studied)

I have a keen interest in the human body and the processes that are responsible for the way our human body works, I find myself intrigued by what the human body has to offer that is essential for our survival. I am most interested in the brain since it is basically our central command, it is responsible for sending signals to other parts of the body, such as our organs. I am willing to choose this project because I have always wanted to find out why stress can have an adverse effect on our sleep.

My plan is to be working within the medicine faculty and I believe this project can help me prepare for that.

The broad contexts this project will cover are

Citizenship-

My project links to citizenship because it explores how stress and poor sleep affect individuals' health and their ability to participate effectively in society. 

Learning environments, I will access are

Internet

The public

How I will use my knowledge of my chosen subject area

I will use my knowledge of Biology and Chemistry to explain how stress affects sleep quality by focusing on the processes that occur in the brain and body. I will apply my understanding of hormones such as cortisol and melatonin, and how they regulate the sleep cycle, to show how stress can disrupt normal sleeping patterns. I will also use my knowledge of the nervous and endocrine systems to explain how signals are sent in the body during stressful situations and how they impact different stages of sleep, including REM sleep.

The skills I will develop and/or improve during this project are:

(carry out a short analysis of your current strengths and weaknesses in the skills areas below and how you think your project will allow you to develop and/or improve these skills)

- application of subject knowledge and understanding

I will use my knowledge of Biology and Chemistry to investigate what is responsible for our sleep quality being affected by stress, I will use knowledge from the previous year and S6 to explain the processes that trigger this hormone.

Current strengths: I have a good understanding of biology and chemistry at my current level and can explain how different body systems interact.

Areas for improvement: I sometimes struggle to apply this knowledge to real-life examples or connect multiple concepts together.

Development: This project will help me strengthen those skills by applying classroom knowledge to an issues such as the effect of stress on sleep quality

- *research skills – analysis and evaluation*

I will look online on trustworthy websites, for information that could help to explain the reason for why stress influences our sleep quality.

Current strengths: I can find relevant information from online sources and summarise it clearly.

Areas for improvement: I tend to accept information at face value instead of deeply evaluating its reliability.

Development: I will compare evidence from different scientific sources and evaluate which are most trustworthy to support my conclusions.

- *interpersonal skills – negotiation and collaboration*

I will discuss my ideas and progress with my teacher to receive feedback and improve my work. I will also communicate with classmates to share ideas and gain different perspectives on stress and sleep., I will carry out a survey to understand how stress affects others' sleep patterns, which will help me compare real-life experiences with scientific research.

Current strengths: I am open to feedback and can communicate my ideas clearly.

Areas for improvement: I sometimes find it difficult to ask others for help or to share responsibility in group work.

Development: I will work with my teacher and classmates to gain different perspectives and learn to collaborate more effectively.

- *planning: time, resource and information management*

I will be using a timeline to organise tasks and events that I will be required to do and attend(respectively), so information can be compiled easily and without struggle. This

will prevent any clashes between tasks and make the journey to finishing this project much simpler.

Current strengths: Interpreting information

Areas for improvement: I occasionally underestimate how long research tasks take and when a task involves a big piece of writing I try to avoid it

Development: I will use a detailed timeline to manage my time better and avoid last-minute stress.

- *independent learning – autonomy and challenge in own learning*

I will try to keep on top of assignments related to this project and try to avoid any form of procrastination so I can be successful in this project. I will reflect on the work that I have done and check if there is any room for improvement, whether it may be in research or the way I have communicated my ideas, explanations and opinions on this topic.

Current strengths: I am motivated and willing to learn new concepts.

Areas for improvement: I

Development: I will set weekly research goals and reflect on my progress to build more discipline and consistency.

- *problem solving – critical thinking: logical and creative approaches*

During my research, I may come across information from different sources, these sources may not agree with each other, to solve this problem I will start by comparing evidence, checking if the information from each source is reliable. I will also use critical thinking to determine how hormones affect sleep and make logical connections between stress and different stages of the sleep cycle. Creatively, I will present complex ideas visually, so they are easy for others to understand.

Current strengths: I can identify logical patterns and connections in scientific ideas.

Areas for improvement: I sometimes find it challenging to interpret conflicting data.

Development: I will practise comparing evidence, analysing data, and using creative visual methods to explain my reasoning clearly.

