

ISEF Sample Abstract & Certification

Students face many challenges that can result in different levels of stress. Education stress is triggered by low academic performance, comprehensive assignments, strong standards, and academic strain. Acne vulgaris, sometimes called lesions, are a common skin disorder that is often caused by the obstruction and inflammation of the pilosebaceous units. So far, there has been no research done testing if stress from academics may aggravate acne. The purpose of the study is to see if stress caused by academics influences the development of acne in adolescents. This study was conducted from April to October 2022 and there were a total of 108 participants to date who were 13-18 years old and attended high school, middle school, or were homeschooled. A survey was conducted which included the Perceived Stress Scale to measure academic stresses with academically related questions. The students answer with 0=never, 1=almost never, 2=sometimes, 3=fairly often, and 4=very often. The Global Acne Grading System measures the amount of acne on each student and they self-diagnose acne in various areas of their face and torso. Data was analyzed with Chi Square Test of Independency (Pearson 1900) and was concluded that academic stress and acne vulgaris are independent of each other. In all, there was no statistically significant difference between the correlation of the two factors. Students with high perceived stress are not more likely to suffer from comdonal, papular, pustular, and nodulocystic acne than students who are less stressed. Implications for all variables are discussed.

Category
Pick one only--
mark an "X"
in box at right

- Animal Sciences
- Behavioral and Social Sciences
- Biochemistry
- Biomedical and Health Sciences
- Biomedical Engineering
- Cellular & Molecular Biology
- Chemistry
- Computational Biology and Bioinformatics
- Earth & Environmental Sciences
- Embedded Systems
- Energy: Sustainable Materials and Design
- Engineering Mechanics
- Environmental Engineering
- Materials Science
- Mathematics
- Microbiology
- Physics and Astronomy
- Plant Sciences
- Robotics & Intelligent Machines
- Systems Software
- Translational Medical Science

1. As a part of this research project, the student directly handled, manipulated, or interacted with (check all that apply):

- human participants
- potentially hazardous biological agents
- vertebrate animals
- microorganisms
- rDNA
- tissue

2. This abstract describes only procedures performed by me/us, reflects my/our own independent research, and represents one year's work only.

- yes
- no

3. I/We worked or used equipment in a regulated research institution or industrial setting.

- yes
- no

4. This project is a continuation of previous research.

- yes
- no

5. My display board includes non-published photographs/visual depictions of humans (other than myself):

- yes
- no

6. I/We hereby certify that the abstract and responses to the above statements are correct and properly reflect my/our own work.

- yes
- no

