

# Exploring Social Influences on Vaping

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## Background

- E-cigarette use has increased dramatically over the past years resulting in a need for research among college students (Case, Crook, Lazard, & Mackert, 2016).
- These vaping devices have tanks that are filled with chemicals, including nicotine, which is known to be an addictive compound when ingested or inhaled. One of the main ingredients in the flavored aerosolized liquids is aldehydes which has been proven to have side effects on the respiratory tract (Hart, Sears, Hart, & Walker, 2017).
- One study explored the attitudes of high school adolescents towards the ingredients, safety, social norms, and regulation of e-cigarettes. The results concluded that adolescents were more likely to have more positive attitudes toward e-cigarette usage and perceived them to have lower risks than traditional cigarettes (Delucchi, Fisher-Travis, Gorukanti, Halpern-Felsher, Ling, 2016). The study also demonstrated that participants were more likely to use e-cigarettes if they believed their close friends were using them too (Delucchi et al., 2016).

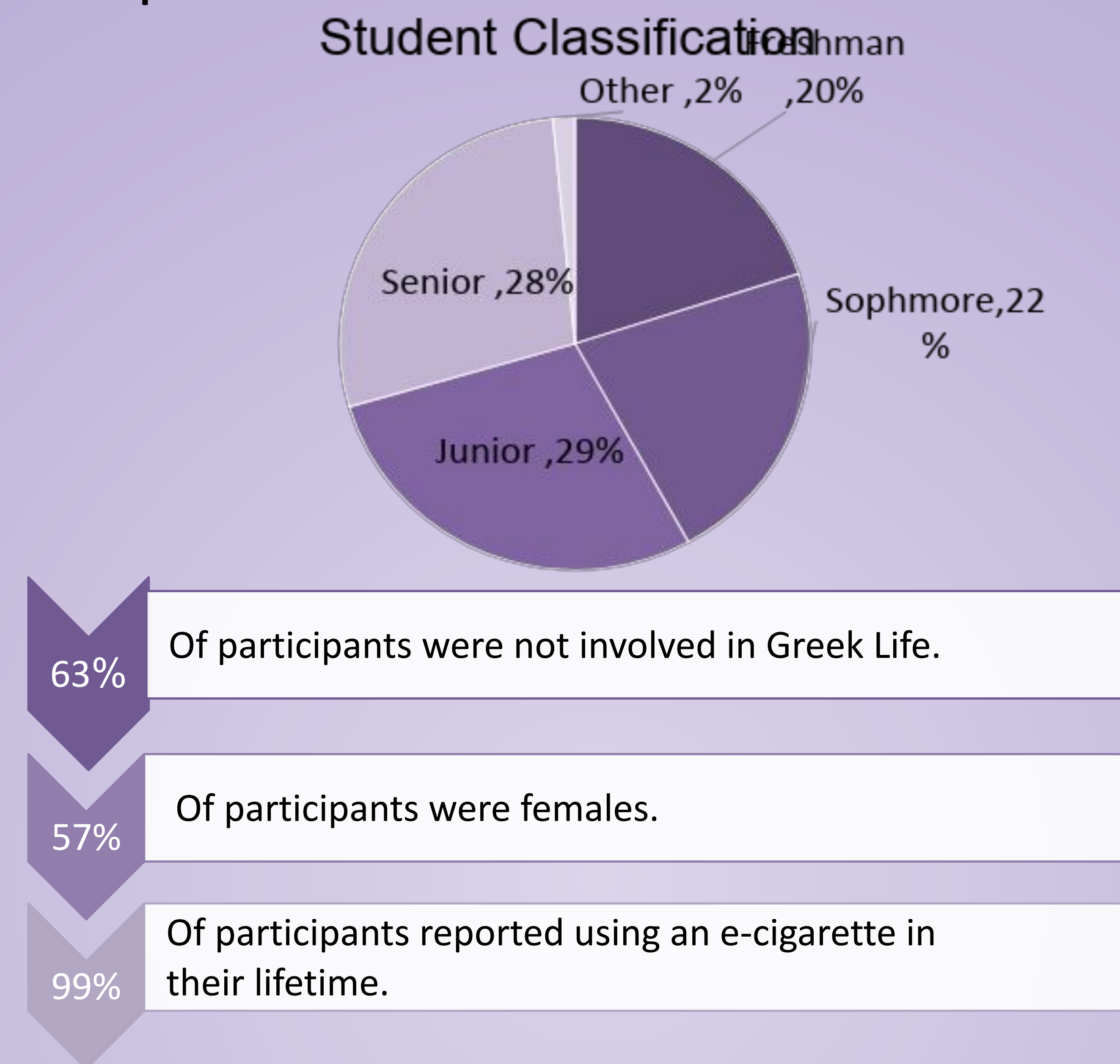
## Research Questions

- What percentage of students report vaping?
- Do students who vape report having more friends than those who do not vape?
- Are students who belong to Greek organizations more likely to vape?
- Do students see vaping as an alternative to smoking cigarettes?
- Do JMU students who do vape perceive vaping as more socially acceptable than students who do not vape?

## Methodology

A cross-sectional research design was used in this study to collect data among JMU college students. Convenience sampling was used to gather data in populated areas on campus. Participants were recruited and given a 19-question paper-and-pen survey that consisted of demographic questions as well as questions related to vaping. After the data was collected, researchers analyzed the data using Statistical Package for Social Sciences (SPSS) and ran an independent t-test, two Chi-square tests, and a descriptive analysis. Internalized Stigma of Smoking Inventory (ISSI) scale questions were adapted to evaluate the stigma among JMU students who vape and JMU students who do not vape (Brown-Johnson, Cataldo, Orzco, Lisha, Hichman, & Prochaska, 2015).

## Participants



## Results

- Of the 200 participants, 151 (75.5%) reported vaping at least some days or every day, with 49 (24.5%) reporting that they do not vape.