- *presentation skills*

I will show my findings through informative posters shown around school. These posters will include clear diagrams of the sleep cycle, explanations of key hormones such as cortisol and the effect of stress on the body. I will make sure that what I present is visually appealing, informative and easy to understand by using bullet points, headings and other visuals to make information clear and understandable.

Current strengths: I am confident using visual tools such as posters and slides.

Areas for improvement: I sometimes include too much information, which makes presentations less engaging.

Development: I will focus on clear visual layout, concise explanations, and creative design to make my findings easy to understand.

- *self-evaluation – recognition of own skills development and future areas for development*

Throughout this project, I will reflect on my progress and identify areas where I have improved or need improvement on, such as my research skills and understanding of biological processes, my ability to evaluate sources and manage my time effectively. This will help me understand how I can improve in future projects and continue developing my independent learning skills.

Current strengths: I am reflective and willing to take constructive feedback.

Areas for improvement: I sometimes overlook small details that could make my work stronger.

Development: I will track progress in a research journal, noting areas of improvement and setting new goals to continue developing my scientific and analytical abilities.

Assessor feedback to candidate

This is looking like a great start. Can you expand on your skills & areas for improvement.

Can you also add more to the broad contexts and your learning environments?

Proposal approved	✓	Further work required	✓
Candidate signature			Date 25/6/25
Assessor signature			Date 25/6/25

Interdisciplinary Project

Plan

Candidate name	
SCN	
Centre name	
Assessor name	
Project title	
Is this a group project? No.	
Timescales (<i>this should be a detailed timeline, and any separate spreadsheets or charts should be included as evidence</i>) October • Define project aim and key research questions • Create a detailed project plan and timeline • Begin background research using reliable sources (NHS, WHO, academic journals) • Identify key themes (stress, sleep quality, cortisol, HPA axis) • Start collecting and organising notes from sources • Record all references for bibliography November • Continue in-depth research using peer-reviewed journals • Analyse and compare different studies (identify patterns and differences) • Design and create survey/questionnaire • Distribute survey and begin collecting responses • Start drafting sections of the report (introduction + biological mechanisms) • Begin creating PowerPoint structure (outline slides) December • Collect and organise survey results • Analyse data (identify trends between stress and sleep) • Compare primary data with secondary research • Write main sections: • Impact on sleep • Research evidence	

- Analysis and evaluation
- Continue developing PowerPoint slides
- Begin writing conclusion

January

- Review and edit written work for clarity and accuracy
- Add critical evaluation (strengths, limitations, reliability of sources)
- Improve analysis and link ideas more clearly
- Finalise conclusion
- Refine PowerPoint slides (add visuals, graphs, structure)

February

- Practice presentation delivery
- Improve timing and confidence
- Make final adjustments to slides
- Ensure all references and bibliography are correct
- Get feedback from teacher/peers and make improvements
- Deliver final presentation

March

- Submit completed project
- Write reflection on:
 - What went well
 - Skills developed
 - Areas for improvement

Planning *(how you are going to meet the agreed objectives of your project)* ?

This project is based on secondary research using reliable, peer-reviewed sources and official health organizations. The aim is to explore how stress affects sleep quality in adults through biological and chemical mechanisms, and to review evidence-based interventions that can help reduce stress-related sleep problems.

Resources *(eg people, materials, places)*

- NHS resources: Evidence-based information on stress, sleep disorders, and mental health.
- World Health Organization (WHO): Reports and fact sheets on mental health and sleep health.
- Academic journals: Peer-reviewed research from *PubMed*, *ScienceDirect*, and *Nature*.

- Scientific reviews and meta-analyses: Systematic reviews from *Journal of Sleep Research* and *Psych neuroendocrinology*.
- Government and public health data: Statistics from *Public Health England* and *NHS Digital* on stress and sleep disorders.

Research methods (eg contacting companies, surveys, focus groups, experimentation)

This project uses a combination of secondary research and primary research methods to investigate the relationship between stress and sleep quality. Using a range of methods increases the reliability of the findings, as information can be compared and supported from different sources.

One of the main methods used is a literature review, which involves analysing information from academic journals, scientific articles, and online databases such as PubMed and ScienceDirect. These sources provide detailed explanations of how stress affects the body, including the role of cortisol and the sleep cycle. By reviewing multiple studies, it is possible to identify consistent patterns and draw more reliable conclusions. This strengthens the overall validity of the project. However, a limitation of this method is that some sources use complex scientific language, which can make them more difficult to interpret accurately.

