



# Application of theory of planned behavior on the nutritional behaviors of adolescents and young adults with Poly Cystic Ovarian Syndrome in Iran: A field trial study

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## Abstract

**Introduction:** Polycystic ovary syndrome is the most common endocrine disorder among adolescents and adults. According to previous research, the prevalence of this syndrome has increased in adolescents and young adults in recent years. Given the importance of healthy nutritional behaviors in improving the management and control of this disease, the present study was conducted to determine the impact of an educational intervention program based on the theory of planned behavior on the nutritional behaviors of adolescents and young adults with polycystic ovary syndrome.

**Methods:** In this field trial study, 72 participants (15-21 years old) from four gynecology clinics in Shiraz, Iran were assigned to intervention and control groups. Educational intervention program was implemented based on the theory of planned behavior over 4 sessions during two weeks. The data collection tools were researcher-made questionnaires of demographic information, knowledge assessment, and assessment of theory of planned behavior constructs, as well as a questionnaire for assessing consumption of food groups, fast food, and snacks. Data were collected at two stages (baseline and three months after the intervention) and the changes in knowledge, attitude, subjective norms, perceived behavioral control, behavioral intention, and nutritional behavior were analyzed using descriptive and inferential statistical methods (t-test, Chi-square, Mann-Whitney U, and Wilcoxon tests; one-way ANOVA, repeated measures ANOVA and ANCOVA).

**Results:** Based on the results, a significant statistical increase was observed in the mean scores of knowledge, attitude, subjective norms, perceived behavioral control, behavioral intention, and nutritional behavior in the intervention group by passing three months from the intervention compared to before the intervention ( $p < 0.001$ ). However, these differences were not statistically significant in the control group ( $p > 0.05$ ). Moreover, the mean scores of knowledge, attitude, subjective norms, perceived behavioral control, behavioral intention, and nutritional behavior had no statistically significant difference before the intervention between the two groups, but this was statistically significant three months after the intervention ( $P < 0.001$ ).

**Conclusion:** Considering the effect of an educational intervention program based on the theory of planned behavior on creating healthy nutritional behaviors in adolescents and young adults with polycystic ovary syndrome, it is recommended to use it to improve the nutritional health of them.

**Key words** Adolescent, Polycystic ovary syndrome, Theory of planned behavior.