

# Mission Impossible – explaining gender differences in health and work disability

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Based on:

**Explaining the gender differences in psychosomatic symptoms among adolescent women and men. A prospective cohort study.**

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womens health



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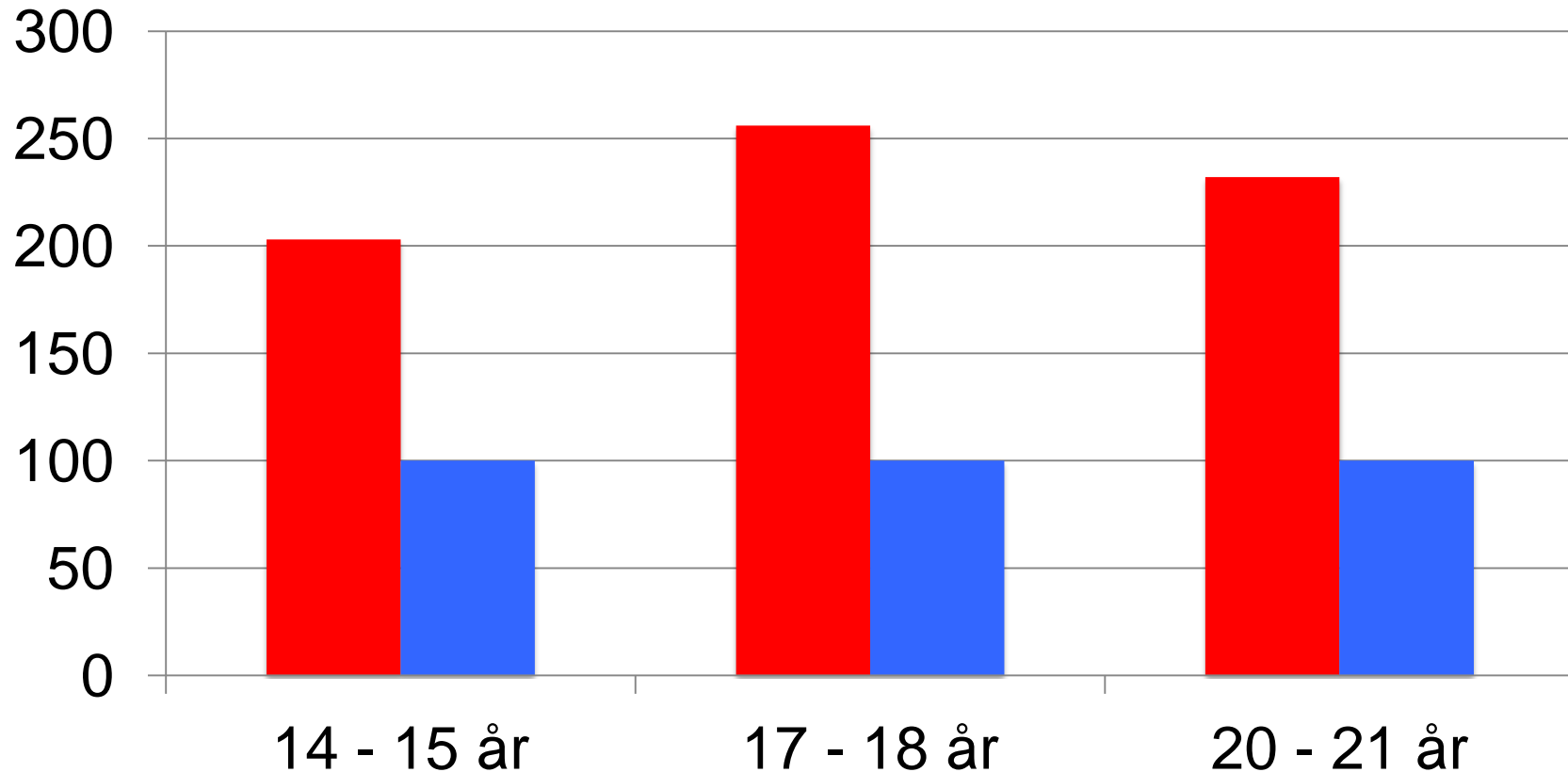


# But...

- Excess risk of sickness absence
- Prolonged duration of sickness absence
- Permanent work disability
- More frequent use of health care system
- Self-reported health, mental health
- Depression, anxiety, burnout
- Subjective health complaints



# Psychosomatic symptoms among 14-21 year olds



# Aim

- To investigate to which degree gender differences in psychosomatic symptoms could be explained by school factors, family factors, negative life events, coping style and personality



# Population

- Of a birth cohort of 3,681 born in 1989 in the county of Ringkjøbing, Denmark, 3,058 (83 %) completed a questionnaire in 2004 (age 14-15).
- Of these, 2,400 (65 %) completed a follow-up questionnaire in 2007 (age 17-18).



# Methods – psychosomatic symptoms at age 17-18 (outcome)

- Hopkins Symptom Checklist (HSCCL-90)
  - 11 of 12 items:
    - Headaches
    - Faintness or dizziness
    - Pains in heart or chest
    - Nausea or upset stomach
    - Soreness of your muscles
    - Trouble getting your breath
    - Hot or cold spells
    - Numbness or tingling in parts of your body
    - A lump in your throat
    - Weakness in parts of your body
    - Heavy feelings in your arm or legs
- Dichotomized around the quartile with most symptoms





# Methods – potential explaining factors

- Family factors
  - Family functioning (FAD-GF)
  - Parenting style (PBI-BC)
- School factors
  - Victim of bullying
  - Status in school class (MacArthur Scale of Subjective Social Status)
  - Opinion of school
- Negative life events
  - Newcomb, Huba and Bentler & The Social Stress Indicator
    - Parents divorce, parents died, parents abuse alcohol or drugs, victim of abuse, witnessed a very violent event, parents suffered a life-threatening disease or accident
- Coping style
  - Carver's Brief Coping Scale
- Personality (neuroticism)



