## **ORIGINAL ARTICLE**



# Patients' reasons for weight loss and their relations to clinical weight loss outcomes in a comprehensive lifestyle intervention

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# Summary

**Objective:** Research suggests that individuals seeking weight loss treatment do so for a variety of reasons. Limited work has explored relations of reasons for weight loss to patient characteristics or to weight loss outcomes. The current study examined these relations.

**Methods:** The sample consisted of 588 patients in a 15-week fee-for-service weight loss programme. Prior to the intervention, patients completed questionnaires including items on reasons for weight loss, demographic characteristics, and a variety of weight-based characteristics. Patients' weight change outcomes were expressed as percent weight loss and also categorized into one of three previously described weight loss trajectories.

**Results:** The results of chi-squared and *t*-test analyses suggested that endorsement of health concerns, mobility concerns, or another person's recommendation was associated with higher body mass index (BMI) and older age. These reasons were more likely to be endorsed by White patients than Black patients and by male patients than female patients. Endorsement of doctor recommendation was more likely to be seen among Black patients than White patients. There was no significant relation of any weight loss reason with weight loss outcome.

**Conclusions:** While certain reasons for weight loss were more often cited by certain patient groups, no specific reason predicted a better or worse outcome.

#### **KEYWORDS**

motivation, obesity, outcomes, weight loss

#### 1 | INTRODUCTION

Evidence suggests that those who seek weight loss services are motivated to do so for a variety of reasons, such as appearance, health, mood, medical triggers, social factors, quality of life, and avoidance

of death.<sup>1-6</sup> Appearance and social events (eg, a wedding) have been found to be the most and least frequent motives for weight loss, respectively, among American adults ages 18 to 50 years.<sup>3</sup> Additionally, seeking weight loss services primarily for health-based reasons is correlated with greater satisfaction with one's appearance.<sup>4</sup>

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Limited work has explored the relations of specific weight loss reasons (ie, health, appearance) to clinical weight loss outcomes or to other patient characteristics. In one study, patients whose weight loss efforts were triggered by a medical concern have been found to have better short- and long-term weight loss outcomes compared with patients who did not report a medical trigger. Understanding the relations, if any, between individual specific reasons and weight loss outcomes may indicate whether providers can assist with greater weight loss by more effectively focusing patients' attention on specific potential benefits associated with weight loss.

The purpose of the current investigation was to examine reasons (eg, health, appearance) for weight loss among patients enrolled in a 15-week weight loss programme and to assess the relations of these reasons to outcomes. As previous research suggests that different groups may seek weight loss services for different reasons<sup>3,4</sup>, we were additionally interested in exploring patient characteristics (demographics, eating, and weight loss variables) possibly associated with reasons for weight loss. These patient characteristics were selected using previous literature examining the relations between such variables and weight loss outcomes.<sup>8-11</sup>

We hypothesized that specific reasons for weight loss may be differentially related to weight loss outcome, with greater number of reasons indicated for weight loss associated with more successful weight loss trajectories, and differentially related to psychosocial variables. We additionally hypothesized that the type of reason for weight loss would be differentially related to weight loss trajectory and psychosocial variables.

#### 2 | METHOD

The sample was derived from a retrospective database (N = 1050) of patients enrolled in a 15-week fee-for-service weight loss programme at the Weight Management Center of the Medical University of South Carolina between 2005 and 2013. Patients were selected for the present analyses if they had completed eight or more visits and had baseline height and had complete data on a pretreatment questionnaire eliciting reasons for weight loss (N = 588).

This sample was composed of 80.4% women and 19.6% men. Our sample was predominantly White (83.7%) and 14.5% identified as Black/African American, 0.7% as Asian, 0.5% as Hispanic, and 0.4% as other race or ethnicity. Mean age was 47.12 years (SD = 13.47), and mean pretreatment body mass index (BMI) from measured baseline height and weight was 36.45 kg/m $^2$  (SD = 7.52). Please see Tables 1 and 2 for a summary of patient characteristics.

