

I began my research back in the fall of 2017 while taking HLTH 410, a course meant to prepare myself and the others in the community health honors program for completing our independent research projects. From the start, I was interested in doing a project that involved tobacco/cigarette smoking among young adults. I was paired up to work with Dr. Craig Fryer as my mentor because of my interests and his experience in mixed methods tobacco research. I originally had a different project idea, but after having some conversations with Dr. Fryer and discussing my interests further, he encouraged me to think about JUULs as the centerpiece for my project, rather than traditional cigarettes. After giving it some thought, I took my mentor's advice to focus on JUUL use rather than cigarette use among young adults. By now, it was April 2018 and I was finally beginning to start putting together my final proposal idea for IRB approval.

I discovered my sources in a variety of ways. After searching on my own through search engines like PubMed, Google Scholar, and the UMD Libraries database and coming to a few dead ends, Dr. Fryer advised me to set up an appointment with Nedelina Tchangalova, the School of Public Health's librarian expert. Nedelina helped me to discover new searching strategies like using quotation marks around key words, adding "or" or "and" to my searches that had multiple keywords, and brainstorming synonyms of my keywords to broaden my search results. For example, instead of just "young adult juul use", I could search "young adult" OR "college students" AND "JUUL use" OR "Vaping" OR "E-cigarette use" OR "Alternative tobacco product use." I found a lot of useful sources in the American Journal of Public Health. Dr. Fryer also told me to browse some popular science articles to get the most information possible about JUULs and shared some of his previous research articles with me to give me an idea of what my research could look like.

As mentioned previously, my mentor, Dr. Fryer, really helped shaped my research idea and led me in a different direction. He himself was curious to learn more about JUULs since they are a newer product with little existing research about them and inspired me to consider them more. Since they are a novel product rapidly increasing in popularity among my target age group of young adults, we realized that changing my research topic to JUULs could have a more significant impact in the sphere of public health than would a research project on traditional cigarettes.

Being that scientific research on JUULs is currently limited, I had to expand my selection criteria while conducting my literature review. I found few, if any, research articles specifically concerned with JUULs so I also included research on any e-cigarette or vaping device in my search criteria. I tried to stick to only studies that were done with my target age group of young adults ages ~18-25, however. I looked into some popular science articles as well about JUUL use and trends because real scientific studies were hard to come by but JUULs are frequently featured in news articles. I paid close attention to the future directions/conclusions sections of the studies I read in order to guide my research question.

The knowledge and skills I gained will be invaluable moving forward in my academic and professional career. This spring semester, I will be interning full-time rather than taking classes as part of my major. One of my responsibilities will be to do research for grant writing and letters of intent, so having experience in conducting thorough literature reviews and knowing how to effectively search through literature will help me greatly. Additionally, tobacco research is one of my passions that I hope to potentially pursue in a future profession, so having

completed an independent research project on a hot topic in the tobacco/smoking field will hopefully be a way to show employers what I am capable of. It was also useful in getting me up to speed on the current literature that exists on tobacco, especially pertaining to young adults' tobacco use.

Looking back on the process of completing my research project, there are a few things I would change. First off, I would have asked for help sooner on searching for articles for my literature review. Reviewing the literature was by far the most time-consuming part of the project, but I could've completed it faster if I had gotten help sooner. Initial searches can be daunting when hundreds of articles pop up and you feel the need to peruse them all. Second and lastly, I would request that the library have more private rooms available to book for research purposes. My project involved interviewing participants and for that I needed a private, enclosed space so that we would not be interrupted or overheard. I wound up using the huddle rooms in the Edward St. John teaching and learning center, but it would've been great to have spaces available in McKeldin or other libraries on campus as the huddle rooms fill up quickly.