Abstract

Purpose: The aims of our study were to assess the following in Hispanic men enrolled in a weight loss intervention: 1) the association between dyadic coping and weight, and 2) potential moderators including self-efficacy for weight loss, stress, and age. 

Methods: A community sample of 50 Hispanic men enrolled in a gender- and culturally-sensitive weight loss intervention (GCSWLI). Participants completed surveys and were weighed at baseline, 12 weeks, and 24 weeks. The weight loss intervention included two arms: 1) a GCSWLI, and 2) a wait-list control including a GCSWLI plus mHealth technology. Participants completed the Dyadic Coping Inventory, the Weight Efficacy Lifestyle Questionnaire, the Perceived Stress Scale, and demographic questionnaires. 

Results: Contrary to our hypothesis, dyadic coping was positively associated with the subsequent measure of weight (intervals of 12 weeks), b = 0.11, se = 0.04, p = 0.01, 95% CI (0.03, 0.19). Self-efficacy and stress did not moderate the relationship between dyadic coping and weight. However, age was a significant moderator, for this relationship, b = -0.01, se = 0.003, p = 0.03, 95% CI (0.001, 0.02)

Data Analyses and Results

Hypotheses

• We predicted that dyadic coping would be inversely related to weight.
• We predicted that dyadic coping would be moderated by stress, such that higher levels of stress were associated with higher weight at the subsequent measurement.
• We predicted that the interaction between dyadic coping and age would be greater for those reporting higher levels of self-efficacy for weight loss, and older Hispanic men.

Data Analyses:

• Dyadic coping was person-mean-centered to disaggregate within-person and between-person longitudinal effects. Linear mixed models using an unstructured mean and variance-covariance matrix were utilized to assess all models. Control variables in adjusted models included age, education, treatment group (treatment vs. wait-list control), diabetes diagnosis status, acculturation, and BMI at baseline.

Results: Contrary to our hypotheses, dyadic coping was positively associated with weight at the next measurement.

• Model 1) Dyadic coping was positively, significantly associated with weight at the next measurement.
• Model 2) The interaction between dyadic coping and stress was not associated with weight at the next measurement.
• Model 3) The interaction between dyadic coping and stress was not associated with weight at the next measurement.
• Model 4) The interaction between dyadic coping and age was associated with weight at the next measurement. Specifically, younger men with high ratings of dyadic coping had higher levels of weight at the next weigh-in when compared to younger men with low levels of dyadic coping.

Conclusions and Implications

Findings:

• Contrary to our hypotheses, dyadic coping was positively associated with weight at the subsequent measurement.
• Age modified the relationship between dyadic coping and weight.
• Younger men exhibited this relationship; older men did not.

Implications:

• Further research should investigate potential mechanisms to explain the positive relationship between dyadic coping and weight. Future research may benefit from considering the important aspects of partner and spousal influences on health in this population.

Limitations:

• The sample size in the ANIMO study was relatively small given its aim for feasibility. This study should be replicated in a larger sample as statistical power may not be sufficient to see moderation effects (stress, self-efficacy).
• Data from spouses and partners were not collected. These data would make interpreting relational processes more clear. Future studies should consider collecting data from partners and immediate family.

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