Because this research used existing deidentified clinical data, the Medical University of South Carolina's Institutional Review Board considered this study exempt from review.

#### 2.1 | Intervention

The weight loss programme has been described in detail elsewhere. <sup>12</sup> Throughout treatment, patients were weighed at the start of each

**TABLE 1** Means and standard deviations of continuous variables

	N	Mean	SD
Age	588	47.05	12.43
Pretreatment BMI	588	36.45	7.52
Total weight loss %	588	9.71%	5.27%
Pretreatment			
BDI	373	8.82	7.25
EBI	421	70.57	10.57
PFS food not present	143	2.39	1.02
PFS food present	143	3.15	1.08
PFS food tasted	143	2.42	0.92
PFS Total	143	2.66	0.91
Posttreatment			
EBI	164	97.52	11.44
PFS food not present	138	1.89	0.79
PFS food present	138	2.25	0.95
PFS food tasted	138	2.18	0.73
PFS Total	138	2.12	0.71

Abbreviations: BMI, body mass index; BDI, Beck Depression Inventory; EBI, Eating Behavior Inventory; PFS, Power of Food Scale

session and then met with an individual specialist (behavioural counsellor, exercise specialist, and registered dietitian) to discuss topics on lifestyle change, exercise, and nutrition. During weeks 1 through 8, patients' diets were largely composed of meal replacement products (two shakes [Health Management Resources: Boston, Massachusetts], three nutrition bars [Nutritional Resources Inc, Grovetown, Georgia; Robard Corporation, Mount Laurel, New Jersey]), and one very structured low-calorie meal. During weeks 9 through 15, patients consumed food-based meals. Patients could also consume one or two meal replacements during weeks 9 to 15, at their discretion.

#### 2.2 | Measures

Prior to the initiation of treatment, patients completed a questionnaire packet containing demographic items and questionnaires assessing reasons for losing weight, psychosocial functioning, and weight-based characteristics.

#### 2.2.1 | Reasons for weight loss

Patients' self-endorsed reasons for weight loss were established from a single item on the initial intake form. This item read: "Why are you trying to lose weight **now**?" Patients could select as many reasons as applied from the following choices: "appearance," "health," "mobility," "doctor suggested I lose weight," "other person suggested I lose weight (eg, friend, spouse)," and "other." The choices were nonmutually exclusive. The "other" category was not included in any analyses.

ABLE 2 Endorsement of weight loss reasons by ethnicity, sex, and weight trajectory group (N = 588)

	Race					Sex				Weight Trajectory Group	y Group				Ŀ
ariable		White (N %)	White (N %) Black (N %) $\chi^2$	$\chi^2$	Ф	Male (N %)	Male (N %) Female (N %) $\chi^2$	$\chi^2$	Φ	Group 1 (N %)	Group 1 (N %) Group 2 (N %)	Group 3 (N %) $\chi^2$	$\chi^2$	Ф	Y —
erson recommended	Yes	132 (26.8)	11 (12.9)	7.50*	11	56 (48.7)	89 (18.8)	44.54**	-0.26	46 (26.0)	70 (25.0)	29 (22.1)	0.63	0.03	
octor recommended	Yes	194 (39.4)	44 (51.8)	4.55*	0.09	58 (50.4)	184 (38.9)	5.08*	09	81 (45.8)	107 (38.2)	54 (41.2)	2.55	0.07	CSIL
obility concern	Yes	291 (59.1)	38 (44.7)	6.17*	10	76 (66.1)	260 (55.0)	4.67*	09	107 (60.5)	161 (57.5)	68 (51.9)	2.72	90.0	y Jc
opearance concern	Yes	440 (89.4)	71 (83.5)	2.49	07	101 (87.8)	421 (89)	0.13	0.02	159 (89.8)	245 (87.5)	118 (90.1)	0.88	0.04	iciic
ealth concern	Yes	475 (96.5)	84 (98.8)	1.25	0.05	114 (99.1)	456 (96.4)	2.31	90	173 (97.7)	268 (95.7)	129 (98.5)	2.84	0.07	.c ai
															'

\*P < .05.

