

# The Affect of Stress and Relaxation on Smoking Behaviors

## NEXT GENERATION OF SCIENTISTS

### TITLE and AUTHORS

The title should describe the work to the reader. Include the variables that are manipulated and the author(s)

### ABSTRACT

The abstract is a one or two paragraph condensation of the entire article giving the main features and results of the work described more completely in the poster.

Pre-AP Biology students investigate the affects of stress/relaxation on smoking behaviors. They are doing this by exploring databases, and a questionnaire that has been created by UW scientists. This investigation can be done by anyone who has access to the database and questionnaire.

### RESULTS

Describe the results clearly. Use graphs, tables and charts to help clarify the results. Include a discussion on the statistics you use to describe or test your data. Save any conclusions for the DISCUSSION

We hypothesized that if a person is dealing with a great amount of stress, then they are more likely to become a regular smoker, because they believe smoking relieves their stress and relaxes them and by looking at the graphs, it clearly shows that when they got more stress, and had to deal with stress, they started to smoke. Also that majority of people in graph 18.7 said "yes" that smoking had decreased their level of stress. In graph 18.5, most of the study participants said that they had a relaxed feeling also.

Total

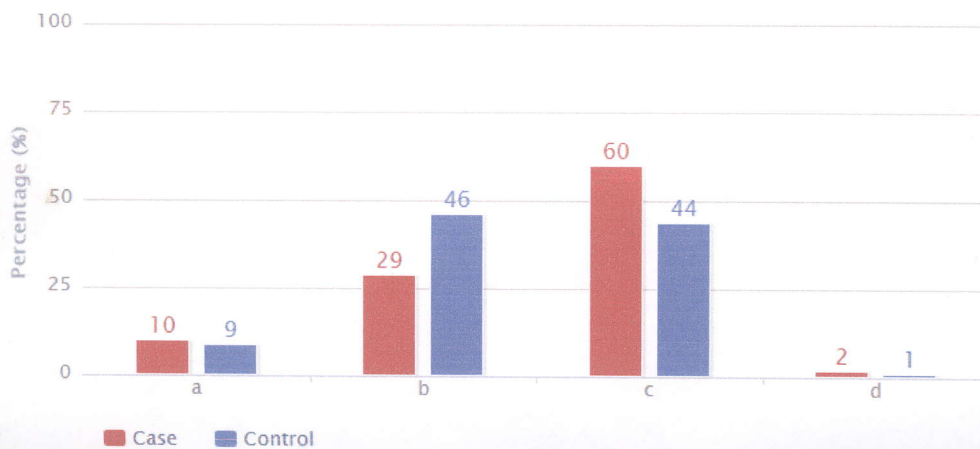
155

92

33

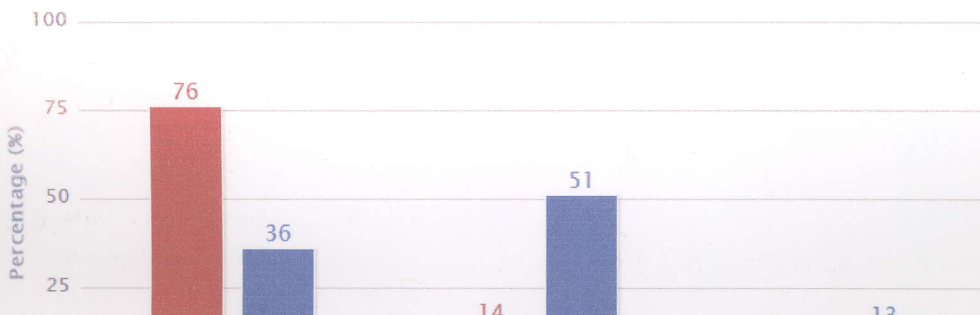
69. As a teen, how much stress did you experience in your life?

