

Evaluating the role of a commercial slimming organisation within type 2 diabetes management

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Introduction

Type 2 diabetes (T2D) is a major public health problem closely linked to overweight and obesity. T2D treatment can be both dynamic and challenging, requiring a number of lifestyle changes in order to reduce the risk of disabling and life-threatening macro and micro vascular complications. Weight management is highlighted as the principal strategy for managing blood glucose levels in T2D (Dyson *et al*, 2011). Slimming World is a commercial weight management organisation running approximately 12,000 community-based support groups each week across the UK. This research investigated the impact of accessing Slimming World's group support in diabetes management.

Methods

Slimming World members with diabetes were invited to complete a questionnaire hosted on their member website for two weeks in July 2013. In addition to questions about medication usage and weight change, change in quality of life (QoL) was measured using the Impact of Weight on QoL questionnaire (Kolotkin *et al*, 2003). Participants were asked to rate their QoL retrospectively for before joining Slimming World and at time of survey using Likert 5-point scales. Respondents were split by type of diabetes and length of membership.

Results

551 members with T2D responded to the survey, of which 87% were female. Mean age was 53.1 (11.1) years and joining BMI was 39.6 (8.03) kg/m². Current length of membership varied between respondents, but for those who had been attending Slimming World for longer than 3 months (n= 368); mean attendance 12.2 (20.6) months, mean weight and BMI had fallen by 11.7kg (10.9%) and 5.4 kg/m² respectively.

Mean BMI and glucose level changes are reported for different lengths of attendance in table 1. BMI, glucose and HbA1c reduce on average for all members regardless of current length of membership, indicating that even shorter lengths of membership can be beneficial for diabetes control (Table 1).

Of the 479 (87%) members taking medication, 38% reported a reduction in medication, with the majority (66%) reducing their intake of Biguanides. Of the 123 taking insulin, 61% reported a reduction in dosage, since joining Slimming World. Respondents also reported significant improvements in aspects of QoL including physical activity levels and physical functionality scores; measures of self-esteem, sexual life, public distress/weight stigma and working experiences (P<0.000 for all changes) (Figure 1).

Table 1. BMI, Glucose and HbA1c changes over length of Slimming World membership

Current length of membership	N=	Values on joining SW (SD)	Time of survey (SD)	% change
>3months				
BMI (kg/m ²)	368	39.3 (7.96)	33.9 (3.89)	-13.74*
Glucose (mmol/l)	221	11.29 (5.03)	6.52 (2.01)	-42.25*
HbA1c (%)	102	8.26 (2.15)	6.55 (1.32)	-20.70*
>6 months				
BMI (kg/m ²)	260	39.2 (8.16)	33.0 (6.73)	-15.82*
Glucose (mmol/l)	157	11.36 (5.14)	6.60 (2.13)	-41.90*
HbA1c (%)	69	8.63 (2.18)	6.46 (1.40)	-25.14*

Mean (SD), *significant difference from baseline (P<0.00)

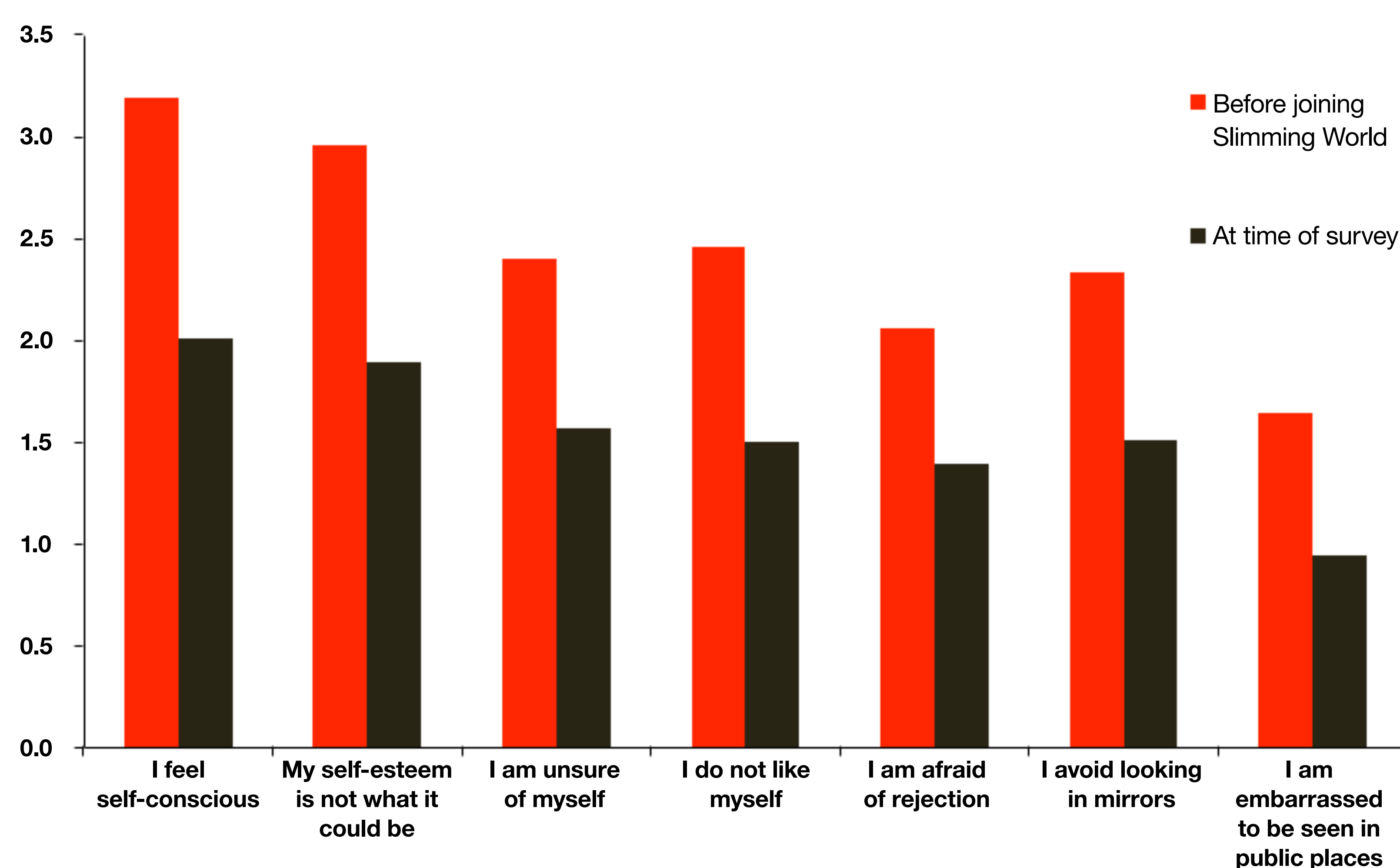


Figure 1. Changes in self-esteem aspects of quality of life (QoL) since joining Slimming World (from 5-point Likert scales)

Conclusion

Slimming World members with T2D lost weight, reported improved blood glucose and HbA1c levels irrespective of membership length. Reductions in medication, including insulin, were also reported as were improvements in QoL measures. The improved glycaemic control indicates attendance at Slimming World is a practical, effective option for supporting weight management in T2D in a community setting when in collaboration with regular reviews by the members' health care team.

References

Dyson, P.A. *et al* (2011). *Diabetic Medicine*. **28**: 1282-1288
 Kolotkin, R.L. *et al* (2003). *Diabetes Research in Clinical Practice*. **61**(2): 125-132

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