# 2.2.2 | Percent total weight loss

Patients' initial height (in inches) and weight (in pounds) were directly measured. Weights at each visit were converted to percent weight loss from baseline (%WL). This calculation is as follows: ([Weight at first visit – Weight at current visit]/Weight at first visit) × 100. Positive values represented a loss, and negative values represented a gain. Ending percent total weight loss reflected the last available weight reading for each patient.

# 2.2.3 | Weight change trajectory group

Patients were classified into three groups (Group 1, Group 2, and Group 3), based on their pattern of weight loss throughout the 15-week weight loss programme. Groups were derived from a latent class analysis of weight change variables, including percent total weight loss, weight nadir, maximum weekly percent weight gain, number of weekly weight gains, individual standard deviation (SD) of weekly percent weight loss, individual linear slope values, and slope change. Group 1 had the most variable weight trajectory and was least successful in their weight loss attempts. Group 3 was the least variable and most successful in their weight loss efforts. Group 2 occupied the middle ground on all parameters.

# 2.2.4 | Demographic information

Patients filled out items assessing race, sex, and age on the initial intake form.

## 2.2.5 │ Mood symptoms

The Beck Depression Inventory<sup>13</sup> (BDI-2) is a 21-item, self-report scale measuring characteristic attitudes and symptoms of depression over the previous 2-week period. Items are scored on a 4-point Likert scale. The BDI was used to assess patient mood prior to treatment.

#### 2.2.6 | Power of food scale

This is a 15-item, self-report scale measuring hedonic hunger (ie, responsiveness to food stimuli). Items are rated on a 5-point Likert scale, with responses ranging from don't agree at all to strongly agree (Example Item: If I see or smell a food I like, I get a powerful urge to have some). The Power of Food Scale<sup>14</sup> (PFS) has three-factor scores<sup>10</sup> assessing food responsiveness when food is (1) not present (Factor 1), (2) present (Factor 2), or (3) tasted (Factor 3), as well as a total score. Higher scores indicate greater hedonic hunger. The PFS was administered at the beginning and end of treatment.

#### 2.2.7 ∣ Eating behaviour

The Eating Behavior Inventory<sup>15,16</sup> (EBI) is a 26-item, self-report scale measuring weight management-related behaviours. EBI items are rated on a 5-point Likert scale, with answers ranging from *never or hardly* 

ever to always or almost always (Example Item: I carefully watch the quantity of food which I eat). Higher scores reflect greater usage of behaviours contributing to weight loss. The EBI was administered at both pretreatment and posttreatment.

#### 2.3 | Statistical analyses

All analyses were conducted in IBM SPSS Statistics Version 25 and R Version 3.5.0. For each reason for weight loss, we conducted separate chi-squared analyses assessing its relations to weight trajectory group, sex, and race. (Patients who identified as neither Black nor White made up less than 2% of the study's sample; these patients were excluded from analyses of racial differences.) To examine the relations of reasons for weight loss to continuous variables (age, pretreatment BMI, percent weight loss, and pretreatment and posttreatment EBI, PFS, and BDI scores), we conducted separate *t*-tests for patients who endorsed each reason versus those who did not. Numbers of reasons for weight loss selected by patients ranged from 1 to 5. One-way analyses of variance were used to assess the relations of the *number* of reasons for weight loss to BMI and age. To examine the relations of the number of reasons for weight loss to sex and race, we conducted chi-squared analyses.

