

Examining Treatment Fidelity in Motivational Interviewing  
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Objective:

Childhood obesity is a significant health concern, especially in lower income African Americans within the United States. Previous research suggests that programs developed to promote healthy eating and exercise habits have been effective in reducing childhood obesity. One strategy that has been impactful in facilitating those changes is Motivational Interviewing (MI), a brief, patient-centered counseling style used to explore and resolve ambivalence about behavior change. Recent studies have shown that MI has its advantages, such as increasing patients' sense of control when making healthy choices and promoting overall wellness; however, less research examines treatment fidelity and its impact on program adherence which may limit the interpretation of the results. Treatment fidelity is defined as the methodological strategies used to monitor and enhance the reliability and validity of behavioral intervention. NOURISH+ is a parent-focused intervention for overweight children ages 5-11 years (Nourishing Our Understanding of Role-Modeling to Increase Support and Health: PI: Mazzeo). We are currently implementing an adjunctive, MI-based treatment to investigate if MI can improve treatment adherence and effectiveness of NOURISH+ (NOURISH+MI; PI: Bean). We describe treatment fidelity methods and preliminary feasibility data in the NOURISH+MI trial.

Methods:

Prior to study onset, raters were trained extensively on use of the MITI 3.1 (Motivational Interviewing Treatment Integrity Code), a validated coding system designed to measure adherence to MI. Satisfactory interrater reliabilities (determined using intraclass correlations; [ICC]) were established prior to study onset. Raters also used the MITI 3.1 to examine MI competency of study interventionists, to indicate readiness to begin treatment. Participants who consent to NOURISH+MI complete two MI sessions prior to the onset of the group-based treatment. Session 1 (T1) occurs over the telephone and Session 2 (T2) is in-person. All sessions are audio recorded and independently coded by two raters. ICCs are continually assessed throughout the study duration to identify rater drift and indicate areas in need of retraining. MITI ratings also determine interventionists' competence and adherence to MI. Raters and interventionists attend bi-weekly to address.

Results:

To date, 80 MI sessions (T1=46, T2=34) have been conducted and coded using the MITI for MI adherence. Interventionists met or exceeded competency with a M of 100% MI adherence, 1.8 reflection to question ratio, and 4.8 Global spirit. Rater ICC's ranged from 0.6 to 1.0 across MI global scores and behavior counts.

Discussion:

Interventionists met or exceeded competency thresholds, demonstrating excellent treatment fidelity. While overall ICCs were adequate, the limited response ranges for the global scores contributed to lower ICCs in those domains. Overall reliabilities were adequate suggesting high fidelity to the MITI 3.1 and reliable ratings among independent raters. Data suggest that the NOURISH+MI trial is being implemented with high treatment integrity. Thus, if study results suggest that MI is deemed effective, this intense protocol for establishing and maintaining treatment fidelity enhances confidence in treatment effects and furthers scientific research examining MI and pediatric obesity treatments.