	Answers	Cases	Controls	Total
A)	None or very little	15 (10%)	12 (9%)	27
B)	Some	45 (29%)	62 (46%)	107
C)	A lot	94 (60%)	59 (44%)	153
D)	Don't know/not sure	3 (2%)	1 (1%)	4
Total:		157	134	291



18.5. During your experimental smoking phase, did you experience any of the following regularly? - A relaxed feeling

	Answers	Cases	Controls	Total
A)	Yes	109 (76%)	48 (36%)	157
B)	No	20 (14%)	68 (51%)	88
C)	Don't know/not sure	14 (10%)	17 (13%)	31
Total:		143	133	276





# INTRODUCTION

The introduction has three parts: 1) The question asked, 2) Background context—where does this question fit with what is known, and 3) Your hypothesis presented in an "If...then" prediction that structures your research.

**QUESTIONS:**

**BACKGROUND:**

**HYPOTHESIS:**

Question:	Background Information:	Hypothesis:
How does stress relief and relaxation affect a person's smoking behavior?	The results from the study participants from the University of Washington experiment that answered question 69 showed that, the people who had a higher stress level/ amount of stress were mostly the regular smokers.	If a person is dealing with a great amount of stress, then they are more likely to become a regular smoker because they believe that smoking relieves their stress and relaxes them.

# METHODOLOGY

This section should include three sections in sufficient detail so that others can repeat your research.

**PROCEDURE:**

**MATERIALS:**

**STATISTICAL TESTS:**

## Procedures

## Materials

## Statistical Tests

<ol style="list-style-type: none"> <li>1. UW scientists gathered participants who are smokers/were smokers</li> <li>2. The participants took a questionnaire</li> <li>3. UW asked high school classes to participate in the investigation</li> <li>4. Students in the class began to look at the questionnaire</li> <li>5. Looked at the questionnaire and decided on what variables to investigate</li> <li>6. Explored the database</li> <li>7. With the database, the students got the statistical results</li> </ol>	<ul style="list-style-type: none"> <li>-Database</li> <li>-Questionnaire</li> </ul>	<p><b>Question 69</b> Odds Ratio: 1.69 Confidence Interval: 1.69, 3.14</p> <p><b>Question 18.5</b> Odds Ratio: 7.72 Confidence Interval: 4.22, 14.11</p> <p><b>Question 18.7</b> Odds Ratio: 10.68 Confidence Interval: 5.76, 19.82</p>
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# DISCUSSION

What do your results mean when you consider the original question or hypothesis? Point out the significance of your results. If the results are unexpected or contradictory, you should attempt to explain why and point out possible avenues for further research.

In this study, it was found that stress relief and relaxation had an impact on smoking behaviors. The data of odds ratios found supported the hypothesis. The questions being compared in a odds ratio were: as a teen, how much stress did you have, did you experience the following: a decrease in stress, and a relaxed feeling. This data supported the hypothesis because the odds ratio was almost 2 for teen stress between smokers and non-smokers. The odds ratios for the experiences are significantly greater. For the relaxed feeling, the confidence interval goes up to 14 and for the decrease in stress it got up to 19.82. (The people who chose "I don't know" for parts of the questionnaire were not included in the odds ratios.) There is a high association with these three factors and smoking. These would cause them to become regular smokers because the feeling of relaxation and no stress feels good, and with stress as a teen, in a teenager's eyes, it would fix their problems.

Errors could have been mixing up the exposed and not exposed factors, putting in wrong questions for the database queries, and/or not putting in the correct data. These errors could be avoided if people are cautious and more careful.

For future studies, some possible questions could be: how does stress as an adult affect that person's smoking behavior, and how does stress and education at a certain age contribute to smoking behaviors, what is the association between a job you love and a job you hate and smoking behaviors?

## LITERATURE CITED

Include all published works mentioned in your presentation. List in bibliographic form.

Exploring Database. WISE. December 13,  
2010 <<http://www.sciencemathpartnerships.net/webapp/student/vle/vle.html?runId=5&workgroupId=23&closeokay=true>>.