



**Dance Intervention for Adolescent Girls  
with Internalizing Problems**  
Effects and Experiences

av

**Anna Duberg**

**Akademisk avhandling**

Avhandling för doktorexamen i medicinsk vetenskap med  
inriktning mot hälso- och vårdvetenskap  
som kommer att försvaras offentligt  
fredagen den 20 maj 2016 kl. 09.00,  
Wilandersalen, Universitetssjukhuset Örebro

Opponent: Professor Töres Theorell  
Stressforskningsinstitutet, Stockholm

Örebro Universitet  
Institutionen för Hälsovetenskaper  
701 82 ÖREBRO

## Abstract

Anna Duberg (2016) Dance Intervention for Adolescent Girls with Internalizing Problems. Effects and Experiences. Örebro Studies in Medical Science 144.

Globally, psychological health problems are currently among the most serious public health challenges. Adolescent girls suffer from internalizing problems, such as somatic symptoms and mental health problems, at higher rates than in decades. By age 15, over 50 % of all girls experience multiple health complaints more than once a week and one in five girls reports fair or poor health.

The overall aim of this study was to investigate the effects of and experiences with an after-school dance intervention for adolescent girls with internalizing problems. The intervention comprised dance that focused on resources twice weekly for 8 months. Specifically, this thesis aimed to: I) investigate the effects on self-rated health (SRH), adherence and over-all experience; II) evaluate the effects on somatic symptoms, emotional distress and use of medication; III) explore the experiences of those participating in the intervention; and IV) assess the cost-effectiveness.

A total of 112 girls aged 13 to 18 years were included in a randomized controlled trial. The dance intervention group comprised 59 girls, and the control group 53. In paper I, the dance group showed increased SRH scores compared to the control group ( $p = .02$ ). Girls in the intervention group showed high adherence and a positive overall experience. In paper II, the dance group exhibited a decrease in somatic symptoms ( $p = .021$ ), emotional distress ( $p = .023$ ) and use of medication ( $p = .020$ ) compared to the control group. In paper III, a strategic sample of 24 girls was interviewed. Qualitative content analysis was performed, and five generic categories emerged. Two were “*An Oasis from Stress*” and “*Supportive Togetherness*”, which was shown to represent the fundamental basis and setting of the intervention. The main category, participants’ central experience, was understood as “*Finding embodied self-trust that opens new doors*”. Paper IV revealed that, due to decreased number of visits to the school nurse and an increase in health related quality of life; the intervention was considered to be cost-effective (combined with the usual school health services). In summary, the results of this thesis show that this dance intervention for adolescent girls with internalizing problems generated positive health effects and proved to be cost-effective. For this target group, a non-judgmental environment and supportive togetherness proved to be of importance for participation. The results of this study may provide practical information for school health care staff and caregivers in designing future interventions.

**Keywords:** Adolescent Health, Body Awareness, Cost Effectiveness, Dance, Enjoyment, Physical Activity, Randomized Controlled Trial, Self-rated Health

Anna Duberg, Faculty of Medicine and Health, School of Health Sciences, SE 701 82 Örebro University, Sweden, [anna.duberg@oru.se](mailto:anna.duberg@oru.se)