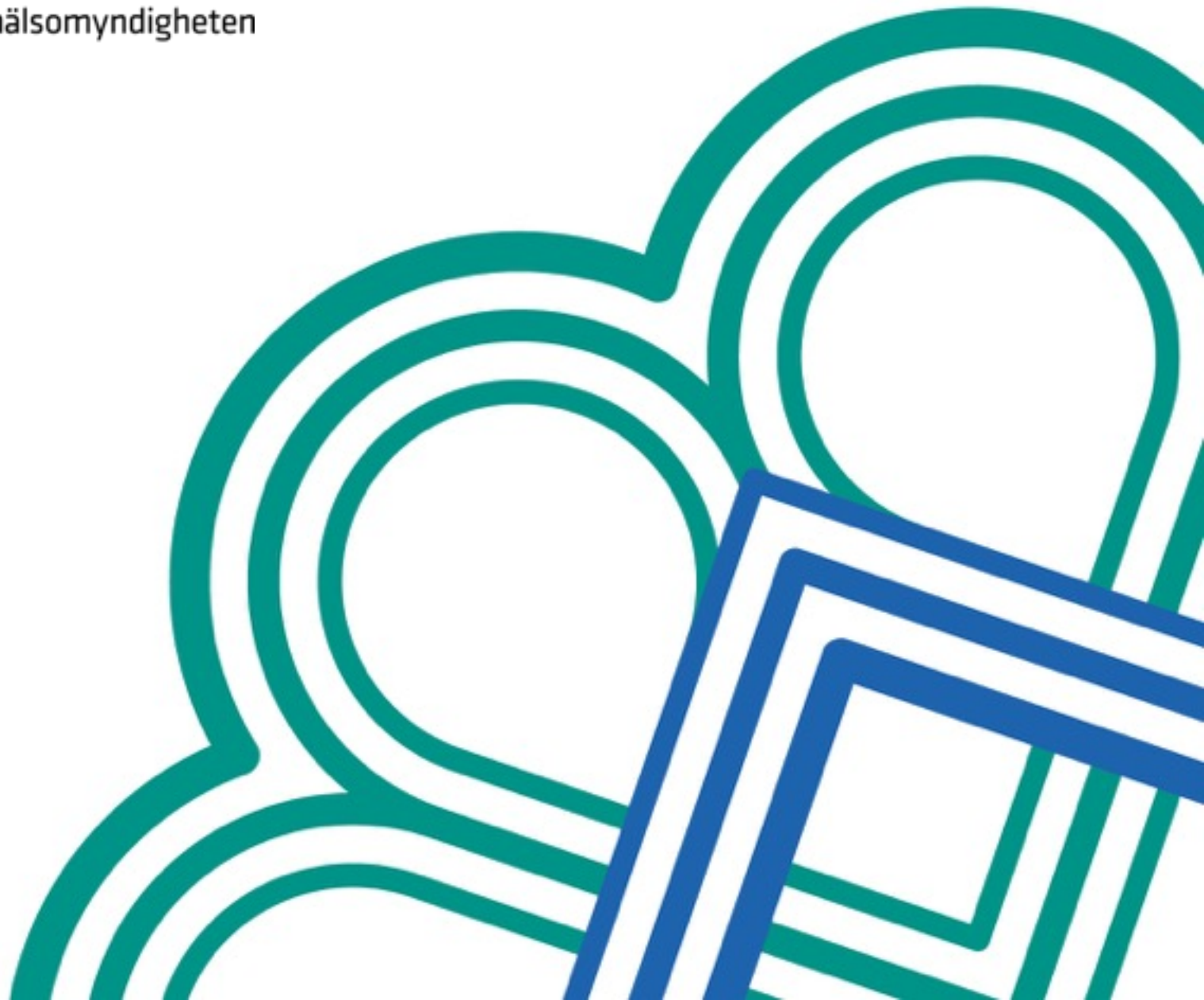# Compulsory school grades and problem gambling among Swedish young women and men

