

Assessing the Association Between Purchasing Behavior and Smoking Behavior

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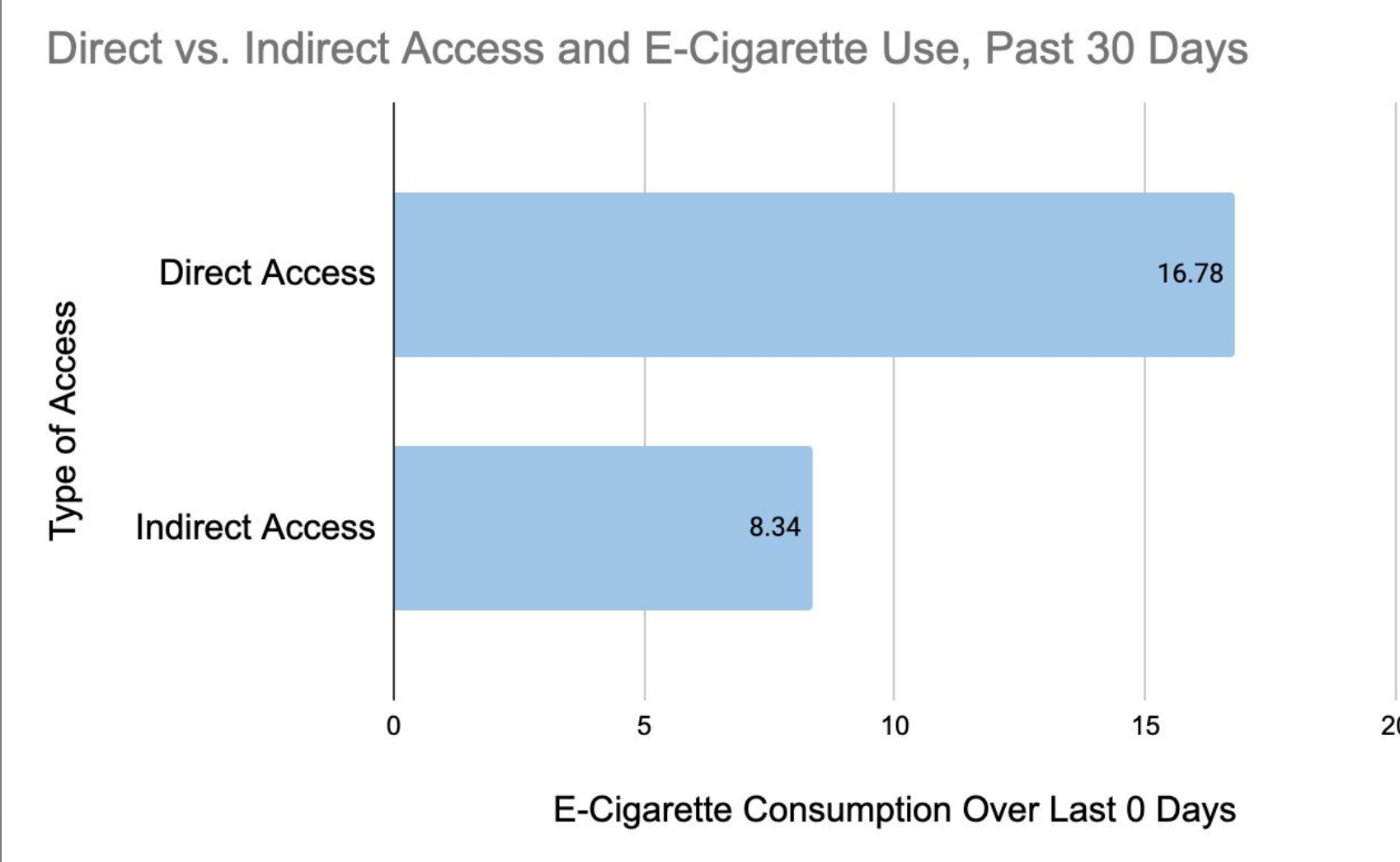
Background / Objectives

- E-cigarettes heat nicotine (extracted from tobacco), flavorings and other chemicals to create an aerosol that you inhale.
- Nicotine is the primary agent and it is highly addictive. It causes you to crave nicotine and suffer withdrawal symptoms if you ignore the craving. Nicotine is also a toxic substance. It raises your blood pressure and spikes your adrenaline, which increases your heart rate and likelihood of having a heart attack
- Buying e-cigarettes (direct access) vs. getting from a social source (indirect access) is studied to determine whether purchasing behavior is associated with increased e-cigarette use.

