How and Why Young Adults JUUL Christina Higgins & Dr. Craig Fryer University of Maryland, College Park

Abstract

The growing prevalence of e-cigarette use is reintroducing smoking behaviors to college campuses and exposing individuals to tobacco and nicotine that would not have been exposed via traditional smoking products (Heinz et al., 2013). More importantly, studies show that e-cigarette use is a predictor of future traditional cigarette use, so the national smoking rates that have been drastically lowered in the past fifty years may be at risk of rising again if e-cigarettes continue to be popular (Primack et al., 2015). While it is already apparent that e-cigarettes are being used more and more by the 18-25 age demographic, this research project will assess this age groups' reasons for using products like the JUUL and their attitudes towards juuling.

Rationale

JUUL is currently the most popular vaping device available on the market; it accounted for 40% of all market sales of electronic vaping devices in 2017. They are also being used frequently by youth and young adults, both of which were not the original target demographic of the product (Huang et al., 2018). Certain marketing techniques utilized by the JUUL company have been responsible in part for younger generations using the product such as proposing appealing flavors like crème brûlée, fruit medley, and cool mint. One JUUL pod contains as much nicotine as a full pack of cigarettes therefore putting those who use it at risk of nicotine addiction and future cigarette use (Gibson-Young, 2018). The rapid increase in young adult JUUL usage is a growing concern among public health experts.

Methods/Analysis

A total of 9 University of Maryland undergraduate students between the ages of 18-25 were recruited to participate in this research study. Participants were recruited through campus flyers, social media posts, and word of mouth. A majority of participants were Non-Hispanic white individuals. Thirty percent were female, and although the age range recruited was 18-25, all participants fell in the 18-22 age range. In order to participate, individuals were screened to assure that they had used a JUUL at least twice in the past month.

Individual, in-depth interviews were conducted with all of the participants after informed consent was given. The interviews ranged from approximately 10-25 minutes in length. Participants were asked questions from an interview guide with a total of 13 questions. Some examples of the questions included in the interview guide are: "Where do you usually use your JUUL?", "Who is with you when you JUUL?", "Have you used any other e-cigarette or tobacco products? If so, how would you compare them to the JUUL?", and "What is your main reason for using a JUUL?" The full interview guide can be found after the references section.

Each interview was recorded verbatim and later transcribed by the principal investigator, generating 57 pages of textual data. To analyze responses from participants, the principal investigator performed a content analysis and created a content analytic table using each of the 13 questions in the interview guide as a code. A total of 13 themes were pulled, one from each of the 13 questions. Similar themes were combined to form a final total of 11 main themes of JUUL use among the young adults in the study.

Results/Themes

One of the three biggest themes discovered after the content analysis was that young adults in this study first used JUULs after having it offered to them by a friend. One participant recalled their first time using a JUUL as follows: "*I think I was at my high school football game and I was just with my friends and uh one of my friends just bought it so he offered it to me so I tried it. I had heard about it but um I wasn't gonna go buy one or anything but since my friend had it I was like might as well."* Another participant had a similar first-time experience "*I was in high school at one of my friend's parties and someone like had a JUUL but like I had like I didn't know about them for a long time and so then like they said like you can smoke it and stuff so I did but like I didn't own one at the time."* In addition to initiation of JUUL use being with friends, it was also apparent that most future JUUL use was also with friends.

The second major theme pulled from the analysis was that the young adults in this study think that their use of the JUUL is impacted by the people around them/friends who use JUULs. One participant reasoned: "Um I mean if you have let's say you hang out with uh people who don't smoke JUULs, you're more inclined to not smoke JUULs but if 9 out of 10 of your friends smoke JUULs you're most likely gonna get a JUUL too..." Another participant stated: "*Mm yeah I don't think I would've started if I hadn't like seen other people doing it um yeah so it's definitely kind of like a group like peer process.*"

The last major theme gathered from the content analysis was that young adults in this study mainly use JUULs because they like the physical feelings it gives them. One participant admitted: "It's stupid but like I guess like you enjoy it kind of like the feeling it gives you and like now that you've like already experienced it ...you know what that feels like so you know what you're missing, I guess. Like mainly for the head buzz." A different participant commented on the addictive properties of the JUUL: "Satisfaction. That's pretty much it. It's a drug. It's an addictive drug. You take a little bit and then if you go back you take more of it to get the same feeling...and do the same process..."