To examine the relations of individual reasons for weight loss and the number of reasons for weight loss to weight trajectory, multinomial logistic regression analyses were conducted with a null model (only intercepts for each outcome group) entered into the first step of the regression, the number of reasons entered into the second step of the regression, and individual reasons entered into the final step of the regression equation. Note that each of those steps is nested in the one that preceded it. That is, the null step is a special case of the final model but with all slopes constrained to 0. The second step (number of reasons) is a special case of the final model but with all slopes constrained to equality. Thus, steps can be compared using chisquared difference tests, a specific version of a chi-squared test used to compare differences between nested models.

A multiple linear regression analysis was conducted to predict percent weight loss from reasons for weight loss and number of reasons for weight loss. Similar to the multinomial regression, the null model was entered into the first step of the regression, the number of reasons was entered into the second step of the regression, and individual reasons entered into the final step of the regression equation.

# 3 | RESULTS

Patients' mean pretreatment and posttreatment scores on EBI, PFS, and BDI are shown in Table 1. The study sample's average pretreatment BMI was  $36.45 \text{ kg/m}^2$  (Obesity Class 2) (SD = 7.52). Mean weight loss was 9.71% (SD = .53%) of baseline weight; 30.1% of patients fell in weight trajectory Group 1 (most variable, least loss), 47.6% in Group 2 (middle range of variability and loss), and 22.3% in Group 3 (most consistent, greatest loss).

Frequencies of endorsement for each reason for losing weight were as follows: 24.7% endorsed "[another] person recommendation," 40.9%

endorsed "doctor recommendation," 56.9% endorsed "mobility concern," 88.3% endorsed "appearance concern," and 96.4% endorsed "health concern." Among the total sample, 5.6% endorsed only one reason, 25.5% endorsed two reasons, 35.2% endorsed three reasons, 21.3% endorsed four reasons, and 12.4% endorsed five reasons.

There was a significant association with age for the total number of reasons for weight loss,  $F_{5,588} = 3.19$ , P < .01. The average age of patients with one reason was 48.38 (SD = 13.59); two reasons was 44.13 (SD = 12.09); three reasons was 46.47 (SD = 12.70); four reasons was 49.06 (SD = 14.57); and five reasons was 50.48 (SD = 14.86). Posthoc comparisons using the Tukey HSD test showed that age was higher for patients with five and with four reasons for weight loss ( $M_{age}5 = 50.48$ , SD = 14.86;  $M_{age}4 = 49.06$ , SD = 14.57) than it was for patients with two reasons for weight loss (M = 44.13, SD = 12.09). There were no significant racial or sex differences on numbers of reasons.

# 3.1 | Relations of reasons for weight loss to patient characteristics

Please see Tables 3 and 4 for a summary of chi-squared and t-test results. The endorsement of "person recommendation" as a reason for weight loss was associated with higher BMI and was more likely to be seen among White patients than Black patients and male patients than female patients. The endorsement of "doctor recommendation" was associated with higher BMI and older age and was more likely to be seen among Black patients than White patients and male patients than female patients. The endorsement of "mobility concern" was associated with higher BMI and older age and was more likely to be seen among White patients than Black patients and male patients than female patients. The endorsement of "appearance concern" was not associated with BMI, age, sex, or race. Although only 3% of our sample did not endorse health concern (18 patients), nonendorsement was associated with lower BMIs.

At pretreatment, the endorsement of "person recommendation" or "doctor recommendation" as a reason for weight loss was associated with lower pretreatment EBI score. The endorsement of "doctor recommendation" was also associated with higher BDI score. The endorsement of "mobility concern" was associated with lower PFS food not present, PFS food present, and PFS total score, with no differences on BDI or EBI scores. Neither the endorsement of "appearance concern" nor of "health concern" was differentially associated with pretreatment BDI, EBI, or PFS scores.