The project also uses information from trusted health organisations, such as the NHS and the World Health Organization (WHO). These sources provide evidence-based information that is both reliable and up to date. They are particularly useful for supporting key ideas and providing statistics on stress and sleep. However, these sources may sometimes simplify scientific concepts, meaning they need to be used alongside more detailed academic research to ensure depth and accuracy.

Another key method used is comparative analysis, which involves comparing findings from different studies. This helps to evaluate how strong the link between stress and sleep quality is. By identifying similarities and differences between studies, it is possible to assess the reliability of the evidence. For example, if multiple studies show similar results, this increases confidence in the conclusion. However, differences in study design, sample size, or methods can affect results, so careful evaluation is required.

In addition, the project includes primary research in the form of a survey or questionnaire. This involves collecting data directly from participants about their stress levels and sleep habits. Questions may focus on sleep duration, sleep quality, and perceived stress levels. This method is valuable because it provides real-life data and allows patterns to be identified within a specific group. However, there are limitations, such as a small sample size, possible bias in responses, and external factors (such as screen time or lifestyle) influencing results.

Finally, the project includes an evaluation of stress-reduction strategies, such as mindfulness, physical exercise, and relaxation techniques. This involves analysing

studies that test the effectiveness of these methods in improving sleep quality. This approach adds depth to the project by not only identifying the problem but also exploring practical solutions. However, the effectiveness of these strategies may vary depending on individual differences.

Overall, the use of multiple research methods allows for a more balanced and well-supported investigation. By combining different types of data and critically evaluating the evidence, the project is able to produce more reliable and meaningful conclusions about the effect of stress on sleep quality.

Presentation

- **Who do I think will benefit from listening/reading/looking at my presentation of my project findings/product?**

A wide range of people will benefit from listening to or reading my presentation. Firstly, students and young people are likely to benefit the most, as they often experience high levels of stress due to schoolwork, exams, and social pressures. This can have a direct impact on their sleep quality, so understanding this relationship can help them improve both their wellbeing and academic performance.

In addition, adults, particularly those in stressful jobs, can benefit from this project. Many adults experience work-related stress, which can lead to poor sleep and long-term health issues. The information presented in this project can help raise awareness of these effects and provide practical strategies to manage stress more effectively.

Teachers and educational staff may also benefit, as the project highlights how stress affects students' sleep and overall performance. This can help them better understand the challenges students face and potentially adapt support strategies.

Finally, the public can benefit from this project, as stress and sleep are issues that affect people of all ages. By explaining the causes, effects, and possible solutions, the project aims to increase awareness and encourage healthier habits.

Overall, this project is useful for anyone interested in improving their mental and physical health, particularly by understanding how managing stress can lead to better sleep quality

- **What methods are appropriate to my audience(s)** (*eg demonstration, presentation software, websites, oral, report, piece of theatre, dvd, wiki/blog or any combination*)

I will share my project using posters and a PowerPoint presentation because this makes the information clear and easy to understand. The posters will show the main points using short text, headings, and visuals like graphs, so people can quickly understand the topic. The PowerPoint will help explain the information in more detail and guide the audience through each part of the project step by step. This is useful because my audience may not know much about the science behind stress and sleep. Using both formats makes the project more interesting, easier to follow, and helps people understand the key ideas better.

Dependencies *(what is required for your project to go ahead ie reliance on other people or resources, steps in plan that must be completed before starting the next step)*

My dependencies for this project include information from websites, research material and getting data from my survey/questionnaire, I require a certain number of responses for this project to be valid, this means I will have a reliable and informed conclusion. I would like to contact specialists that can share some of their knowledge on this topic, but if I am unable to get a response, I will just rely on my research of this topic on NHS and WHO websites or medical journals as well as the information I receive from surveys.

Contingencies

Any anticipated problems

During this project, there are several potential problems that may affect progress. One possible issue is difficulty in collecting enough responses for the survey or questionnaire. A small sample size could reduce the reliability of the primary research and make it harder to identify clear patterns between stress and sleep quality.

Another anticipated problem is the possibility of not receiving responses from any specialists or experts contacted for additional information. This could limit the depth of the research and reduce access to professional insights.

Time management may also be a challenge, especially when balancing this project with other schoolwork and deadlines. Falling behind schedule could impact the quality of the final work.

Additionally, some academic sources may be difficult to understand due to complex scientific language. This could make it harder to accurately interpret and use the information.

My plans for overcoming the anticipated problems.