Methods

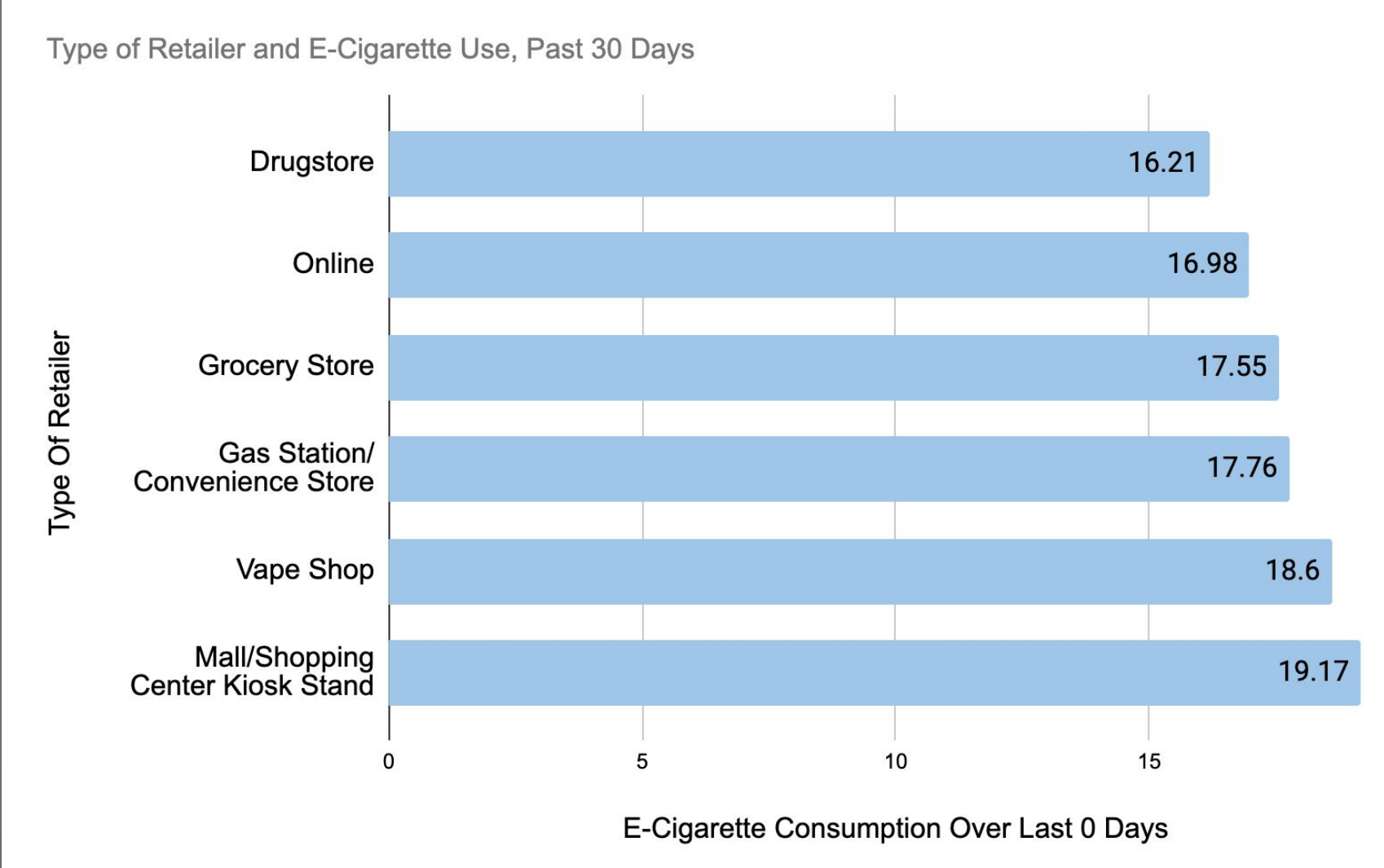
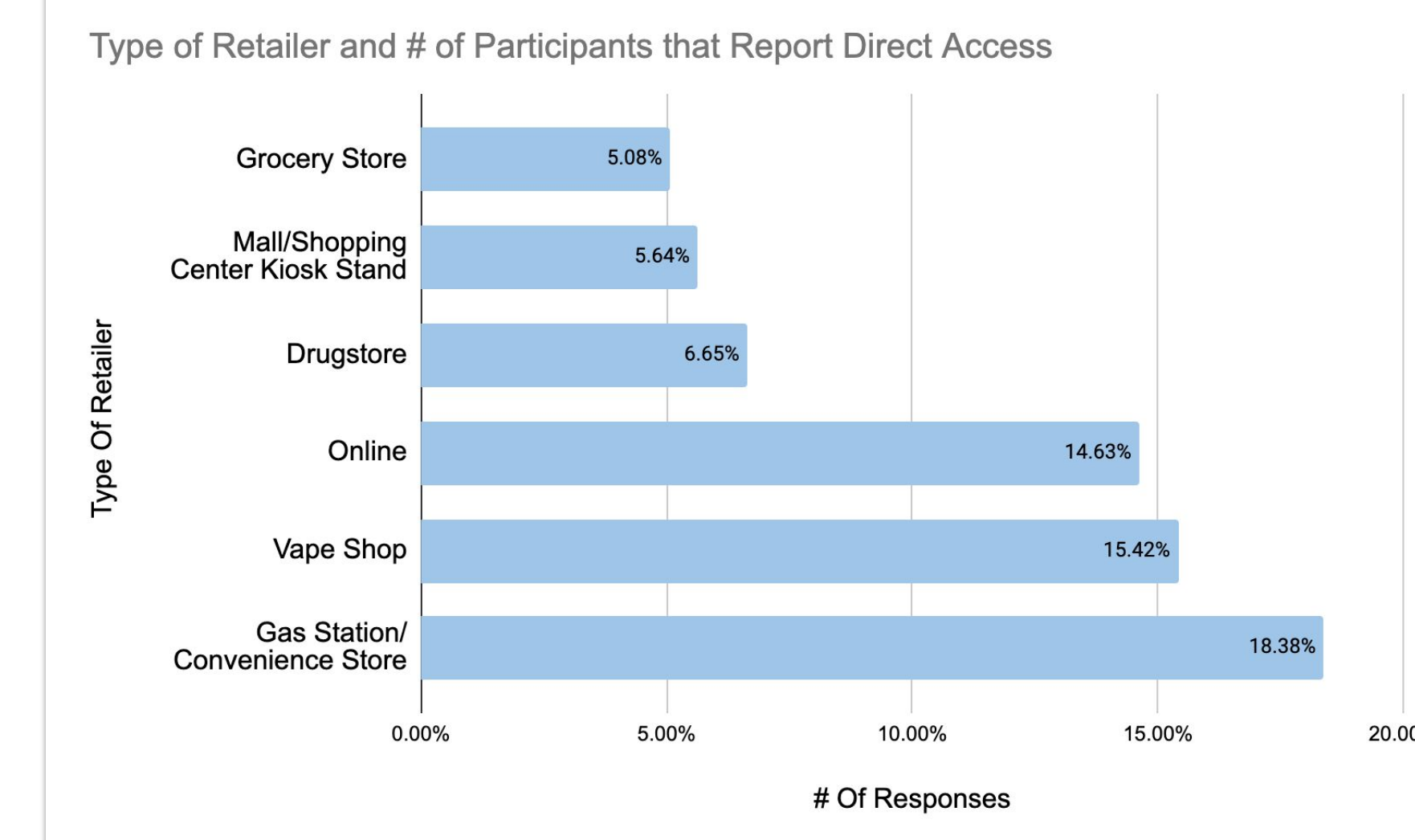
- The analysis will utilize data from the National Youth Tobacco Survey, a cross sectional school based survey of 22,679 middle and high school aged participants from across the country. The relationship between direct underage access to e-cigarette retailers and the frequency of vape use, within the last 30 days, is examined to analyze any association between purchasing behavior and frequency of e-cigarette use.
- Access is defined based on the answer to the question: "In the past 30 days, how did you usually get your own <cigarettes/vapes>?"
- If the subject answers "I bought them myself from a store," then they are defined as having direct access. If the subject answers any of the other answers, including "I gave someone else money to buy them for me," they are defined as having indirect access.