- No significant relationship was found when exploring the relationship between number of close friends and vaping status,  $\chi^2(2) = 7.077, p = .314$
- No significant relationship was found for determining if there was an association between being affiliated in a Greek organization and vaping status,  $\chi^2(3) = 3.261, p = .353$
- Of the 200 participants, 119 (60%) agreed with the statement that people are more likely to vape because they believe it is a healthier alternative whereas 38 participants (19%) strongly agreed, 34 participants (17%) disagreed and 8 participants (4%) strongly disagreed with the statement.
- At a confidence interval of 95%, there was not a significant difference in the reported perceptions on social acceptability of vaping among students who vape and students who do not vape,  $t(198) = .58, p = .563$ .

## Discussion

- Previous research states almost one-third (33%) of college students have used an e-cigarette in their lifetime (Kenne, Fischbein, Tan, & Banks, 2017). Findings in this study indicated otherwise, with a total of 99.5% of JMU college students reported using an e-cigarette in their lifetime.
- Despite the lack of research incorporating e-cigarettes, it is important to understand the perceptions college students have on vaping and determine if stigma is associated. Greek Life has not been reported as a population of interest.
- Results in previous research allowed to measure whether students who vape or do not vape perceive vaping as socially desirable (Brown-Johnson, Cataldo, Orzco, Lisha, Hichman, & Prochaska, 2015).
- Findings in our research indicated there was not a significant difference in the reported perceptions on social acceptability of vaping among students who vape and students who do not vape.
- Limitations included non-generalizable data due to convenience sampling used in the study. Self reported data limited findings attributable to social desirability, misunderstandings, and acquiescence.

## Conclusion

- This study focused on understanding the social influences behind why students make the decision to vape or not.
- The results displayed in this research study could be beneficial in developing intervention programs to aid in the cessation of vaping among students by addressing the social influences
- Further research is necessary in determining other factors that influence college students in order for there to be a better understanding of how to decrease the amount of people overusing nicotine products

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