Posttreatment questionnaire results largely resembled those seen at pretreatment. The endorsement of "person recommendation" was again associated with lower EBI score, with no differences on PFS scores. The endorsement of "doctor recommendation" was not differentially associated with posttreatment EBI or PFS scores. The endorsement of "mobility concern" was associated only with lower PFS scores (PFS food not present and total scores). The endorsement of "appearance concern" was again not differentially associated with posttreatment EBI or PFS scores. The endorsement of "health concern" was associated with higher posttreatment EBI score; however, recall that only 3% of patients did not endorse this reason.

 TABLE 3
 Endorsement of weight loss reasons by psychosocial and weight-related variables (N = 588)

	Person Recommended	papua		Doctor Recommended	papu		Mobility Concern			Appearance Concern	sern		Health Concern		
Variable	No (M, SD)	Yes (M, SD)	t	No (M, SD)	Yes (M, SD)	t	No (M, SD)	Yes (M, SD)	t	No (M, SD)	Yes (M, SD)	t	No (M, SD)	Yes (M, SD)	t
Age	46.82 (12.96)	47.72 (14.79)	70	45.78 (12.96)	48.86 (14.52)	-2.76*	44.31 (13.01)	49.10 (13.4)	-4.34**	46.82 (12.96)	47.72 (14.79)	1.18	49.06 (14.21)	46.98 (13.41)	0.64
Pre-Tx BMI	35.75 (7.33)	38.6 (7.71)	-4.01***	34.92 (6.66)	38.64 (8.12)	-6.09***	34.83 (6.77)	37.67 (7.83)	-4.6***	37.86 (8.85)	36.28 (7.33)	1.61	32.99 (4.66)	36.56 (7.57)	-1.99*
Total weight loss %	-9.73% (5.24%)	-9.73% (5.24%) -9.64% (5.38%)	17	-9.91% (5.01%)	-9.43% (5.63%)	-1.08	-10.00% (5.47%)	-9.49% (5.11%)	-1.16	-9.75% (4.76%)	-9.71% (5.34%)	07	-10.37% (3.98%)	-9.69% (5.31%)	-0.54
Pre-BDI	8.67 (7.06)	9.29 (7.88)	63	8.17 (6.43)	9.88 (8.34)	-2.22*	8.64 (7.09)	8.95 (7.39)	42	6.85 (4.25)	9.06 (7.51)	-1.84	8.10 (9.13)	8.83 (7.21)	32
EBI total	71.14 (10.96)	(8.95)	2.05*	71.46 (10.42)	69.19 (10.69)	2.17*	71.14 (10.96)	68.65 (8.95)	22	71.56 (11.58)	70.45 (10.46)	0.68	75.42 (16.79)	70.43 (10.33)	1.62
PFS food not present	2.43 (1.04)	2.54 (.94)	-1.02	2.48 (.96)	2.26 (1.11)	1.27	2.61 (1.04)	2.23 (.99)	2.27*	2.30 (1.03)	2.41 (1.03)	38	3.10 (1.79)	2.37 (.99)	1.58
PFS food present	3.09 (1.06)	3.31 (1.15)	99	3.29 (1.00)	3.31 (1.15)	1.93	3.42 (.96)	2.94 (1.13)	2.7*	3.17 (1.27)	3.14 (1.06)	0.08	3.45 (1.49)	3.14 (1.07)	0.63
PFS food tasted	2.36 (.93)	2.63 (.86)	-1.57	2.48 (.85)	2.34 (1.02)	0.84	2.57 (.94)	2.31 (.89)	1.65	2.46 (.98)	2.42 (.92)	0.18	2.80 (.97)	2.41 (.92)	0.93
PFS total	2.6 (.91)	2.83 (.89)	-1.31	2.75 (.83)	2.51 (1.0)	1.53	2.86 (.88)	2.49 (.9)	2.5*	2.65 (1.02)	2.65 (.89)	05	3.12 (1.26)	2.64 (.89)	1.16
Post-EBI total	98.61 (10.96)	93.78 (12.38)	2.29*	97.89 (11.31)	96.97 (11.7)	0.5	95.82 (10.90)	98.96 (11.74)	-1.76	97.42 (9.44)	97.54 (11.70)	04	87.2 (8.23)	97.85 (11.4)	-2.07*
PFS food not present	1.88 (.81)	1.94 (.75)	38	1.92 (.82)	1.86 (.76)	0.44	2.12 (.84)	1.71 (.71)	3.12**	1.98 (.63)	1.88 (.81)	0.46	2.47 (.97)	1.87 (.78)	1.66
PFS food present	2.17 (.92)	2.5 (1.02)	-1.72	2.33 (.94)	2.13 (.97)	1.24	2.42 (1.02)	2.11 (.88)	1.87	2.38 (.80)	2.24 (.97)	0.55	3.00 (.85)	2.22 (.95)	1.8
PFS food tasted	2.17 (.78)	2.21 (.57)	28	2.25 (.77)	2.08 (.67)	1.37	2.31 (.83)	2.07 (.63)	1.88	2.36 (.76)	2.16 (.73)	1.05	2.60 (.85)	2.17 (.73)	1.3
PFS total	2.09 (.72)	2.22 (.69)	95	2.17 (.70)	2.04 (.73)	1.06	2.28 (.77)	1.98 (.63)	2.55*	2.24 (.53)	2.10 (.73)	0.74	2.69 (.69)	2.09 (.70)	1.86

