



Association of Socioeconomic Status and Prevalence of Overweight /Obesity among Children and Adolescents – Intervention Study with Young People with NEET Status in Austria

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Background and Aims

Most studies conducted in developed Western countries observed an inverse relationship between socioeconomic status (SES) and overweight /obesity in children and adolescents. Young people with NEET status (not in education, employment or training) are particularly socially disadvantaged, which favours unhealthy behaviour. About 8.7% of Austrians youth have NEET status. In order to gain knowledge on this group's health behaviour and body weight and to improve their health literacy, the GAAS project was performed.

Subjects and Methods

53 participants (32 male, 21 female, aged 17.9 ± 1.7 years) with NEET status were recruited. About one third (29%) of female and 53% of male were younger than 18 years. Half of participants (53%) have immigration background. To determine SES the Family Affluence Scale (FAS) was performed¹. A questionnaire was conducted to evaluate body awareness, physical activity and dietary behaviour. Body weight was classified on the basis of BMI using cut-off points recommended by Kromeyer-Hauschild et al. (2015)². Body composition was measured using bioelectrical impedance analysis.

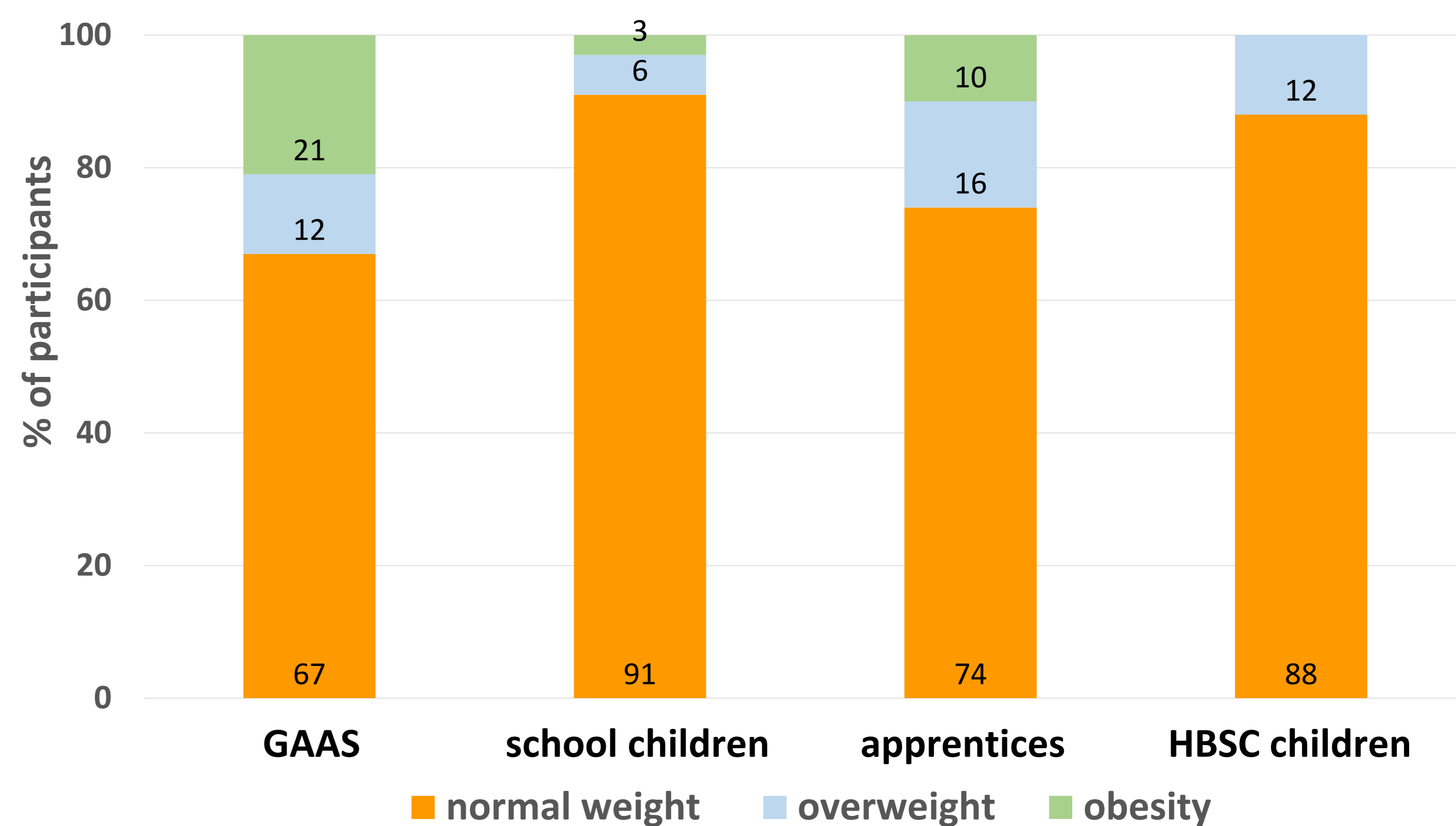


Fig. 1: Prevalence of normal weight, overweight and obese in GAAS participants compared to Austrian secondary school children (n=62, 13-14y), apprentices (n=143, 15-25y) and HBSC youth (n=4.096; 11-15y)

Results

70% of participants had a low/medium SES, whereas 67% of the Austrian school children investigated in the HBSC study had a high SES. In 42% of the examined NEET youths both parents were unemployed. Mean BMI was 25.0 ± 5.1 kg/m². 66.7% of the young adults were normal weight, 12.5% overweight, and 20.8% obese. Compared to Austrian secondary school children (6% overweight, 3% obese), to Austrian apprentices (16% overweight, 10% obese) as well as to results of the Austrian cohort of the HBSC study (12.4% overweight and obese) the prevalence of overweight and obesity was higher in young people with NEET status. Average body fat percentage was $14.6 \pm 7.3\%$ in male and $33.4 \pm 8.1\%$ in female. Every second participant had too high body fat percentage. A significant positive correlation was recognized between body awareness and body weight classification ($p < 0.01$). NEET participants consumed more often food of animal origin, fast food, as well as soft and energy drinks and less fruits and vegetables compared to HBSC school children. Furthermore 58% of female and 35% of male NEETs were not or slightly physical active, which might along with more unhealthy food pattern result in higher body weight.

Conclusions

Low SES results in high prevalence of overweight/obesity, which underlines the necessity of specific public health activities. The GAAS project yields to improve healthy behaviour among young people with NEET status to prevent adverse effects of excess body weight.

Reference:

Currie C, Molcho M, Boyce W, Holstein BE, Torsheim T, Richter M. (2008). Researching health inequalities in adolescents: the development of the Health Behaviour in School-aged Children (HBSC) Family Affluence Scale. *Social Science & Medicine*, 66(6), 1429–1436.

Kromeyer-Hauschild K, Moss A, Wabitsch M (2015). Referenzwerte für den Body-Mass-Index für Kinder, Jugendliche und Erwachsene in Deutschland. Anpassung der AGA-BMI-Referenz im Altersbereich von 15 bis 18 Jahren. *Adipositas*; 9: 123-127.

