

RELATIONSHIP BETWEEN TIME AND OTHER DIETARY-RELATED FACTORS IN CITY BUS RIDERS

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INTRODUCTION

- The five barriers of food access are availability, accessibility, affordability, accommodation, and accessibility established by researchers Penchansky and Thomas¹
- Many research programs have expanded on these 5 barriers but there is limited data on affordability, accommodation, and acceptability.
- This research aims to target these three domains and understand the influences that are at play to having adequate food access in Dayton, Ohio.
- The purpose of this study was to examine the relationship between time in-regards-to dietary-related psychosocial factors and monetary food cost in low-income individuals



Undergrad dietetics student conducting food demo at Dayton's downtown bus station



Whole grain pasta with spinach and garlic powder



Sweet potatoes with cinnamon and a drizzle of honey

METHODS

Research Design: This was a quasi-experimental study approved by the University of Dayton's Institutional Review Board

Setting: Data collecting occurred at an urban bus hub that has a local produce stand inside the station. Cooking demonstrations happen on a weekly basis and recipes are handed out to the patrons

Participants: During the cooking demonstration, patrons of the bus station who approached the cooking demo were asked to complete a survey. Individuals were 18 years of age or older and met the inclusion criteria. Dietetics undergrad students were conducting the research and providing cooking demos each week

Instruments: A dietary-related psychosocial questionnaire was developed using past research and assessed how individual attitudes, knowledge/self-efficacy, perceived time, food cost and intrapersonal factors in relation to food procurement and preparation. The questionnaire (Figure 1) There were preliminary questions that included age, gender, employment, if the SNAP program was utilized.

Statistical analysis: Constructs measured included dietary-related knowledge/self-efficacy, attitudes, perception of food cost, perception of time, and responsibility of household food preparation. Bivariate Pearson Correlation coefficients were run to determine the linear relationship across dietary-related factors.

Figure 1: Example items on the Dietary-related Psychosocial Questionnaire

Question/Statement	Strongly disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (2)
1. I consider myself a good cook (knowledge-self-efficacy)					
2. I enjoy cooking (attitude)					
3. I cook healthy meals (knowledge-self-efficacy)					
4. I eat out or make frozen meals 5-6 times per week (prep time)					
5. I live far from the grocery store or local food market (shop time)					
6. Cooking is important to me (attitude)					
7. Health and nutrition are important to me (attitude)					
8. I have poor nutrition knowledge (knowledge-efficacy)					
9. I think eating outside of the home is cheap (cost)					
10. I have a car or transportation to the grocery store (shop time)					
11. Making homemade meals takes too much time (prep time)					
12. I have poor cooking skills or techniques (knowledge-efficacy)					
13. I have time to cook (cook time)					
14. I have time to clean up meals after eating (clean time)					
15. Home cooked meals are healthy and fresh (attitude)					
16. I meal plan for the week (knowledge-efficacy)					
17. I cook for myself and other people at least 3-4 times a					

RESULTS

Table 1 provides the demographic data of the 36 participants. The majority of the participants were women, employed and participating in the Supplemental Nutrition Assistance Program.

Table 2 provides the bivariate correlations. In short, perceived time for food procurement and preparation was significantly inversely related to attitude and knowledge/self-efficacy. Therefore, a more negative attitude or low knowledge/self-efficacy correlated to less perceived time for food procurement and preparation. Moreover, participants who perceived they had less time for food procurement and preparation had more children and perceived fast food and pre-made meals as more inexpensive than homemade meals.

Table 1: Demographics (N=36)

Gender	
Male	13
Female	23
Employed	
Yes	19
No	17
Receiving SNAP	
Yes	24
No	11

Table 2: Correlations among dietary-related psychosocial factors (N=36)

	M	SD	1	2	3	4	5	6
1. Attitude			-	.91**	-.64**	-.30	.02	-.35*
2. Knowledge/Efficacy				-	-.73**	-.46*	-.04	-.33
3. Time					-	.67**	.37	.38*
4. Expense						-	.27	.15
5. Social							-	-.06
6. Number of Children								-

CONCLUSIONS

This study showed perceived time related to food procurement and preparation may be correlated to psychosocial and cost factors, similar to other studies.² Therefore, addressing the psychosocial factors may influence perception of time and food choice. For instance, past research suggests that individuals who perceive not having sufficient time food procurement and preparation are more likely to purchase convenience food.³

Therefore, future research to examine methods to address the perception of time and build knowledge and self-efficacy around food procurement and preparation could positively impact dietary behavior.

Some of the limitations to this research included the instrumentation not being validated and conducting the research on a population that was convenient and could lend itself towards generalizability.

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ACKNOWLEDGEMENTS

We want to thank Homefull for their collaboration in these efforts.