A couple of gender differences were also notable in this study. Firstly, female participants use the JUUL mostly socially and less so by themselves compared to male participants. Secondly, females were less likely to have tried other e-cigarette or tobacco products than the males in the study.

Conclusions

After reviewing all responses from the interviews, it became clear that socialization has a huge impact on young adults' JUUL usage. Friends kept being mentioned as people to JUUL with, people who first introduced the individuals in the study to JUULs, or a source of obtaining JUULs. Only 2 out of 9 participants interviewed did not mention friends as an influence on JUUL use. Social situations such as parties, bars, tailgates, and hanging out with friends were

also common places for participants in this study to use JUULs. From a public health standpoint, experts may want to take action sooner rather than later to halt or slow the spread of JUUL use among young adults and teenagers, both groups that are very vulnerable to socialization and sometimes peer pressure. Campaigns to stop JUUL use should consider changing young adults' and teens' views on the perceived acceptability of JUUL use among their peers.

Public health campaigns on JUULs could also highlight common misconceptions about the product to increase young people's knowledge. Participants in the study were aware that JUULs are a hot topic in the media right now but could not provide any specific details on their regulation. There was also a lot of variation in participants' responses to the questions "What do you know about JUULs?" and "Do you think there are any potential health consequences of using JUULs?" Clarifying the facts that young adults need to know about JUULs and spreading awareness of legislation regarding them, could decrease the possibility of initiation of JUUL use.

The popularity of JUULs is putting young adults at risk for nicotine addiction and future cigarette use. A majority of participants in this study have not only used JUULs, but have also used other e-cigarette or tobacco products including traditional cigarettes, chewing tobacco, and other vaping devices like the Suorin. Many studies have found that smoking electronic cigarettes or other similar vaping devices increases young adults' chances of trying traditional cigarettes in the future (Primack et al., 2015, Coleman et al., 2014). This puts the overall smoking rate among the U.S. population in danger of rising after years of efforts by public health officials lobbying for legislation and creating anti-tobacco campaigns to lower smoking rates. One study participant put it simply: "*This [JUUL] is gonna be the new cigarette*" and they may be correct if preventative actions are not taken quickly.

<u>References</u>

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Interview Guide

- I. How do they use JUUL?
 - When do you usually use your JUUL? (Examples/prompts: with friends, in social situations, when you're stressed, when you want to unwind)
 - Where do you usually use your JUUL? (Examples/prompts: at home, at parties, at bars)
 - Who is with you when you juul?
 - How often do you JUUL? (Examples/prompts: every day, multiple times per day, every week, a few times a month)
 - What other e-cigarette or tobacco products have you used?
 - How would you compare them to the JUUL? (Examples/prompts: do you prefer the JUUL or the other products you've tried)
 - If more than one mentioned, compare each to JUUL individually?
 - *How/where did you obtain your JUUL or the JUUL that you use?* (Examples/prompts: got it from a friend or family member, borrow it from someone rather than own it, purchased online or in person)
- II. Why do they use JUUL?
- What do you know about JUULs? (Examples/prompts: the contents of the JUUL, the intended use of the product, potential health effects)
- How old were you when you first used a JUUL?
 - Can you tell me a bit more about your first time using a JUUL?
 (Examples/prompts: where were you, what was it like, were you with others)
- What are your personal opinions of the JUUL? (Examples/prompts: is it a good quality product, is it enjoyable, would you recommend it to others)
 - If you have friends/family that use it, do they have similar opinions of it? If not, how do their opinions differ?
- What do you think non-JUUL users think of this product? (Examples/prompts: do they think it's socially acceptable, do they frown upon its use, do they not understand the use of the JUUL, are they indifferent towards it)
- Do you think there are any possible risks to using this product?
 - If so, what are they?
- Do you think your use of this product is influenced by others using this product?
 - If so, how? (Examples/prompts: does seeing others use JUULs make you want to use it too)
- Why do you use this product? What is your main reason? (Examples/prompts: because friends use it, as a cessation tool, because it's trendy, because you like the flavors)
 - Are your reasons for using this product now the same as your reasons for using this product when you first tried it? If they are different, how so?

- Are there any things you would like to tell me that we haven't already discussed?
- Do you have any questions for me?