Abbreviations: BMI, body mass index; BDI, Beck Depression Inventory; EBI, Eating Behavior Inventory; M. mean; PFS, Power of Food Scale; SD, standard deviation.

\*P < .05.

\*\*P < .01.

\*\*\*P < .001.

**TABLE 4** Endorsement of weight loss reasons by weight trajectory group

Group 1	vs	Group 2 vs Group	3		b (SE)		Relative Ris	k	Wald z
Intercept	t				2.9 (.30)*	**	18.0907		9.59502
Group 2					0.83 (.09)	<b>)</b> ***	2.29451		9.23324
Intercept	t				1.38 (.36)	)***	3.96266		3.8574
Group 3					0.83 (.11)	<b>)</b> ***	2.28656		7.67873
Name o	df	Model Deviance	AIC	BIC	Log likelihood	McFadden Pseudo Rsq	Model Chi Diff	Model Chi Diff df	Model Chi Diff_P
Null	2	1233.89	1237.89	1246.64	-616.95	0	-	-	-
Count	4	1217.78	1225.78	1243.26	-608.89	0.01305	16.1074	2	.00032
Full 1	12	1208.72	1232.72	1285.14	-604.36	0.0204	9.06048	8	.33722

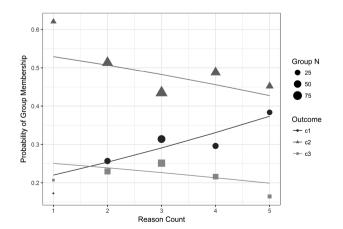
<sup>\*\*\*</sup>P < .001.

#### 3.2 | Relations of weight loss reasons to outcome

Please see Table 4 and Figure 1 for multinomial regression results comparing reasons for weight loss across weight loss trajectory categories. As shown, the best fitting model included only the count of reasons for weight loss (ie, fit did not significantly improve by allowing each reason for weight loss to have its own slope). Within that model, the probability slope of the reason count is negative for weight loss groups 2 and 3, suggesting that a patient with more reasons for weight loss is less likely to experience either of the more successful weight loss trajectories. However, results of the multiple linear regression analysis showed that neither number of reasons nor specific reasons predicted total percent weight loss.

# 4 | DISCUSSION

The current investigation examined correlates of weight loss reasons among patients enrolled in a 15-week fee-for-service lifestyle intervention. Five nonmutually exclusive reasons for weight loss were examined: doctor recommendation, other person recommendation, mobility concern, appearance concern, and health concern. Large majorities of patients endorsed "health concern" and "appearance concern," roughly



**FIGURE 1** Number of reasons and their relationships to weight trajectory group

half endorsed "doctor recommendation" and "mobility concern," and a quarter endorsed "[another] person recommendation."