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Folkhälsomyndigheten

Outline

1. Introduction
2. Methods
3. Results
4. Conclusions

Original article

The Association Between Compulsory School Achievement and Problem Gambling Among Swedish Young People

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Different aspects in the school situation have been associated with gambling problems

- Truancy

- Conflicts

- Lower school achievement

- Few longitudinal studies

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Gambling/gambling problems ➡️ low achievement

Low achievement ➡️ gambling/gambling problems

Gambling problems

Low achievement

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The General Strain Theory by Agnew

- Sociological/criminological theory

- Strain (emotional distress, anger or frustration):
  – Not meeting/losing expected and valuable goals in life
  – Negative life events

- Deviant behaviours:
  – relief, distraction, escape, or revenge
  – incentive

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Poor school achievement:

- failure

- circumscribed opportunities

Gambling:

- become a winner

- dreams and fantasies

- renewed strength, outlet

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The aims of this study were to examine:

1) the association between final grades in compulsory school and mild and moderate/severe problem gambling

2) whether there were any sex differences in the association between school grades and problem gambling

Methods:

Study population:

- 16 to 25 year-olds in Wave I & II of Swelogs

- 3,816 person-yrs of follow up time
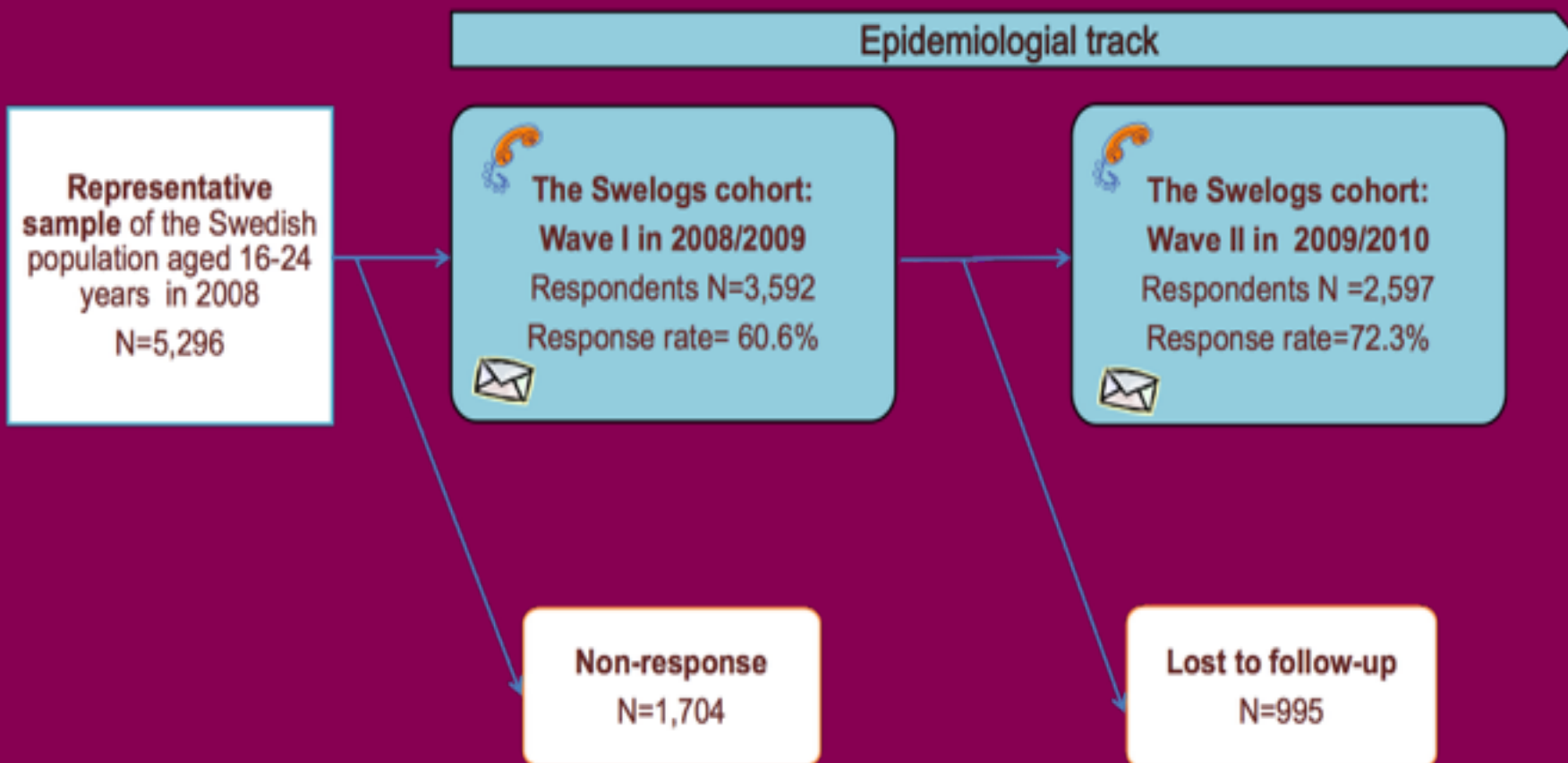
Design:

