MAXIMIZING LONG-TERM WEIGHT CONTROL: SELF-DETERMINATION THEORY AND WEIGHT SELF-MANAGEMENT

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ABSTRACT
- Behavioral weight control is difficult to promote and maintain among patients with obesity
- Tailored self-management programs promote long-term weight loss and maintenance
- Incorporating Self-Determination Theory (SDT) into weight self-management contributes to higher levels of adherence, exercise activity, and overall positive weight outcomes
- The current study reviewed literature examining how SDT principles of autonomy, competence, and relatedness moderate associations between weight intervention programming, adoption of long-term behaviors, and healthy outcomes (i.e., including weight loss).

INTRODUCTION
- Overweight and obese individuals (Body Mass Index (BMI) ≥ 25) are at risk for hypertension, diabetes, or heart disease (Jarolimova et al., 2013)
- Weight loss reduces the risk of comorbidities, but weight recidivism (regain) remains a major obstacle
- Weight intervention programs have implemented SDT (Deci & Ryan, 2000) and self-management tenets to minimize recidivism. Individuals are encouraged to achieve intrinsic regulation for change (Williams et al., 1996)
- How might SDT principles – autonomy, competence, and relatedness - influence weight intervention programming, adoption of long-term behaviors, and healthy outcomes?

METHODS
- Three electronic bibliographic databases (CINAHL, Medline, and PsycINFO) were searched for articles published from 1996 - 2018, resulting in 49 citations.
- Three research assistants reviewed each relevant studies for inclusion to, or exclusion from, the literature review.
- Following search terms were used: “weight self-management” AND “self-determination theory” AND weight loss, AND behavior” NOT diet

RESULTS
- Of the 11 studies, 2 systematically reviewed SDT’s implementation in weight-intervention programs, 8 examined randomized control trials of SDT weight-intervention programs, and 1 assessed the correlation between SDT and support for obesity-related policies.
- Across all domains, perceived autonomy, competence, and relatedness promoted positive physical and psychological outcomes for overweight/obese individuals.

SDT and Weight Loss
- Individuals who attended weekly group meetings and received autonomy-promoting physical and social cues at home–greater weight loss at 6 months (Gorin et al., 2014)
- Contrastingly, more directive forms of support (e.g., encouragement of healthy eating), were associated with less weight loss (Gorin et al., 2014).

SDT, Adherence, and Weight Maintenance
- Autonomous motivation is an important predictor of effectiveness of weight loss & maintenance (Williams et al., 1996).
- After a six-week SDT-based weight-intervention program, patients’ autonomous motivation to participate was positively related to adherence rates, losing weight, and maintaining weight loss (Williams et al., 1996).

SDT and Physical Activity
- Overweight/obese premenopausal females who underwent a 1-year SDT-based intervention program reported higher levels of self-determination, intrinsic self-regulation for treatment, and perceived autonomy support (Silva et al., 2010).
- SDT-based intervention elevated levels of physical activity at 12 months: more steps per day and more minutes of moderate and vigorous physical activity (MVPA) per week (Silva et al., 2010).

SDT, Exercise, and Eating Regulation
- Among leading health behavior change theories, SDT is found to be the strongest model when reinforcing the importance of exercise for the success of long-term weight management. (Palma et al., 2007)
- Focusing on increasing efficacy and self-determination toward exercise and weight control, and supporting participants’ autonomous decisions contributed to a motivational spillover of eating self-regulation (Mata et al., 2009).
- Exercise intrinsic motivation predicted eating regulation beyond general self-determination and treatment motivation (Mata et al., 2009).

SDT and Adoption of Long-Term Behaviors
- Individuals who fully endorse weight loss-related behavioral goals and feel competent and autonomous about reaching them are likely to exhibit long-lasting behavior change (Teixeira et al., 2012).
- Individuals’ perception of choice and volition about what types of activity are engaged in, as well as perceptions of competence that they can effectively perform the chosen activities, are important to the development of self-determined motivation to exercise and overall self-management (Silva et al., 2010).
- Immersing oneself within autonomously supportive environments promotes intrinsic self-regulation (Deci & Ryan, 2012).
- In the absence of autonomy and intrinsic self-regulation, individuals may exhibit heteronomous motivation and less likelihood for long-term success. (Teixeira et al., 2012).

CONCLUSIONS
- Self-Determination Theory plays an important role on healthy outcomes during and especially after involvement in weight-intervention programs.
- SDT’s tenets of autonomy, competence, and relatedness appear most pivotal when overweight/obese individuals when self-managing physical activity, exercise, and adoption of long-term behaviors.
- By intrinsically and competently fostering physical activity and exercise-related goals, individuals might obtain long-term behavior change, leading to satisfaction of psychological needs, weight loss or maintenance, and modification of self-management techniques.
- Although intrinsic motivation and competence might contribute to the formation of healthy outcomes, relatedness and autonomc support remain crucial for self-management.
- Incorporation of SDT into weight intervention programming promotes healthy lifestyle changes to be adopted long-term.

IMPLICATIONS
- Weight loss programs need to be multi-component and must involve the PATIENT in decision-making.
- Instead of examining females and males exclusively, studies should attempt to examine this motivational pathway among and between sexes (i.e., in the same study).
- There are many creative ways to integrate autonomy, competence, and support/relatedness into modern interventions.
- Post-weight loss interventions and follow-up are critical for weight loss maintenance.

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