|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **smoking** |  | **Alcohol consumption** |  |
| **Variable type** | more | less | more | less |
| demographic | * Male |  | * Male | * Younger * Male |
| Socioeconomic | * Self employed compared to regular employee * Unemployed compared to regular employed * Basic income recipient | * Higher income * Temporary employee compared to regular employee * Unemployed compared to regular employee | * Not living with two parents * Self employed compared to regular employee | * Home owned compared to yearly deposit (전세) * Higher income * Temporary employee compared to regular employee |
| Social capital | * More offline friends | * Less offline friends | * More offline friends | * More online friends |
| Psychological wellbeing | * Less happy * Feeling of worry * Feeling of depression * Feeling of apathy | * Happier * Feelings of depression | * Less happy * Feelings of worry * Feelings of depression * Feelings of apathy | * No feelings of worry * Feelings of apathy |
| Physical health | * Suffering from chronic disease for more than 6 months compared to no chronic disease |  | * Suffering from chronic disease for less than 6 months compared to no chronic disease * Suffering from chronic disease for more than 6 months compared to no chronic disease | * Suffering from chronic disease for less than 6 months compared to no chronic disease |

Model result summary

* Associated with both smoking more and drinking more
  + Male, self employed, more offline friends, less happy, feelings of worry, feelings of depression, feelings of apathy, suffering from chronic disease for more than 6 months
* Associated with both smoking less and drinking less
  + Higher income, temporary employee,
* Associated with both smoking more and less compared to no change
  + Unemployed, feeling of depression
* Associated with both drinking more and less compared to no change
  + Feelings of apathy, suffering from chronic disease for less than 6 months

Brief interpretation

* Certain subgroups were more likely to increase smoking and drinking, which are risk health behaviors, due to COVID 19. These groups included male, self employed, those with more friends, those with symptoms of poor psychological wellbeing including unhappiness, worry, depression, apathy, and those suffering from chronic diseases.
* This may reflect that various strains and pressure caused by COVID 19 via shutdown, self quarantine, social distancing impacted more for these groups. On the other hand, those with higher income were found to smoke and drink less in this period.

Manuscript outline

* Introduction
  + Introduce COVID 19 pandemic
    - COVID 19 situation internationally and in South Korea.
    - During COVID 19, cigarette sales increase internationally and in South Korea.
    - Alcohol sales? -> check. Probably decreased.
  + COVID 19 and changes in smoking and drinking behaviors
    - Changes in smoking and drinking due to COVID 19 have been observed globally.
    - Smoking and drinking are modifiable contributors to diseases, thus it is important to be aware of who are affected in situations of stressors like the pandemic.
    - COVID 19 puts psychological stress on people, which is known to increase smoking and drinking.
    - Increased smoking and drinking lead to worse health outcomes and worse outcomes from COVID 19
  + COVID 19 and social inequalities, social vulnerability
    - The effect is not likely to be equally distributed. Certain subgroups of individuals with the variables above may be affected more, resulting in worsened inequalities.
* Methods
* Results
* Discussion
  + Summarize results
  + Clarify the distinction in the interpretation for the variables that are not likely to be changed since COVID 19 versus the variables (psychological variables) that may have changed since COVID 19.
  + Discuss the clear pattern for variables associated with both smoking and alcohol
  + Discuss some interesting findings for variables associated with both change for more and less.
  + Discuss strengths and limitations
  + Conclusion