To overcome the issue of limited survey responses, I will distribute the questionnaire to a wider group of people, such as classmates, friends, and family, to increase participation. I will also keep the survey simple and quick to complete to encourage more responses.

If I am unable to get information from specialists, I will rely on trusted and credible sources, such as the NHS, World Health Organization (WHO), and peer-reviewed academic journals. These sources provide reliable and evidence-based information, which will still allow me to produce a well-supported project.

To manage my time effectively, I will follow my project timeline closely and set personal deadlines for each stage. This will help ensure steady progress and prevent last-minute work.

To deal with difficult academic sources, I will break down complex information into simpler terms and compare multiple sources to improve my understanding. I may also use more than one source to confirm key ideas.

Overall, by planning ahead and using reliable alternative methods, I will be able

	to overcome these challenges and successfully complete my project.
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Method for recording my skills development and future areas for improvement

Throughout this project, I will record my skills development by keeping a progress sheet. This will include regular updates on what I have completed, what skills I have used, and any challenges I have faced. By doing this, I can clearly track how my skills improve over time, such as my research skills, time management, and ability to analyse information.

I will also use self-evaluation at different stages of the project. For example, after completing key sections like research, data collection, and my final presentation, I will reflect on what went well and what could be improved. This will help me identify strengths, such as improved understanding of the topic, as well as weaknesses, such as areas where I may need to manage my time better or explain ideas more clearly.

For example, I will develop my research skills by using reliable sources like the NHS and academic journals, and I will record how I improve at selecting and understanding accurate information. I will also track my data analysis skills when I collect and interpret results from my survey, identifying patterns between stress levels and sleep quality.

I will use self-evaluation at different stages of the project, such as after completing my research, finishing my data analysis, and creating my final presentation. This will help me reflect on what went well, such as clearly explaining biological processes, and what I could improve, such as managing my time better or simplifying complex information.

I will also record feedback from my teacher or peers, especially on my posters and PowerPoint presentation. This will help me improve how I present information and make it clearer and more engaging for my audience.

By the end of the project, I will review my progress log to identify the skills I have developed, such as research, analysis, communication, and time management. I will also highlight areas for improvement, such as improving confidence when presenting or evaluating sources more critically. This will help me understand my overall progress and how I can improve in future projects.

Comments

Good planning sheet and timeline.
could you expand on what flexibility and adjustments you could make, or may need to make if things don't go to plan? You have mentioned what you could change but not linked it to your timings.

Assessor

6/9/25

Candidate

8/9/25

Interdisciplinary Project

Presentation of Project Findings/Product

Candidate name	
SCN	
Centre name	
Assessor name	
Project title	

How I presented my project findings *(describe in detail how you presented your project findings and explain the choices you have made with regard to your presentation method(s) and audience(s))*

In presenting my project findings on the effect of stress on sleep quality, I structured my presentation to guide the audience logically through my research. I began with a brief overview of the topic, explaining why sleep quality is important and how stress is a common factor that can disrupt it. This helped establish the relevance of my project.

I then outlined my methods, describing how I collected data through surveys that measured participants' stress levels and sleep patterns. I included graphs and charts to visually represent key data, making it easier for the audience to understand trends and comparisons.

When discussing my results, I highlighted the main finding that higher stress levels were strongly associated with poorer sleep quality. I explained this relationship clearly, referring to specific data points and patterns shown in my visuals. I also compared my findings to existing research, showing that my results were consistent with established studies.

To investigate the effect of stress on sleep quality, I used a combination of primary and secondary research methods. This allowed me to gather both original data and compare it with existing studies to strengthen the reliability of my conclusions.

For my primary research, I designed and distributed a survey to collect data on individuals' stress levels and sleep patterns. The survey included questions about sleep duration, sleep disturbances, perceived stress levels and daily habits to reduce stress. This method was effective because it provided first-hand, relevant data specific to my research question. After collecting responses, I organised the

data into graphs and charts, which helped me identify patterns and trends more clearly.

In addition to this, I used secondary research to support and validate my findings. I consulted academic articles, health websites, and previously published studies on stress and sleep. These sources helped me understand the biological and psychological links between stress and sleep quality, such as how stress hormones like cortisol can disrupt sleep cycles. Comparing my results with these sources showed that my findings were consistent with established research, increasing the credibility of my project.

