Health behaviour change is influenced by domain-specific, modifiable psychosocial factors and more generalized, stable personality traits. The previous have been extensively researched, and self-efficacy, action planning and social support have been identified to be important behaviour change predictors. However, the relevance of these determinants for men and women and their dynamic change processes have rarely been investigated.

The role of personality in health behaviour change has remained a less studied area until recently. Gender-role related personality traits agency and communion, although established predictors of psychological adjustment and physical health for both genders, have not been studied in the context of lifestyle change interventions. Yet, they may facilitate favorable outcomes, in an interplay with domain-specific psychosocial factors.

The research questions were: I) Are there gender differences in the changes in self-efficacy and planning, as well as the level of social support, and do they predict change in physical exercise similarly in men and women? II) How do gender-related personality traits contribute to changes in abdominal obesity for women and men, and how do they interplay with more proximal psychosocial variables in predicting changes in obesity? Finnish men and women, age 50–65, N=385, at an increased risk for type 2 diabetes were recruited from health care centres to participate in the GOAL Lifestyle Implementation Trial. The program aims were to improve participants' lifestyle (physical activity, nutrition) and to decrease their overweight. Domain-specific psychosocial factors and exercise were measured at baseline (T1) and at three months (T2). Waist circumference was measured at T1, one-year (T3) and three-year follow-ups (T4). Gender-related traits were measured at T4.

In Study I, at baseline, men reported receiving more social support than women. Post-intervention, women reported having formed more exercise plans. Among women, increases in self-efficacy and planning predicted increases in exercise whereas for men, changes in planning played a less significant role. In Study II, higher agency was associated with 1-year waist circumference reduction among women, but not among men. Among women, high agency and self-efficacy increase during T1-T2 were associated with 1-year waist circumference decrease. High communion was associated with weight loss when social support was high. Three-year waist circumference reduction was only predicted by initial (T1-T2) self-efficacy increase.

The results implicate that certain psychological and social resources are beneficial in pursuing health outcomes for women. The findings may reflect life circumstances allowing less spontaneous lifestyle decisions and a lower acceptance of lifestyle changes by women’s social environment than for men.