

Food Security for Successful Smoking Cessation: Qualitative Interview Coding and Thematic Analysis



Pooja Nambiar and Jin Kim-Mozeleski, PhD
Case Western Reserve University



Background

My practicum was completed through the Prevention and Research Center for Healthy Neighborhoods at Case Western Reserve University (CWRU). As part of the practicum experience, I worked on the Food for SucCess Project, which works to promote smoking cessation for individuals who suffer from food insecurity in the Cleveland area.

Population

The Food for SucCess intervention aimed to promote smoking cessation among individuals who consume tobacco products and experience food insecurity in Cleveland.

Learning Objectives

1. Understand acceptability of the intervention by analyzing qualitative feedback and responses from research participants on the Food for SucCess smoking cessation study.
2. Interpret the results of analyses conducted on two sources of qualitative data from the study.
3. Integrate these data and findings with literature on the topic.

Activities

- Transcribe eight qualitative interviews conducted with study participants
- Meet with qualitative interview team and attend seminars to learn about thematic analysis
- Develop a codebook
- Analyze interviews qualitatively using NVivo software
- Examine similarities among interviews and develop final themes
- Conduct literature reviews to understand current research on the topic
- Analyze end-of-study feedback from all participants
- Organize findings and develop graphs and tables

Deliverables

- Codebook derived from analysis of interview transcripts
- Eight interview transcripts with codes
- Final themes
- Literature reviews on various topics
- Graphs and tables from end-of-study feedback survey