My specialist played an important role in reaching my conclusions. Through my understanding of health and wellbeing, I was able to interpret how stress and high cortisol impacts the body and mind, particularly in relation to sleep. This helped me explain why higher stress levels were linked to poorer sleep quality, rather than just identifying the pattern. I was also able to critically evaluate my findings and recognise limitations, such as sample size and potential bias in survey responses.

The main finding from my project was that there is a strong relationship between high stress levels and poor sleep quality. From the survey data I collected, participants who reported high stress levels also reported difficulties such as trouble falling asleep, waking up frequently during the night, and feeling tired during the day. In contrast, participants with lower stress levels generally reported longer and more consistent sleep.

For example, over half of the participants who rated their stress as high also said they slept less than 6 hours per night, while those with low stress were more likely to get 7–9 hours of sleep. This shows a clear pattern that as stress increases, sleep quality decreases.

In my survey, I also noticed patterns in responses with regards to reducing stress. People who listened to music or completed hobbies, essentially completed activities they enjoyed, slept better. I analysed these responses and compared them with existing research before making recommendations, such as maintaining a balanced diet or exercising regularly.

Overall, by combining different research methods, using a variety of reliable sources, and applying my own subject knowledge, I was able to confidently conclude that increased stress levels have a negative effect on sleep quality.

Finally, I concluded by summarising the key insights and suggesting possible ways to reduce stress to improve sleep, such as relaxation techniques and better time management. I also reflected on the limitations of my study and suggested areas for further research.

Assessor feedback to candidate

clear explanation of findings.
Could you give more detail on how your
survey findings affected your research and
therefore any adjustments you needed to make?

Candidate signature		Date	12/2/26
Assessor signature		Date	11/2/26

Interdisciplinary Project

Evaluation of project

Candidate name	
SCN	
Centre name	
Assessor name	
Project title	How stress affects sleep quality

How successful has my project been overall? *(consider the strengths, weaknesses and learning points of your planning, implementation and findings/outcomes giving examples to support your comments)*

Overall, I believe my project has been highly successful in achieving its aim of investigating how stress affects sleep quality. I was able to gather and present detailed information through both primary and secondary research, which allowed me to form well-supported conclusions.

A key strength of my project was my ability to critically evaluate and synthesise different sources of information. By comparing findings from my survey with existing research, I was able to identify consistent patterns, particularly the relationship between increased stress levels and reduced sleep quality. This demonstrates that my conclusions were not based on isolated evidence, but on a combination of data sources, which strengthens their validity.

I demonstrated strong organisational skills by following a structured plan throughout the project. This was a deliberate and reasoned approach, as I recognised early on that effective time management would be essential in completing each stage to a high standard. As a result, I was able to present my findings in a logical and understandable way.

Furthermore, I developed a deeper understanding of the topic by analysing the cyclical relationship between stress and sleep. Rather than simply describing this link, I explored how stress can lead to poor sleep, which in turn increases stress levels, creating a reinforcing cycle. This shows a higher level of critical thinking and understanding.

However, there were some limitations to my project. My sample size was relatively small, and the data collected was self-reported. I recognise that this may reduce the reliability and objectivity of my findings due to potential bias or inaccurate reporting. This awareness highlights my ability to critically assess the quality of my own research.

To improve the project, I would collect data from a larger and more diverse sample. This would enhance the reliability and validity of my conclusions, making them more representative of a wider population. Overall, despite these limitations, the project was successful because I achieved my aim, supported my conclusions with evidence, and demonstrated strong analytical and evaluative skills throughout.

How effective were my communication methods throughout the project?

I would say my communication methods were effective. In addition to creating posters, I posted a survey on Microsoft Teams. The form included questions about how stress affected individuals and how they tried to manage it. I evaluated the effectiveness of these methods by considering how well they engaged my audience and gathered useful data. The posters were written in a way that people could understand, and I explained complex terms clearly to avoid confusion.

One strength of my communication was the clear structure of my presentation. By dividing it into sections like introduction, methodology, results, and conclusion, I made it easier to follow. I deliberately organised my work in this way to improve clarity and logical flow.

I also used visual aids like graphs and tables. I made the decision to present data visually after recognising that raw numbers might be difficult to interpret, which helped highlight patterns more effectively.

Another strength was my use of appropriate language. I explained scientific concepts accurately but simply. I considered my audience's level of understanding and adapted my explanations accordingly, which made my communication more effective.

I also linked my findings to real-life situations. This showed my ability to apply knowledge and evaluate its relevance beyond the project itself, making the information more meaningful.