Results



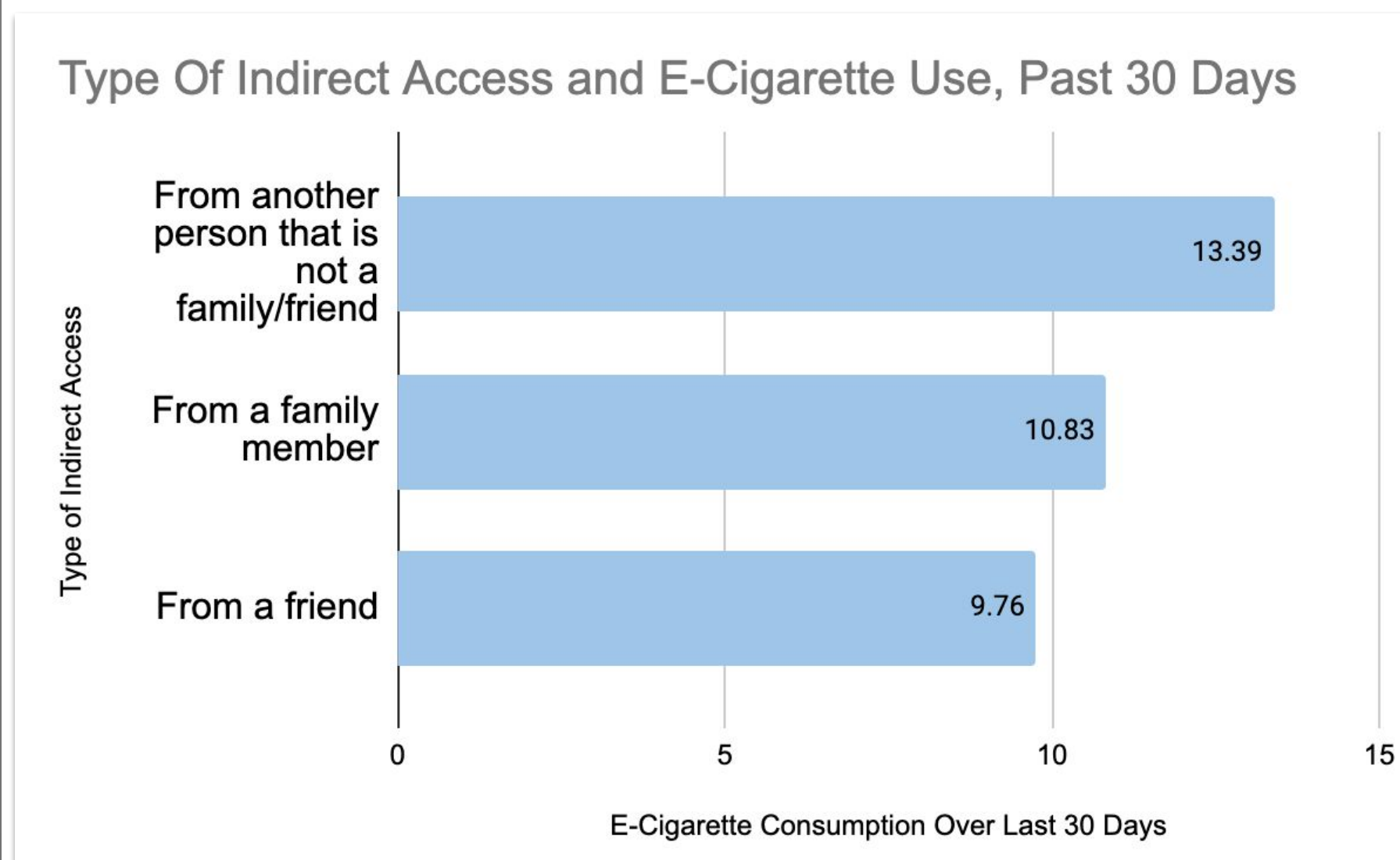
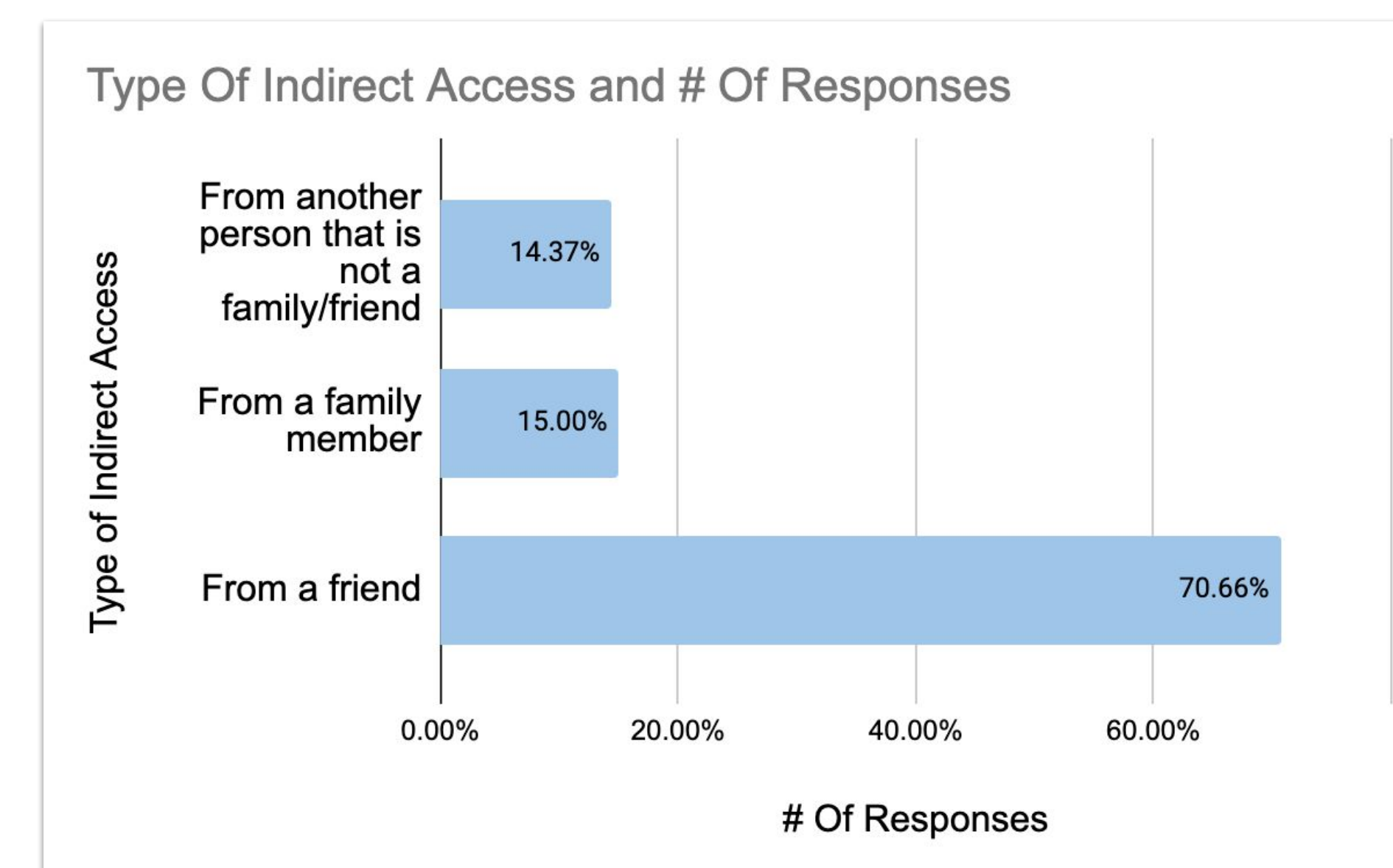
- Participants who obtained e-cigarettes directly consumed over double the amount of e-cigarettes compared to those who obtained e-cigarettes indirectly

