

The educational patterning of health-related adversities in individuals with major depression

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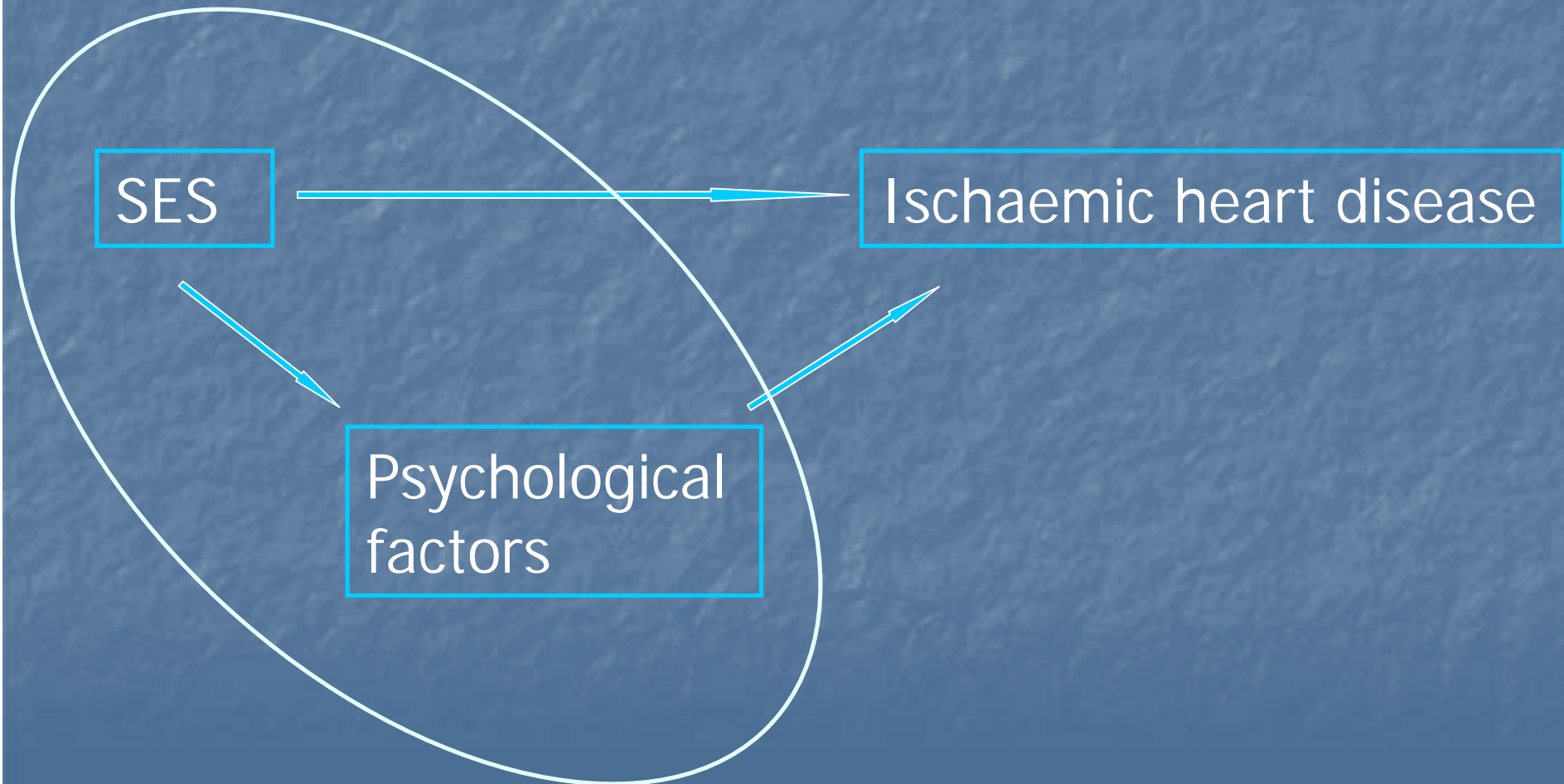
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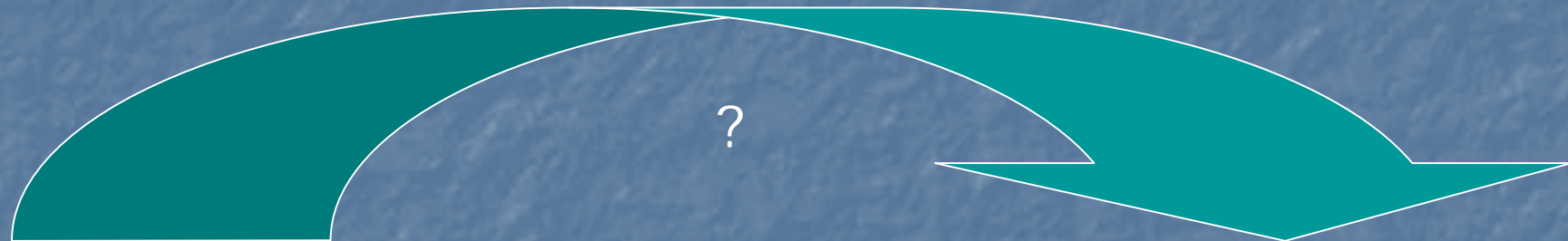
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Thesis