Overall, I think my communication methods were effective because I was able to clearly present my ideas, engage my audience, and support my points with evidence.

Is there any aspect of my project that could be taken further? What might my next steps be?

I think I could have taken the communication aspect of my project further. On reflection, I recognised that relying mainly on internet research may limit the depth and reliability of my information.

To improve this, my next steps could involve contacting specialists in this field and conducting interviews. This would allow me to evaluate different expert perspectives and compare them with my existing findings, increasing the credibility of my project.

I could also ask each specialist the same set of questions. This would allow for more consistent data collection and make it easier to analyse and compare responses critically.

Additionally, I could expand my research by increasing my sample size and including a more diverse group of participants. This would improve the validity of my conclusions and reduce potential bias.

Candidate signature		Date	23/2/26
Assessor signature		Date	22/2/26

Interdisciplinary Project

Self evaluation of generic and cognitive skills development

Candidate name	
SCN	
Centre name	
Assessor name	
Project title	The effect of stress on sleep quality

In evaluating your skills consider the skills analysis which you carried out at the Proposal stage and how you said you would develop and improve these skills. Now refer to your reflective diary/log/blog and feedback you have received and evaluate how you have developed and/or improved these skills through the work on your Interdisciplinary Project.

Application of subject knowledge and understanding

(Think about practical uses for the what you have learned. How did you use your knowledge of your chosen subject area effectively to help you carry out various aspects of your project and how it related to your chosen broad context(s)?)

During my project, I applied my knowledge from Advanced Higher Biology and psychology to investigate how stress affects sleep quality. I looked at how the hypothalamic-pituitary-adrenal (HPA) axis is activated during stress, leading to the release of hormones such as cortisol and adrenaline (epinephrine). These hormones increase alertness and can disrupt the normal circadian rhythm, which is controlled by the suprachiasmatic nucleus (SCN) in the brain. I also studied how high cortisol levels can reduce time spent in REM sleep and deep sleep, which are important for recovery and memory consolidation. From a neurological perspective,

I considered how neurotransmitters like serotonin and melatonin regulate sleep, and how stress can interfere with their balance.

This biological knowledge helped me design more effective survey questions by focusing on both physical and psychological symptoms of stress. It also allowed me to better analyse my results and explain them using scientific evidence. By linking biological processes to real-life experiences, I gained a deeper understanding of how stress impacts sleep quality.

This knowledge helped me plan my project carefully. For example, I created survey questions that measured both how stressed people felt and how it affected their sleep. By connecting theory to real-life experiences, I could make sense of my

results and see how stress impacts sleep in everyday life. Understanding the science made my analysis more accurate and meaningful.

Research skills – analysis and evaluation

(Think about the research process. How did you plan, carry out, analyse and evaluate your research? You should evaluate your research methodologies, tools, resources and contacts, data recording and referencing, reliability and usefulness of data.)

I improved my research skills a lot during this project. First, I read secondary sources like academic articles, books, and websites from health organizations to learn more about stress and sleep. Then I designed a survey to collect information from participants about their stress levels and sleep patterns.

I organised the responses clearly, noting trends such as higher stress often leading to shorter sleep. I used graphs and tables to visualise the results and checked the reliability of my data. I also reflected on limitations, like having a small number of participants and possible bias in self-reported answers. Evaluating my methods helped me understand how research can be improved and taught me the importance of accurate data collection and analysis.

Interpersonal skills – negotiate and collaborate

(Think about how you considered other peoples' views/feedback, discussed issues of concern, reached a solution where needed, adjusted your approach in response to a situation/environment, showed positive self belief and had the confidence to offer and ask for support.)

Working with teachers, classmates, and participants helped me develop my interpersonal skills. I asked my teacher for feedback on my research methods, which helped me improve them. I discussed survey questions with classmates to make sure they were easy to understand and unbiased.

When opinions weren't the same for everyone, I listened to other perspectives and adapted my approach to reach solutions. I also showed confidence in my ideas by explaining my reasoning and asking for help when needed. Collaborating with others taught me how teamwork can improve a project and how listening to different viewpoints makes my work stronger.

Planning – time, resource and information management

(Think about your time management. How did you set targets, monitor/record progress, consider any probable barriers to achievement and take steps to minimise them?)

Planning and organising my time and resources were very important. I created a clear timeline with deadlines for research, data collection, analysis, and presentation. I monitored my progress and adjusted my plan when unexpected delays happened, like waiting for survey responses.

