

The Application of the Transtheoretical Model to a Case Management Intervention in BMI Reduction Among Obese African American Children by Modifying their Eating Habits and Increasing their Physical Activity

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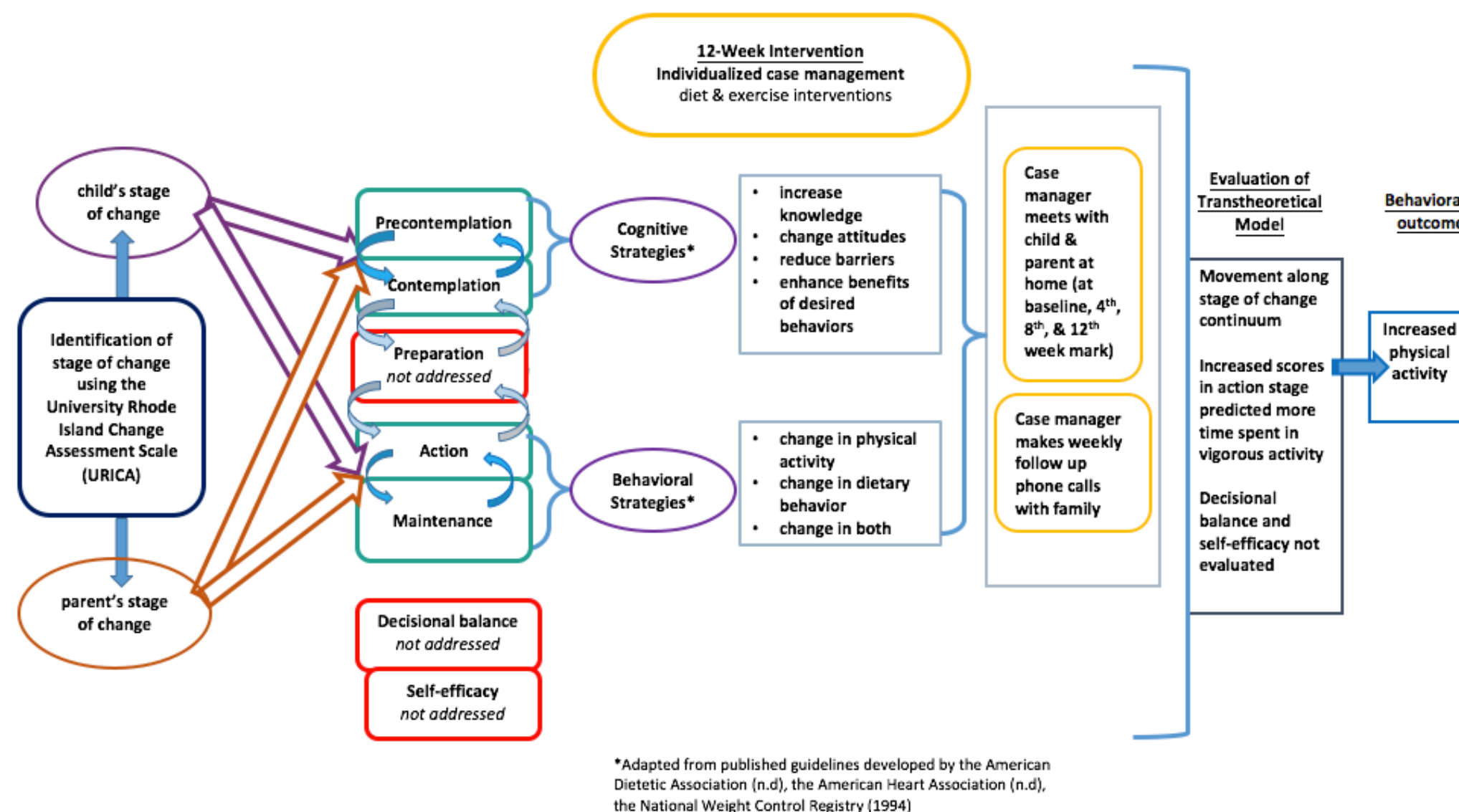
Background

- The percentage of obese children in the United States has increased dramatically over the past three decades, particularly among ethnic/racial minorities, with 35% being African Americans
- Low level of physical activity and overweight/obesity are listed as the top two indicators of health among children and adults
- Childhood obesity is a strong risk factor for a number of common health conditions in children
- The Transtheoretical Model (TTM) has been successfully used to treat many behavior-linked health problems
- Case management adheres to the principle that managing a chronic health condition must be individualized to the patient's current needs
- It is hypothesized that higher intensity physical activity may be especially effective in reducing excessive body weight
- Many practitioners lack understanding of children's obesity and strategies on how to identify and treat this health problem
- Therefore, there is a high need for effective interventions that address both the parent and the child by focusing on the movement toward the maintenance of appropriate eating habits and physical activity goals

Intervention

- Child and parent were assessed for stage of change at baseline
- Based on their stage of change, the case manager developed an individualized intervention for each, with activities focused on modifying eating behavior and change in physical activity
- If parent/child assessed into precontemplation/contemplation, the intervention focused on cognitive strategies
- If parent/child assessed into action/maintenance, the intervention focused on behavioral strategies
- Case manager met with child and parent at home, explaining each of their intervention modules (at baseline, 4th, 8th, and 12th week marks)
- Case manager followed up weekly with the family via phone calls

Transtheoretical Model for Treatment of Childhood Obesity by increasing Physical Activity



References

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Analysis of Intervention Development

- TTM strengthened development of the intervention by covering most of the theory's constructs
- Focus on four stages of change allowed intervention to be designed and individualized for the child and the parent
- Stage of change determined the type of intervention focus each child and parent gets
- Basing the intervention on the stage each child and parent assessed at allowed for reassessment every four weeks to measure progress
- Preparation stage of change was not included in the intervention; it was not applicable
- Key constructs-decisional balance and self-efficacy were not assessed, limiting the intervention
- For the constructs lacking, no justification was provided

Analysis of Evaluation

- Intervention was evaluated based on movement along stages of change, but there was no official measure to indicate this
- It was also limited by not evaluating other theory constructs, such as key ones-decisional balance and self-efficacy
- By leaving out key constructs and a way of measuring change across stages, there is limitation in knowing the true reasoning for the increase in physical activity
- Limits in evaluating the intervention based on theory constructs does not allow inferences to be made on the effectiveness of the intervention

Conclusion

- The TTM strengthens the development of the case management intervention for the most part, but leaves out some key constructs
- However, the TTM limits the evaluation of the intervention by not providing an official measure to indicate its efficiency in observing increased physical activity