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Weight Loss and Self-Monitoring among Young Men in a Technology-Driven Weight Loss Intervention

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Background

Young men with obesity have double the mortality risk compared to young men with a healthy weight

- Challenging to recruit for behavioral weight loss (BWL) programs
- Low concern about weight gain relative to women

Young men might have different needs for weight loss

- Motivated to lose weight to improve physical fitness and appearance

Emerging evidence suggests young men might prefer self-guided and low touch interventions, but limited evidence exists as to potential effectiveness

Objective

Examine young men's performance in a technology-driven behavioral weight loss trial adapted specifically for young adults—relative to young women

Methods

Procedure

- Data drawn from ongoing RCT targeting young adults (18-25 years, BMI 25-45 kg/m^2)
- Participants were recruited using a multi-method approach using generic and male-targeted ads
- Participants were randomized to one of three arms—all received a 6-month technology mediated intervention with content adapted for young adults

Measures

- Weight change at 3-months (fasting weight objectively assessed in-clinic at baseline and 3 months)
- Self-monitoring
  - Days of self-weighing (captured via Bluetooth scale)
  - Days of dietary self-monitoring (captured via self-monitoring app)

Data Analysis

Generalized Linear Model was used to compare men and women on percent weight change and self-monitoring. Treatment arm was included as a covariate in all outcome analyses. Descriptive statistics were computed to capture enrollment rates.

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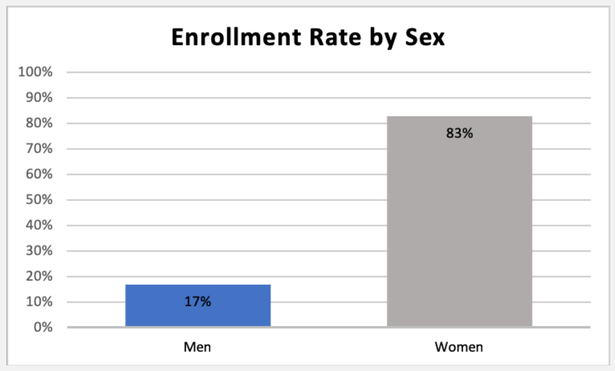
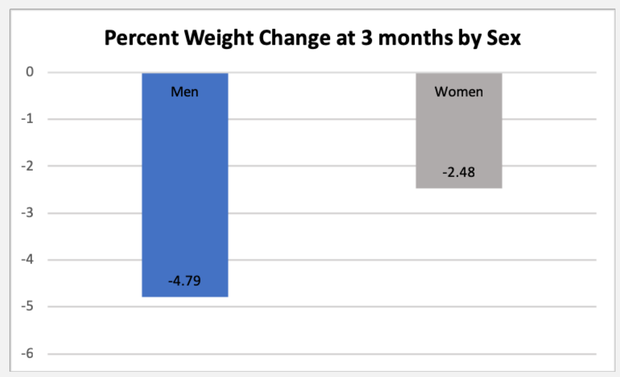
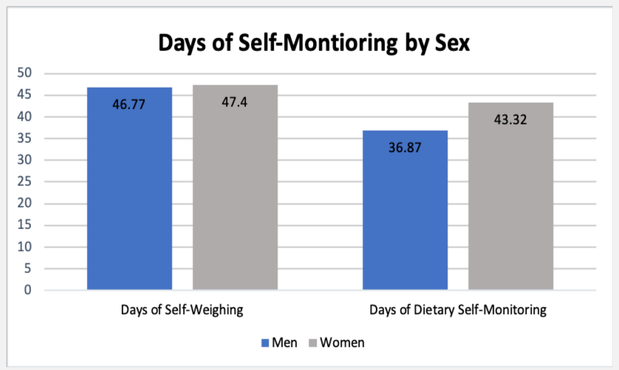
Results



Men had lower enrollment compared to women, representing 17% of the sample



Men had a significantly greater weight loss than women at 3-months



Men and women had similar number of days of self-weighing and dietary self-monitoring

Demographics (N=184)	Women	Men	P value
Percent weight loss	-2.5 (4.1)	-4.8 (5.1)	.008
Days of self-weighing	47.42 (24.0)	46.77 (24.6)	.88
Days of dietary self-monitoring	43.42 (22.6)	36.87 (24.3)	.15

Discussion

- Enrollment of young men was low even with male-targeted recruitment efforts
- Men lost almost double the weight compared to women, though men and women had similar self-monitoring behaviors
- Findings are consistent with existing literature that men lose more weight than women once enrolled
- Future weight loss interventions should adapt programs to be more appealing for men to enhance enrollment among this high-risk population
- Young men may benefit from a self-guided or low touch intervention

Limitations

Treatment seeking sample, short-term follow-up, diet and physical activity were not included

Strengths

Objective assessment of weight and self-monitoring, diverse sample (race, working status) of young adults

Findings suggest that a self-guided and low touch intervention may be sufficient for producing clinically meaningful weight losses among young men