I also thought ahead about potential problems, such as not having enough participants or difficulties with self-reported data, and made plans to reduce these risks. Keeping my notes, sources, and data organised helped me reference information easily and analyse it efficiently. Good planning helped me stay on track and reduced stress during the project.

Independent learning – autonomy and challenge in own learning

(Think about how you used your skills to make things happen, took the initiative to establish links with other learning environments/opportunities and looked for challenges rather than taking the easy option.)

This project gave me the opportunity to take control of my own learning. I researched information from a variety of reliable sources rather than just using easy or obvious options. I explored complex topics, like how chronic stress can affect long-term sleep and mental health.

I took the initiative to contact participants for my survey and followed up to get enough responses. Managing my own work helped me build confidence, solve problems independently, and see that I can tackle challenges without relying entirely on others.

Problem solving – creative approaches; critical thinking; logical approaches

(Think about your problem solving skills. How did you generate and explore ideas, use logical and creative approaches, analyse source materials in order to support findings, reflect on problems and possible contributory factors and think critically about possible actions/changes?)

Problem-solving was important throughout the project. I had to design survey questions that were clear, unbiased, and useful. When some participants gave incomplete or inconsistent answers, I had to think logically about how to interpret the results accurately.

I also considered other factors that could affect the data, such as lifestyle, stress perception, or personal habits. Using both creative and logical approaches helped me understand the results fully and suggest realistic solutions, such as strategies to reduce stress and improve sleep quality. This strengthened my critical thinking and ability to analyse problems carefully.

Presentation skills

(Think about how you presented your findings. Evaluate your presentation method(s), choice of audience(s), layout, structure, degree of formality and choice of content. Did your presentation include information/ideas/reflections with supporting detail in a logical order and reach a reasoned conclusion?)

I presented my findings in a clear and logical way. My report and presentation included sections such as introduction, methodology, results, discussion, and conclusion. I used graphs and tables to make the data easier to understand.

I explained my findings clearly and linked them to the science I had learned, showing how stress affects sleep. I also made sure the presentation was suitable for my audience and maintained a clear structure. Presenting my work improved my confidence and my ability to communicate complex ideas in an organised way.

Self evaluation – recognition of own skills development and future areas for development

(Think about how you have developed throughout your project. How did you deal with feedback, praise, setbacks and criticism and their impact on your own development of knowledge, skills and understanding? To what extent did you ask for feedback, learn from experiences and how will you use these to inform future progress?)

Throughout the project, I noticed improvement in many skills. I became better at research, analysing data, and organising my work. I learned how to take feedback and apply it to improve my project. Setbacks, like delays in getting survey responses and inconsistent answers, taught me patience and problem-solving skills.

For future projects, I want to improve my ability to analyse larger amounts of data and present findings to different audiences. Overall, this project helped me develop skills in planning, research, independent learning, and problem-solving that I can use in future studies and projects.

This section is not mandatory. It has been included to allow you the opportunity to undertake an overall reflection of your project.

Reflection on my experiences throughout this project *(eg things you feel you have achieved, things you have done that you feel particularly proud of, anything you would do differently were you to do something similar in future)*

During this project, I learned a lot about how stress affects sleep. I'm proud of how I created my survey and collected real responses, as it helped me understand the topic better. I also think I did well in explaining my results clearly using graphs and writing.

There were some challenges, like not getting enough responses and some unclear answers, but this helped me learn how to deal with problems and adapt my work. If I did this again, I would try to get more people to take part so my results are more reliable. I might also use different methods, like interviews, to get more detailed answers. Overall, this project helped me improve my skills and confidence.

Skills that I have used in this project that I would like to develop further (eg using skills in even more challenging situations, more working on your own, more team working)

I would like to improve my research and data skills by working with more information and understanding it better. I also want to get better at working independently by challenging myself more and not always relying on others. I would also like to improve my teamwork skills by working more with other people.

Another skill I would like to develop is my confidence when presenting, especially speaking in front of different audiences.

Comments

Good look at the skills you have completed well and how you have developed and used feedback.