Background



SES

DEPRESSIVE DISORDER

HEALTH-RELATED
ADVERSITIES

- Depression prevalence
- Severity
- Suicide rates
- Life expectancy
- Persistence
- Response to treatment
- Treatment with pharmacotherapy

- Comorbidities
- Lifestyle
- Psychological function

Method

Sample & design

- n NESDA sub-sample
- n Including: individuals with current major depression, >24 yrs
- n N=992, 34.4% men, Δ age 43.2 yrs \pm 10.5
- n Cross-sectional design

Measurements

- n Education
- n Depression severity
- n No of somatic diseases
- n Metabolic syndrome*
- n Psychological function
- n Lifestyles
- n Treatment

Metabolic syndrome

Cluster of 3 or more out of 5 abnormalities, predicting cardiac risk (NCEP, ATP III)

- n Waist circumference >102 cm in men, > 88 cm in women
- n Triglycerides ≥ 1.7 mmol/L, or drug treatment
- n HDL cholesterol <1.0 mmol/L in men, <1.3 mmol/L in women, or drug treatment
- n Fasting glucose >5.6 mmol/L or drug treatment
- n Systolic BP ≥ 130 mmHg, diastolic BP ≥ 85 mmHg or drug treatment

Analyses

EDUCATION 

+ *Model 1*

age, sex, north-
european ancestry

+ *Model 2*

depression
severity

•Depression severity

•Lifestyles

} Multinomial regression

•Metabolic Syndrome

•Treatment

} Logistic regression

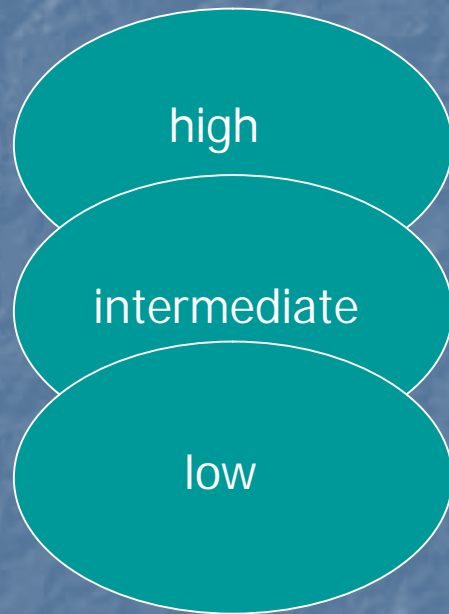
•No of somatic diseases

•Psychological function

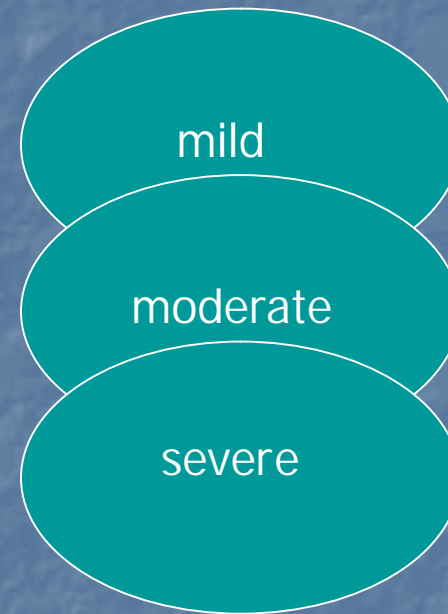
} Linear regression

