Correlation between Self-efficacy, Environment, and Dietary Behaviors in Adults with Multiple Sclerosis

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Introduction

Obesity is a common co-morrbidity in adults with Multiple Sclerosis.

- The larger study is examining if quality of diet and quantity of diet can improve symptoms.
- To correctly assess if diet and weight loss can improve symptoms, participants need to adhere to assigned intervention.
- It is important to identify barriers that can interfere with adherence to the interventions
- Evaluating the correlations between self-efficacy, environment, behavior, and social support will allow better support to be given to participants in this study and others to result in higher retention and more quality outcomes.

Methods

Participants are given a theory questionnaire at baseline, midpoint, and follow up visits. This questionaries has multiple sections to assess social support, environment, behavior, and self-efficacy.

- Participants came in for Baseline, Mid-point, and follow up testing
- They were given Theory questionnaire at each of these points to measure correlations and changes to self-efficacy
- Participants engaged in a dietary intervention where they were randomized to a low glycemic load diet and a standard American diet
- Participants were given a Menu to choose from and food was sent to their home or designated spot each week via Shipt

Results

Table 2: Correlations

		SE	SS	Bx	Environment
SE	Pearson Correlation	1	.266	.509	.576*
	Sig. (2-tailed)		.318	.063	.024
	N	16	16	14	15
SS	Pearson Correlation	.266	1	.257	-.147
	Sig. (2-tailed)	.318		.376	.602
	N	16	16	14	15
Bx	Pearson Correlation	.509	.257	1	.492
	Sig. (2-tailed)	.063	.376		.088
	N	14	14	14	13
Environment	Pearson Correlation	.576*	-.147	.492	1
	Sig. (2-tailed)	.024	.602	.088	
	N	15	15	13	15

*. Correlation is significant at the 0.05 level (2-tailed). Note: SE= self-efficacy, SS=social support, Bx=behavior

Discussion

Self-efficacy and Environment

- Moderate correlation
- Correlation supported by literature including a study done on participants with heart failure and their performance of ADLs

Self efficacy and Behavior

- Moderate correlation
- Correlation supported by literature including a study done examining COVID-19 environment and effect on exercise

Environment and Behavior

- Moderate correlation
- Correlation supported by literature including a study done on food desserts and the effect the food environment has on healthy eating behaviors

Self-efficacy and Social Support

- Weak correlation
- Contrary to literature, variety of studies find a strong correlation between social support and self- efficacy

Discussion continued

Study Limitations

- Small sample size
- Study was not powered to indicate significant of calculations
- Limited time d/t data collection timepoint and capstone experience
- Errors in data sampling due to presentation of Theory questionnaire

Conclusion

These correlations are important to evaluate and research further to better benefit the participants in research. This is an area that could be studied further to enhance support and increase retention of participants and better adherence to interventions.

References

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