# A Sequential Exploratory Mixed Methods Research Approach to Lifestyle Change of Detroit Residents During the Covid-19 Pandemic



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### **INTRODUCTION**

Detroit as a geographic location and gender as a demographic factor are interesting to focus on in a study of lifestyle habits during COVID-19. Regarding gender, studies have explored gender differences in COVID-19-related lifestyle habits, including mask-wearing, social distancing, and handwashing [1,2]. Additionally, Detroit has been affected by COVID-19 differently than other regions, with a higher infection rate and mortality rate than the rest of Michigan [3]. The hypothesis is that there may be differences in gender with lifestyle habits of Detroit residents aged 18 years and older.

### **METHODS**

This study utilized a sequential exploratory mixed methods research approach that involved a qualitative phase followed by a quantitative portion. Convenience sampling was used during both surveys as subjects were sought from the author's social network. In addition, snowball sampling was implemented to increase the sample size by asking participants to share surveys with family and friends.

A phenomenology model guided the qualitative section to understand the essence of lifestyle changes during the Covid-19 pandemic. The qualitative portion yielded eight surveys, and one person analyzed and coded the data. The codes and themes were derived by hand without using online software.

The quantitative survey inquired about gender and self-reported lifestyle habits during Covid-19. There were ten responders with, five males and five females. The quantitative data was extrapolated from surveys into SPSS, and a cross-tabulation frequency table was designed to show the differences among gender for each lifestyle-based question. Chi-square and Fisher-Freeman-Halton tests were used to determine associations among data.

### **RESULTS**

The qualitative results showed some recurring codes. One was that individuals had increased food intake, "more overall calories," and "eating more than usual." Others indicated "Uber Eats" were utilized more. One notable theme boiled down to fewer inperson interactions. There appeared to be fear or restriction on activities to maintain good health during the Covid-19 pandemic.

In the quantitative section, 80% considered their caloric intake to have increased, 70% had at least four servings of fruits and vegetables daily, and 60% endorsed an increase in food delivery services and decreased exercise. Nonetheless, only 30% stated to get an hour of moderate to intense exercise daily. There were 60% who endorsed a shutdown or limitation on exercise facilities, 80% whose outdoor social interaction decreased, and 90% denied their health had improved since the pandemic began. There was no statistically significant association between gender in any lifestyle question or dependent variable.

## **DISCUSSION/ CONCLUSION**

In summary, an increased caloric intake and decreased physical activity were appreciated from this study. If these findings are reflective of others in the Metro-Detroit area, then obesogenic lifestyle changes are a consequence of a pandemic. In addition, this study suggest that COVID-19 has had a significant impact on the lifestyle habits of Detroit residents, similarly for both men and women. One limitation of this study is the small sample size, which may limit the generalizability of the findings. Additionally, convenience and snowball sampling may have introduced bias into the sample.

### **PUBLIC HEALTH IMPLICATIONS**

Overall, this study provides valuable insights into the impact of the COVID-19 pandemic on the lifestyle habits of Detroit residents. Future public health goals should investigate mitigating unhealthy dining habits, finding solutions for social interaction, and providing resources and support for individuals to maintain their physical and mental well-being.

#### REFERENCE

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