



**Karolinska
Institutet**

From the Department of Public Health Sciences

Division of Social Medicine

Studies in Youth Alcohol Consumption and Prevention

ACADEMIC DISSERTATION

For the degree *Doctor of Philosophy* at the Karolinska Institute, to be publicly defended at the Centre for Psychiatric Research (Centrum för Psykiatrforskning), building Z8:00, ground floor lecture theatre, Karolinska Hospital, on:

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by

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ABSTRACT

Background: Alcohol remains the ‘drug of choice’ for most young people and is responsible for a sizable proportion of deaths and injuries every year. In Sweden, total consumption and rates of heavy episodic drinking have reduced over the past ten years. At the same time, the number of adolescents admitted to hospital as a consequence of their drinking has risen. This unexpected trend warrants explanation with empirical research. The recent increase in serious alcohol-related harms also suggests there is more to learn about what works in prevention, including the effects of community-based approaches and targeted brief interventions.

Objectives: The thesis has two main objectives; first, to describe recent trends in alcohol consumption among Swedish youth, with a particular focus on polarisation effects (Study I). The second objective is to examine the effects of various alcohol prevention strategies targeting young people, and what can be learnt from these interventions (Studies II-IV).

Methods: Study I (polarized youth drinking) uses repeated cross-sectional self-report data from the Stockholm Student Survey to explore changes in alcohol consumption and risk factors associated with heavy drinking among year 9 and year 11 students in Stockholm between 2000 and 2010. Changes in the dispersion of consumption over time are reported. Study II also uses cross-sectional data to examine the effects of a comprehensive alcohol prevention trial targeting young people in 12 communities in Sweden between 2003 and 2007. Studies III and IV assess the effectiveness of a brief health education program on consumption and attitudes towards alcohol in high schools and the Swedish military, with assessments taken at 5 and 20 month follow-up. All participants were aged between 15 and 20 years.

Results: Findings indicate that a polarization in youth drinking is a likely explanation for the recent divergence between alcohol consumption and serious alcohol-related harms among youth. We found significant increases in the dispersion of consumption over time, indicating more heavy drinkers in the tail end of the drinking distribution. Most adolescent in Stockholm continue to drink less or abstain from alcohol completely, but a minority continue to drink more alcohol. Results concerning the relationship between heavy drinking and risk factors were inconclusive. We found no significant improvements in six trial communities compared to six control communities following a four year multi-component community intervention primarily targeting young people, although adults in the trial communities developed more restrictive attitudes towards the supply of alcohol. The *Prime for Life* brief health education program did not lead to significant improvements in alcohol use or attitudes towards alcohol in either high school students or military conscripts.

Conclusion: We suggest that ongoing social changes could be affecting young people in the form of greater disparities which are associated with a higher incidence of social problems generally, including heavy drinking. Communities can be mobilized to initiate the organizational changes necessary for effective alcohol prevention. However, for aggregate level effects on youth drinking, strategies with demonstrated effectiveness must be implemented consistently and given sufficient time to influence drinking habits. Brief health education strategies, such as *Prime for Life*, may help to improve short-term attitudes towards alcohol use, but are unlikely to result in sustained behaviour change.

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