- Of the retail stores that participants had direct access to, gas stations and convenience stores were visited more frequently



- Mall kiosks had higher levels of consumption on average compared to those who purchased e-cigarettes elsewhere

- Most common way to purchase e-cigarettes was through a friend rather than a family member



- Participants that purchased indirectly through someone who is not a family or friend had the highest consumption rates.

Conclusions

- E-cigarette use among youth is harmful because of the increased likelihood of nicotine addiction to start at a young age.
- According to the National Youth Tobacco Survey, youth who purchased e-cigarettes themselves consumed over double the amount of e-cigarettes on average compared to youth who obtained e-cigarettes indirectly.
- Gas stations and convenience stores were visited most frequently by participants to purchase e-cigarettes.
- The purchasing behavior of youth affects e-cigarette consumption by making them more susceptible to consume e-cigarettes if youth purchase e-cigarettes themselves directly.

Policy Implications

- To reduce youth access to harmful e-cigarettes, retailers should be required to physically scan consumer IDs at every purchase, including online purchases, at the federal level.
 - This will enforce more stringent purchasing policies that limit youth access to e-cigarettes and potentially reduce the frequency of vaping among students who vape.
- Focus more stringent policies on gas stations, convenience stores, and vape shops, as these underage buyers report having the most success purchasing from these retailers.