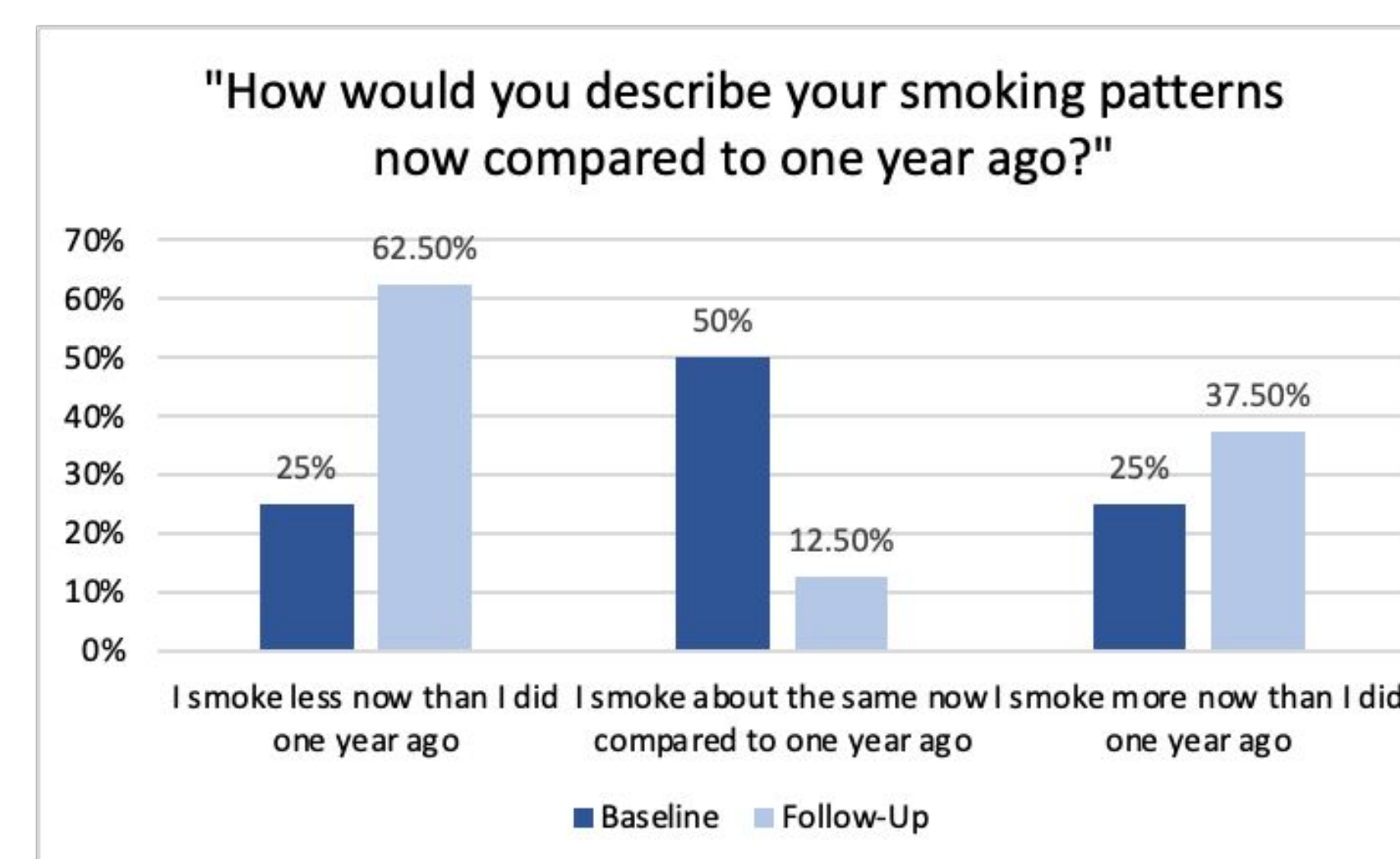
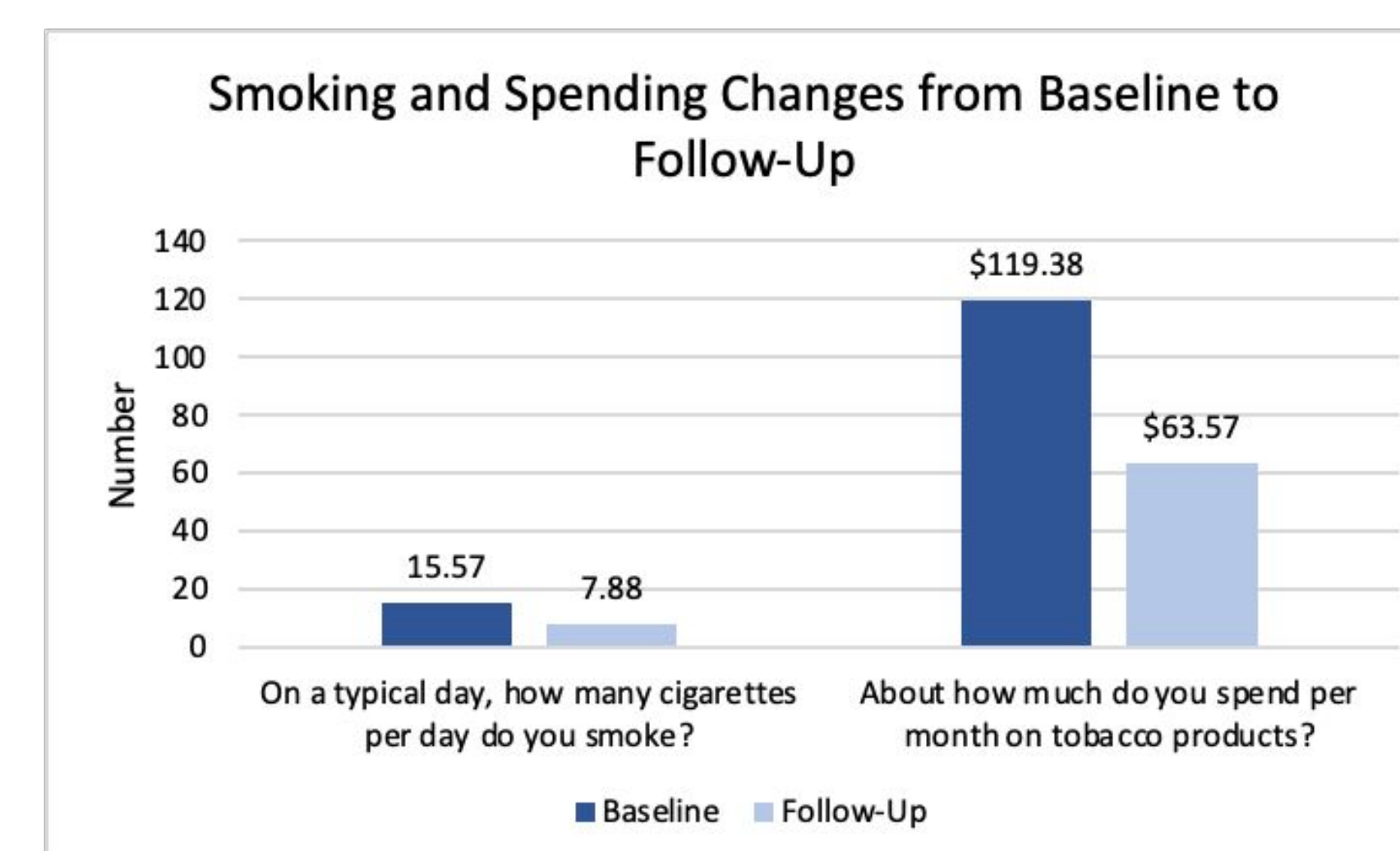
Methods