Assessor

22/2/26

Candidate

23/2/26

Interdisciplinary Project

Assessor Report

Candidate name _____

Candidate number _____

Subject area Science

Centre _____

Project proposal	Tick as appropriate
Grade C criteria	
The title and aims of the project.	✓
Clear aims and reasoned arguments to support the relevance and practicability of the project.	✓
Identification of opportunities for:	
• own skills development	✓
• collaborative working	✓
• accessing less familiar learning environments	✓
• application of subject knowledge in a broad context	✓
• use of knowledge and skills across different disciplines	✓
• making connections between subject knowledge and the wider world	✓
Evidence of the ability to communicate clearly and concisely in advocating the proposal.	✓
Grade A criteria, includes all of above plus	
Well conceived proposal which sets creative and challenging goals which are at the same time realistic, achievable and practicable.	✓
Robust and carefully argued justification of the proposal.	
Substantial links and understanding of possible connections across disciplines contributing to the project.	
Comments	
Could you expand on other broad contexts that this will cover?	
Could you also expand on your learning environments?	

Clear aims & links to the wider world. Good review of skills and opportunities for development. Well communicated but not quite in depth enough to tick all A criteria.

Project plan	Tick as appropriate
Grade C criteria	
Development of clear project objectives in line with the project proposal.	✓
Relevant and detailed planning strands to enable the project to be implemented, monitored, presented and evaluated.	✓
Realistic timescales and achievable milestones for each stage of the project.	✓
Clear identification of resources needed, research methodologies to be used, opportunities for support and feedback.	✓
Grade A criteria, includes all of above plus	
Careful selection and effective use of research/investigation techniques.	✓
Anticipation of probable and possible factors which may impact on the project.	✓
Clear identification of dependencies or reliance on the success of other strands of work and of necessary adjustments to the plan. *	
Outline the process for achieving own identified development needs.	✓
Comments	
Clear planning timeline and thought out process of how it will be achieved. Not quite clear on how any adjustments will affect the timeline & any flexibility needed.	
Presentation of project findings/product	Tick as appropriate
Grade C criteria	
Evidence of effective and critical use of — resources, research methodologies, information and time management, prioritisation, problem solving approach to reach objectives, feedback, collaborative approaches, self monitoring.	✓
Application of specialist and interdisciplinary subject knowledge to establish meaningful connections within the broad context.	✓
Clear presentation of main findings/outcomes.	✓
Grade A criteria, includes all of above plus	
Critical thinking, analysis and reflection used at key stages in the project to construct rigorous arguments, draw convincing, well supported conclusions, identify and resolve issues.	
Skilful and creative use of resources, including people, information and learning context to progress the project.	
Accurate and deepening of understanding through application of subject knowledge in the chosen context, with meaningful connections well established.	✓
Comments	
Good reflection on how the presentation was completed. Findings are clear but not in depth.	

Evaluation of project	Tick as appropriate
Grade C criteria	
A critical and justified evaluation of all stages of the project process — planning, implementation and findings/outcomes in terms of strengths, weaknesses and learning points.	✓
Effective use of chosen communication method(s).	✓
Grade A criteria, includes all of above plus	
Incisive, well balanced evaluation of the project outcome against project aims, supported convincingly by well selected evidence.	
Careful choice and skilful use of communication and presentation methods(s).	✓
Comments	
Clear identification of strengths and reflection on choices made. Could expand on weaknesses.	on choices

Self evaluation of generic/cognitive skills development	Tick as appropriate
Grade C criteria	
A critical evaluation of own skills development against the list of specified generic/cognitive skills.	✓
A reasoned evaluation of own strengths and key goals for development in the specified list of generic/cognitive skills, which takes account of <u>feedback</u> sought and evidenced from others throughout the project.	✓
Grade A criteria, includes all of above plus	
Insightful, balanced and well structured self evaluation of own development.	
Assertive and <u>justified use of feedback</u> from others in evaluation and identification of development areas.	✓
Comments	
Lots of areas have improved, some mention of feedback and how it was used to improve skills and the report findings.	

The overall grade will be:

- A indicative of a highly competent performance which meets the additional Grade A criteria and consistently demonstrated a high degree of autonomy, initiative and effective information management across the five pieces
- B indicative of a competent Grade C performance across the five pieces, but with some aspects of work meeting the criteria for highly competent performance (as outlined by the Grade A criteria)
- C indicative of a competent performance across the five pieces, with all aspects of the work meeting the criteria identified for Grade C performance

Overall Grade Awarded	A	B	C	Unsuccessful
Additional Comments/Overview				
Overall, this was a good project. Lots of good skills development and learning happened in the report writing process. Some areas could have been expanded on for more clarity.				

Assessor signature _____

Date 20/3/26

Internal verifier signature _____

Date 23/4/26