



Structured education programme, **SUCCESS[†]-RCT**, improved physical activity and illness perception in women with Polycystic Ovary Syndrome

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Background Structured education programmes have proved effective in changing illness perception, increasing physical activity in those with or at risk of diabetes. The SUCCESS–RCT was designed to test such a programme in women with PCOS

Methods 12 months follow up in overweight and obese women with PCOS; **Exclusion**; diabetes, pregnancy
Intervention; single 7 hours Structured Education programme. **Primary outcome**; increase in walking activity by 2000 steps/day
Secondary outcomes Physical Activity pattern, glycaemic indices, cardiovascular risk factors, health related quality of life and Illness Perception. **Analysis**: Per-protocol, T-tests; reported as mean difference (MD) with 95% confidence interval

Results

Table 1: Mean Differences (MD) of change at 6 and 12 Months (Control – Education)

	Baseline Control; Mean (SD)	Baseline Education Mean (SD)	MD (95% CI) 6 Months	Adjusted† P Value	MD (95% CI) 12 Months	Adjusted† P Value
Weight (Kg)	88.16 (18.33)	89.41 (18.85)	1.28 (-0.22, 2.80)	0.0728	-1.31 (-1.50, 4.12)	0.3326
Systolic BP (mmHg)	121.11 (10.74)	121.34 (14.25)	1.88 (-2.17, 5.94)	0.4567	-0.47 (-4.89, 3.94)	0.7663
A1c (mmol/mol)	38.40 (4.47)	39.67 (3.93)	0.47 (-0.70, 1.65)	0.365	-1.59 (-0.28, 3.48)	0.1289
CHOL mmol/l	5.14 (0.95)	5.13 (1.04)	0.21 (-0.00, 0.42)	0.0339	-0.09 (-0.18, 0.38)	0.4133
HDL mmol/l	1.43 (0.36)	1.41 (0.37)	0.10 (-0.04, 0.26)	0.1423	-0.03 (-0.06, 0.14)	0.5997
TRIG mmol/l	1.31 (0.62)	1.52 (0.83)	0.28 (0.02, 0.53)	0.0236	0.25 (0.00, 0.51)	0.0366
FAI	5.69 (5.61)	7.00 (5.63)	0.46 (-0.83, 1.76)	0.433	1.74 (-0.09, 3.58)	0.0472
Physical Activity						
Steps	6569 (2523)	6172 (1516)	-1031 (-1927, -135)	0.0367	-326 (-1234, 582)	0.4421
Light (min)	280.32 (68.88)	281.43 (84.33)	15.78 (-9.62, 41.18)	0.085	16.52 (-13.49, 46.54)	0.1488
MVPA (min)	30.53 (22.70)	29.22 (18.23)	-8.38 (-15.63, -1.12)	0.0384	-4.19 (-12.50, 4.11)	0.2746
Sedentary (min)	529.15 (105.69)	532.29 (77.16)	-23.68 (-53.88, 6.51)	0.2934	-23.47 (-56.90, 9.96)	0.3371

Participants: 162 women (66% White) with mean age 33.3 SD=7.5 years were recruited.

100 continued to the end; 24 withdrew, 36 were lost to follow up and 2 developed diabetes.

†Adjusted for baseline stratification factors (age, ethnicity and Metformin) and baseline data.

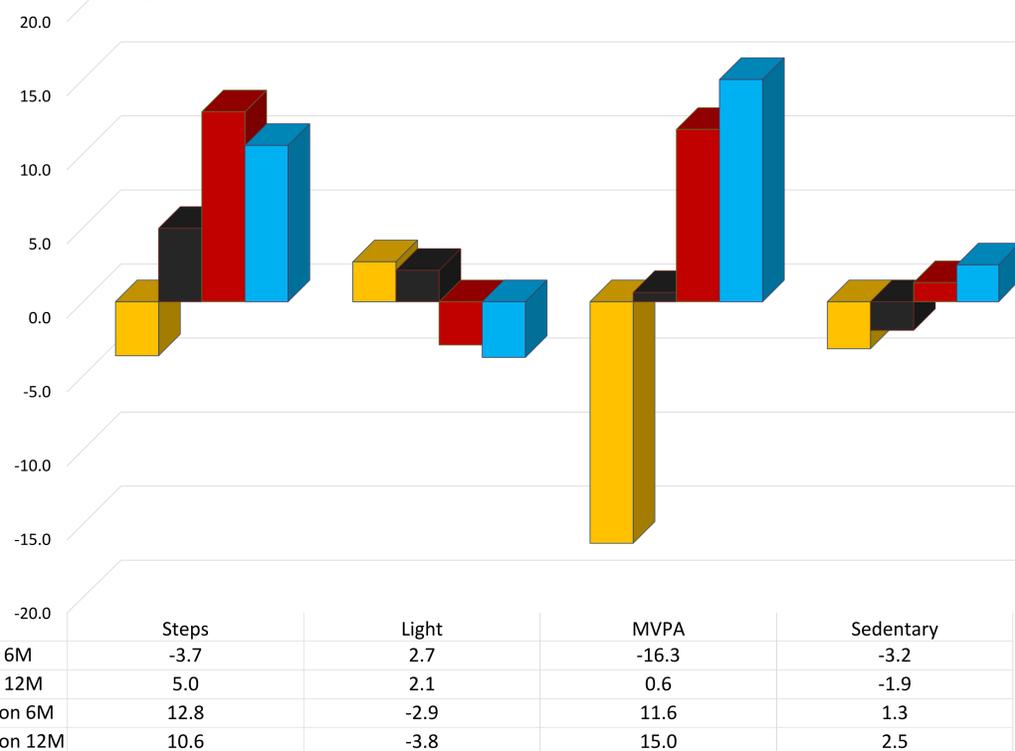
At 12M the education intervention had improved participants' perception of their condition and also improved mental capacity (SF12V2 questionnaire) and less anxiety in regard to their weight (PCOSQ questionnaire).

Conclusion

A single structured education

- increasing their illness perception and improving their quality of life.
- Improved their PA at 6M but failed to sustain or improve on that at 12M.
- Potential need for a reminder/re-enforcement education at 6 month

Fig 1 % Changes from Baseline in Physical activity indices at 6 and 12 Months



MVPA = Moderate to vigorous physical activity

†**SUCCESS:** StructUred eduCation programme to improve Cardiovascular risk in womEn with polycyStic ovary Syndrome (NCT01462864)