Qualitative interviews were conducted with select individuals who had completed the Food for SucCess study to gain insight into their food shopping habits and quit attempt experiences. These interview transcripts were examined and several team-based discussions were held to develop and refine a tree of codes that encompassed common topics in the interviews.

The final code tree was used to conduct qualitative analyses on the transcripts using the NVivo software. Using thematic analysis guidelines, three final themes were extracted. From other sources of data such as the baseline survey, follow-up survey, and end-of-study feedback form, graphs and tables were generated to characterize smoking habits and document any behavioral changes.

Results

The following graphs, codes, and themes were generated from interviews and study surveys:



Figures 1a and 1b. Behavioral changes in smoking habits among the eight interviewed participants from baseline survey to follow-up survey.

Code Name	Number of Mentions
Shopping routine	38
VISA Card	33
Types of foods	26
Motivation, desire, intention to quit (or lack thereof)	25
Income sources, financial situation	24
Health conditions	21
SNAP, WIC, or food stamps	18
Daily routine	16
Housing	16
Quitting, stopping, cutting down smoking	15
Money running out or not lasting	15
Transportation	15
Employment status	15

Table 1. The most mentioned codes in the eight qualitative interviews conducted. "Number of Mentions" refers to the number of times the particular code was brought up in all eight interviews.

Final Themes	Supporting Quotes
Intervention was helpful in meeting immediate needs that were not otherwise affordable	"I bought fresh vegetables for the first time in I can't tell you how long...I could buy things that normally I couldn't afford." (P6)
Intervention dampened the severe effects of inflation on food insecurity	"It is very difficult to make that I get in food stamps...stretch. It's outrageous. It's very, very, very tight, and it's very stressful." (P22)
Intervention increased self-awareness and intrinsic motivation for smoking cessation-related behavioral change	"I think what it did was just make me much more aware of what I was doing, like that I was smoking, and almost made me feel guilty if I wasn't making some attempt to change that habit..." (P31)

Table 2. The three final themes generated from analysis of the codebook, as well as quotes from participants supporting the themes.

Lessons Learned

During this practicum experience, I learned so much about the intricacies of conducting public health research. This included understanding the underlying health promotion theories that guide interventions, the day-to-day activities necessary to complete interventions, and the analysis techniques used to find meaning in the data. This hands-on experience not only enhanced my practical knowledge of data analysis but also honed my communication skills, creativity, and perseverance. The knowledge I gained from this process will shape my future public health research endeavors.

Additionally, I gained valuable insight into the lives of Cleveland's most disadvantaged populations. Given that smoking occurs disproportionately in lower-income communities, I gained a deeper understanding of the struggles individuals face when striving to access adequate food and overcome addiction. Thanks to this experience, I have become more aware of the impact of seemingly unrelated social needs, such as food access, on participants' abilities to make healthy behavioral choices. Ultimately, food insecurity is a complex challenge that will not be easily resolved. However, my involvement in this project has helped me realize the potential of public health interventions in improving the lives of those suffering from food insecurity.

Public Health Implications

Currently, there is little research on the effectiveness of a financial intervention on smoking and food shopping habits. If effective, the financial intervention could add to the growing body of research on smoking cessation interventions and help inform public health policy on the matter. My project, which focuses on interview analysis, provides an important qualitative aspect to the study. The qualitative coding process helped our team identify shared experiences and provided context on smoking-related struggles. The thematic analysis process allowed our to isolate key topics that could be targeted in future interventions.

Acknowledgements

I would like to thank Dr. Jin Kim-Mozeleski for providing advice and guidance on the process of thematic analysis throughout my practicum experience. I would also like to thank Madeline Castele for being part of the qualitative analysis team and answering all of my questions.