Specific reasons for weight loss were not associated with total patient weight loss or with weight trajectory group, suggesting that among the reasons studied, no specific reason predicted weight change outcome. However, the total number of reasons endorsed was related to weight loss trajectory group, in a perhaps counterintuitive direction. Patients who endorsed more reasons were *less* likely to be in the more successful groups (more stable weekly changes with larger overall losses).

In contrast to the lack of observed relations to weight outcomes, results suggest that specific weight loss reasons are differentially associated with a variety of different patient characteristics. Those who were heavier and male tended to endorse recommendation from another individual (ie, doctor and/or nonphysician recommendation), mobility concerns, and health concerns as reasons for weight loss. Those who were older tended to endorse doctor recommendation and mobility concerns for weight loss. Doctor recommendation was more frequently endorsed by Black than by White patients, while mobility concern and other person recommendation were more frequently endorsed by White than Black patients. With the exception of the endorsement of doctor recommendation being reported more frequently by Black patients, these results suggest that, in general, when a reason for weight loss is endorsed, it tends to be associated with higher BMI and older age and is more frequently reported by White and male patients. Interestingly, we found that, at least in this sample, "appearance" reasons were endorsed with equal frequency regardless of sex, age, BMI, and race, perhaps suggesting that different groups of patients are equally motivated by appearance to seek weight loss services.

At pretreatment, the endorsement of doctor/person recommendation for weight loss was associated with lower usage of behaviours contributing to weight loss. The endorsement of doctor recommendation was additionally associated with lower mood. The endorsement of mobility concern was associated with lower hedonic hunger. The endorsement of person recommendation was associated with higher posttreatment use of recommended weight loss behaviours, while the endorsement of health concerns predicted lower use of those behaviours.

Additional literature suggests that different groups of patients are equally likely to receive a doctor's recommendation for weight loss, regardless of patient characteristics (ie, race and sex).<sup>17</sup> The present study implies that, while groups may not differ in the receipt of a doctor's recommendation, racial minority groups and those who are older may be more likely to report that receiving a doctor's recommendation contributes to their desire for weight loss.

The present study is not without limitations. The items that were used reflect the patients' beliefs that the reason played a role in their decisions to lose weight but do not assess whether the specific reason occurred (eg, doctor recommendation) and/or exists (eg, mobility problems). We cannot conclude, for example, that groups who did not endorse "doctor recommendation" for weight loss (ie, women, those with lower BMIs) have not received a doctor's recommendation to lose weight. Instead, patients not endorsing that reason may simply not see it as impacting their desire to lose weight. Another important limitation is that our sample was made up of individuals in a hospitalbased weight loss programme. We cannot therefore generalize our results to those seeking weight loss through other means, such as self-directed diets or commercial programmes. An additional limitation to the study is only patients who completed eight or more treatment visits were retained for analysis. Focusing only on those who completed 50% or more of the programme may have lost variability in weight loss outcomes.

#### 5 | CONCLUSION

Results of the current investigation imply that the *type of* motivation for weight loss does not predict weight loss outcomes. The number of reasons a person endorsed was significantly related to their weight trajectory group: Patients endorsing more reasons were less likely to have a more successful weight loss trajectory. While the present study found no relation of the type of reason for losing weight to success at weight loss, the limited scope does not permit conclusively ruling out possible relations. Assessing a broader range of specific reasons for losing weight, and the level of importance, which the patient attaches to each endorsed reason, would permit a more thorough examination of any relations. Nonetheless, our findings suggest that patients seeking weight loss treatment, across varied motivations, may benefit from treatment.

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#### **CONFLICT OF INTEREST**

The other authors declare no conflicts of interest.

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