

Pilot analysis exploring the impact of deprivation on engagement and weight outcomes in people attending a commercial weight management organisation



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Introduction

Little is known about the effect of deprivation on engagement with commercial weight management programmes, attendance and weight outcomes. This analysis considered a sample of records from a dataset of 1.36million self-funding Slimming World members during their first 3 months attendance, alongside Indices of Multiple Deprivation (IMD) data.

Methods

Records for Slimming World members from six postcode areas (Bristol, Chelmsford, Cleveland, Derbyshire, Doncaster and Nottinghamshire), representative of the total dataset for percentage weight (%) and BMI change (kg/m^2), were selected from a convenient sample of the main dataset producing 41,371 members (3.1% of the original dataset). IMD scores were assigned using postcodes and records quintiled (ranked 1=most deprived to 5=least deprived).

Results

Table 1. Weight outcomes for Slimming World members by deprivation quintile

Deprivation quintile	Mean no. of sessions attended	Mean joining weight (kg)	Mean weight change (kg)	Mean weight change (%)	Mean joining BMI (kg/m^2)	Mean BMI change (kg/m^2)
Quintile 1 (most deprived)	7.2	90.8	-3.7	-4.0%	33.6	-1.4
Quintile 2	7.5	90.2	-3.8	-4.2%	33.2	-1.4
Quintile 3	7.6	88.1	-3.8	-4.3%	32.5	-1.4
Quintile 4	7.8	86.9	-3.8	-4.4%	32.0	-1.4
Quintile 5 (least deprived)	7.7	86.1	-3.8	-4.4%	31.6	-1.4
Total	7.5	88.2	-3.8	-4.2%	32.5	-1.4

Slimming World members from more deprived quintiles recorded higher joining weights and BMI's, 90.8 kg and $33.6\text{kg}/\text{m}^2$ for quintile 1, reducing to 86.1 kg and $31.6\text{kg}/\text{m}^2$ for quintile 5 (Table 1). Members from the most deprived quintiles attended slightly less sessions, 7.2 sessions for quintile 1 rising to 7.8 sessions for quintile 5 and also lost a slightly lower % weight, 4% for quintile 1, rising to 4.4% for quintile 5. However, absolute weight change (-3.7kg to -3.8kg) and mean BMI change ($-1.4\text{kg}/\text{m}^2$) was similar across all quintiles.

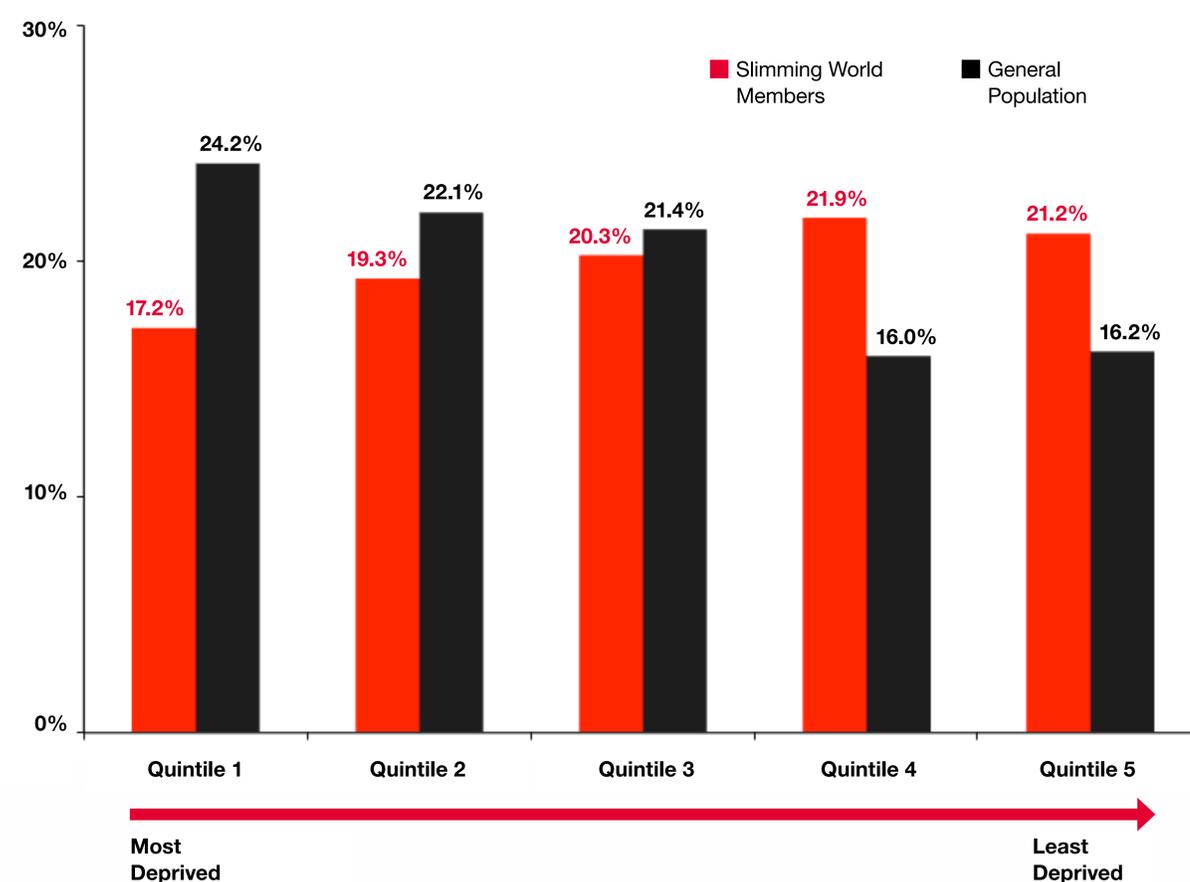


Figure 1. Slimming World members by deprivation centile compared to the general population

This pilot analysis also looked at how well Slimming World members are represented between the deprivation quintiles, compared to the general population (Figure 1).

Slimming World members were under-represented in the most deprived quintiles and over-represented in the least deprived quintiles, with members from quintile 1 making up 17.2% of the sample, compared with 21.2% for quintile 5. This was 7% less and 5% more than the general population, respectively. At postcode level some variability was observed in this pattern, with two areas, Chelmsford and Cleveland, 6.1% and 5.5% over-represented across the two most deprived quintiles and -8% and -1.3% under-represented across the two least deprived quintiles.

Conclusion

This pilot analysis suggests Slimming Worlds' community-based weight management programme is effective for members in terms of attendance and weight outcomes across all deprivation quintiles. However, deprivation appears to slightly affect engagement.