Multinomial regression analyses: *Depression severity*

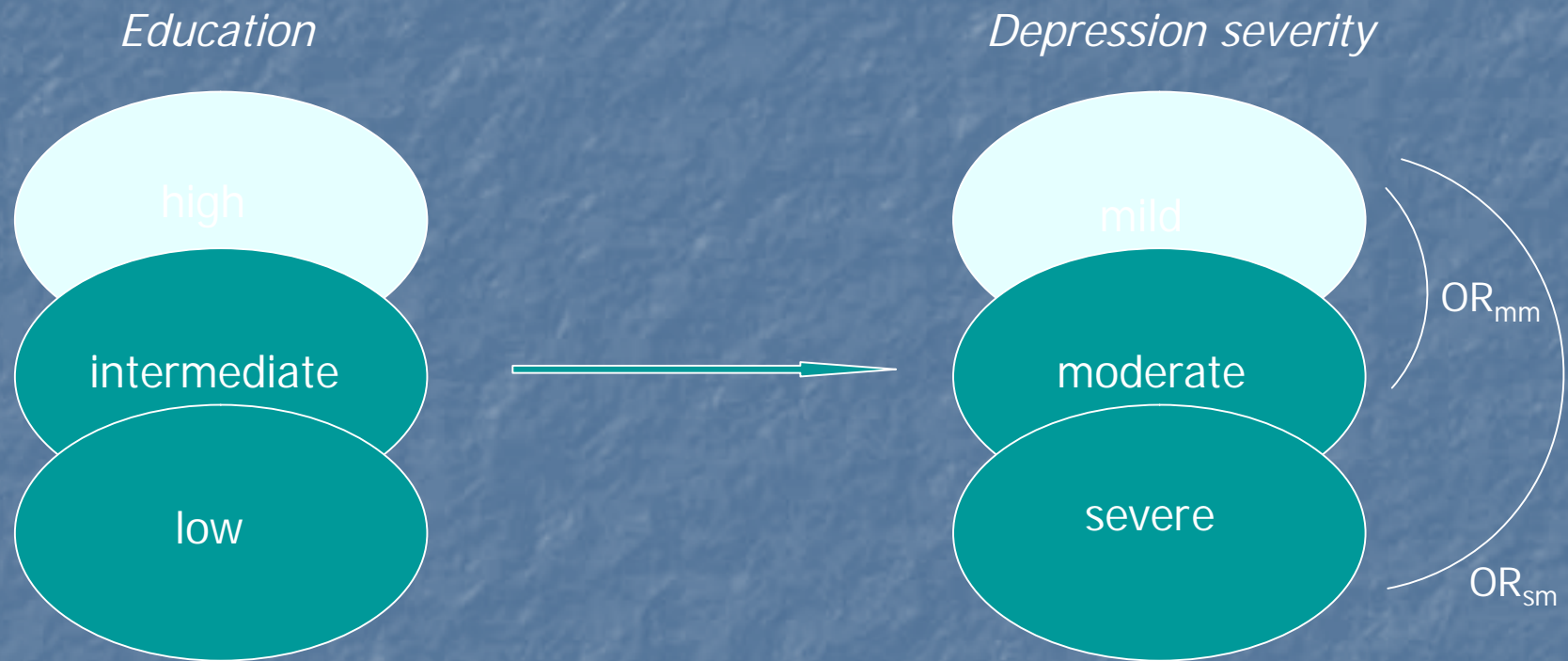
Education



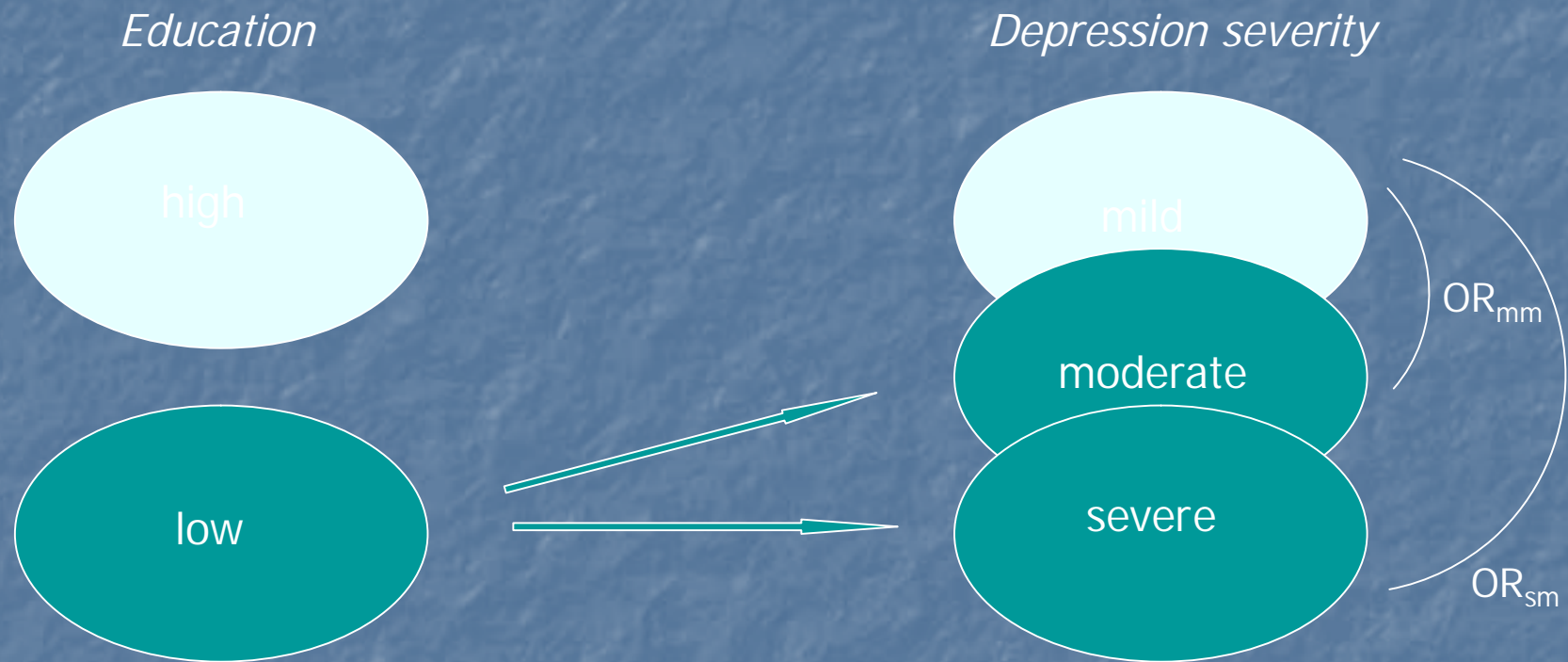
Depression severity



Multinomial regression analyses: *Depression severity*



Results of multinomial regression analyses: *Depression severity*



$OR_{mm} = 1.84 (1.23-2.75)$

$OR_{sm} = 1.66 (1.14-2.41)$

Results of multinomial regression analyses: Odds ratios for adverse *lifestyles* at low educational level

		Model 1 Education + conf	Model 2 Education + conf + depr severity
<i>Smoking</i>	Current	2.28 (1.55-3.37)	2.25 (1.52-3.33)
<i>Alcohol consumption</i>	Low (< 1 gl pw)	2.11 (1.50-2.97)	2.06 (1.46-2.90)
	Excessive (> 21 gl pw)	0.79 (0.43-1.44)	0.77 (0.42-1.42)
<i>Physical activity</i>	Low	1.51 (0.99-2.30)	1.48 (0.97-2.25)

Results of logistic regression analyses: Odds ratios for *metabolic syndrome* and *depression treatment* at low educational level

		Model 1 Education + conf	Model 2 Education + conf + depr severity
<i>Metabolic syndrome</i>		2.24 (1.51-3.32)	2.15 (1.45-3.20)
<i>Treatment</i>	Any psychotherapy	0.73 (0.55-1.02)	0.74 (0.54-1.00)
	Any antidepressant	1.54 (1.13-2.10)	1.48 (1.08-2.02)

Results of linear regression analyses: b coefficients for *no of somatic diseases* and *psychological function*

		Model 1 Education + conf	Model 2 Education + conf + depr severity
<i>No of somatic diseases</i>		0.27 (0.03-0.51)	0.24 (-0.01-0.48)