▪ Cohort study

Exposure

- Final grades in compulsory school (age 16 yrs)

- Official register

- Tertiles: high, average & low

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Outcome

- Mild or moderate/severe problem gambling

- Based on PGSI-scores in wave I & II of Swelogs

- Self assessment telephone interview/ postal survey

Analysis

- Multinomial logistic regression

- Stratification by sex and age groups

- Adjustment for potential confounders:
  - Age
  - Socio-demographic characteristics (age, origin, household income and lives with parents)
  - Alcohol use
  - Psychological distress

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Main finding:

Low and average school grades were associated with mild and moderate/severe problem gambling up to eight years after graduation,

adjusted for socio demographic characteristics, psychological distress, and alcohol use

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Differences by sex and age groups

Adolescent men:

Low & average grades ⟶ mild gambling problems

Men aged 20-25 yrs:

Low grades ⟶ moderate/severe problem gambling

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Men				
	Mild problem gambling		Moderate/severe problem gambling	
	OR	95% CI	OR	95% CI
Adolescents:				
Average vs high grades	2.8	1.6-5.0	1.1	0.6-2.1
Low vs high grades	2.3	1.3-4.0	1.0	1.0-1.8
20 to 25 year-olds:				
Average vs high grades	1.1	0.3-3.4	2.2	0.6-7.2
Low vs high grades	1.2	0.4-3.7	3.2	1.0-9.8

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Women:

Low grades → moderate/ severe problem gambling

In particular for adolescents

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Women				
	Mild problem gambling		**Moderate/severe problem gambling**	
	OR	**95% CI**	**OR**	**95% CI**
Adolescents:				
Average vs high grades	1.1	0.3-3.6	10.3	1.8-59.2
Low vs high grades	0.8	0.4-2.0	6.0	1.6-22.4
20 to 25 year-olds:				
Average vs high grades	1.5	0.4-6.6	0.0	0.0-2.2
Low vs high grades	1.3	0.2-7.0	29.7	4.2-209.6

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Sensitivity analysis

In a subsample with:

- no history of gambling problems

- a 1st episode of problem gambling as outcome

Overall associations remained

Strengths and limitations

- Large sample size

- Sex stratified analysis

- Low response rate

- Difficult to separate age from time

- Unmeasured confounding?

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Conclusions

- Low school achievement, compared to high achievement, associated with gambling problems up to eight yrs after graduation

- Sex differences

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Conclusions…

Low school achievement might lead onto a life path with social problems,

where problem gambling may be one component

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