<i>Psychological function</i>	Hopelessness	1.08 (0.24 - 1.93)	0.80 (-0.02 - 1.61)
	Acceptance	0.11 (-0.29 - 0.51)	0.11 (-0.29 - 0.51)
	Aggression	0.71 (-0.09 - 1.51)	0.53 (-0.26 - 1.31)
	Control	-0.69 (-1.36 - -0.01)	-0.76 (-1.43 - -0.09)
	Risk aversion	-0.04 (-0.80 - 0.72)	-0.18 (-0.93 - 0.58)
	Rumination	-0.71 (-1.47 - 0.05)	-0.88 (-1.63 - -0.13)

In summary

In addition to

- n Depressive disorders being more prevalent at lower socioeconomic levels
- n Depressive disorders being more severe at lower socioeconomic levels

Less educated individuals with a major depression

- n smoke more
- n are more often abstinent
- n have a higher risk of the metabolic syndrome
- n tend to feel more hopelessness
- n report less control
- n are more likely to receive antidepressant medication
- n are less likely to receive psychotherapy

when compared to more highly educated peers. These educational differences are not dependent on depression severity!!!

Discussion

- n Higher susceptibility?
- n Life-course effects?
- n Treatment inequalities?

Implications

Research

- n Examine educational inequalities in depression treatment and their effect on health and on the course of the depression in a longitudinal design
- n Establish pathways (sequence) in a longitudinal design

Practical implications

- n Routine screening for excess health risk in less educated major depressed individuals?