# Methods - analysis

- Logistic regression: associations between gender and psychosomatic symptoms at age 17-18.
- Could gender disparities in psychosomatic symptoms at age 17-18 could be explained by:
  - Baseline measurements (age 14-15) of:
    - Family factors
    - School factors
    - Negative life events
  - Follow-up measurements (age 17-18) of:
    - Coping style
    - Personality (neuroticism)



# Results – gender and psychosomatic symptoms

Symptom:	Mean, females	Mean, males	P for gender difference
Headaches	2.12	1.58	<0.001
Faintness or dizziness	1.37	1.15	<0.001
Pains in heart or chest	1.31	1.24	0.005
Nausea or upset stomach	1.99	1.53	<0.001
Soreness of your muscles	1.91	1.74	<0.001
Trouble getting your breath	1.27	1.18	<0.001
Hot or cold spells	1.60	1.24	<0.001
Numbness or tingling in parts of your body	1.23	1.19	0.06
A lump in your throat	1.44	1.28	<0.001
Weakness in parts of your body	1.77	1.43	<0.001
Heavy feelings in your arm or legs	1.58	1.48	0.002

# Results – predictors of psychosomatic symptoms, females

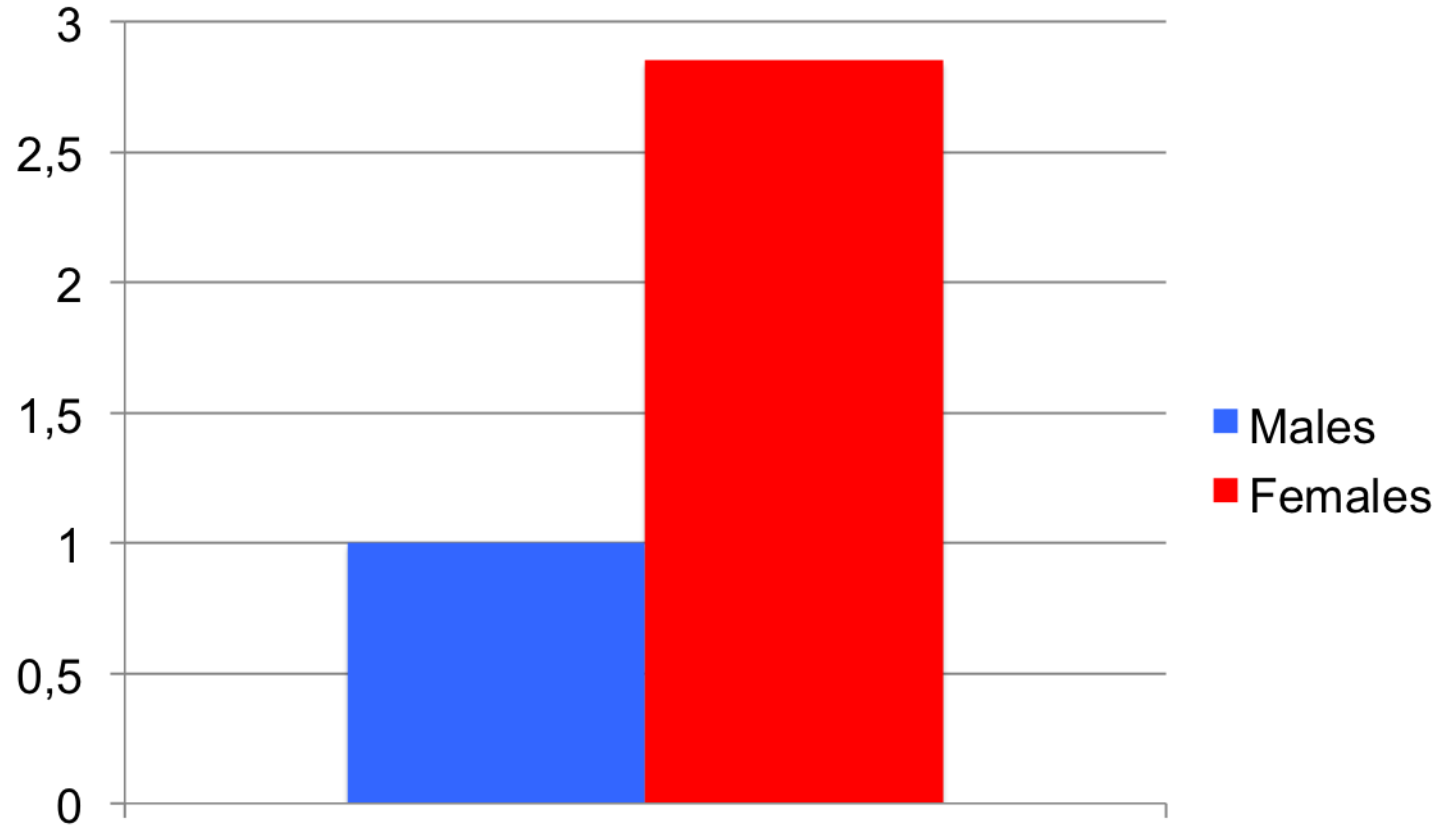
- Low socioeconomic position
  - OR = 1.3
- Low paternal care
  - OR = 1.4
- Victim of bullying
  - OR = 1.5
- Negative opinion towards school
  - OR = 1.7
- Negative life events in childhood
  - OR = 1.4



# Results – predictors of psychosomatic symptoms, males

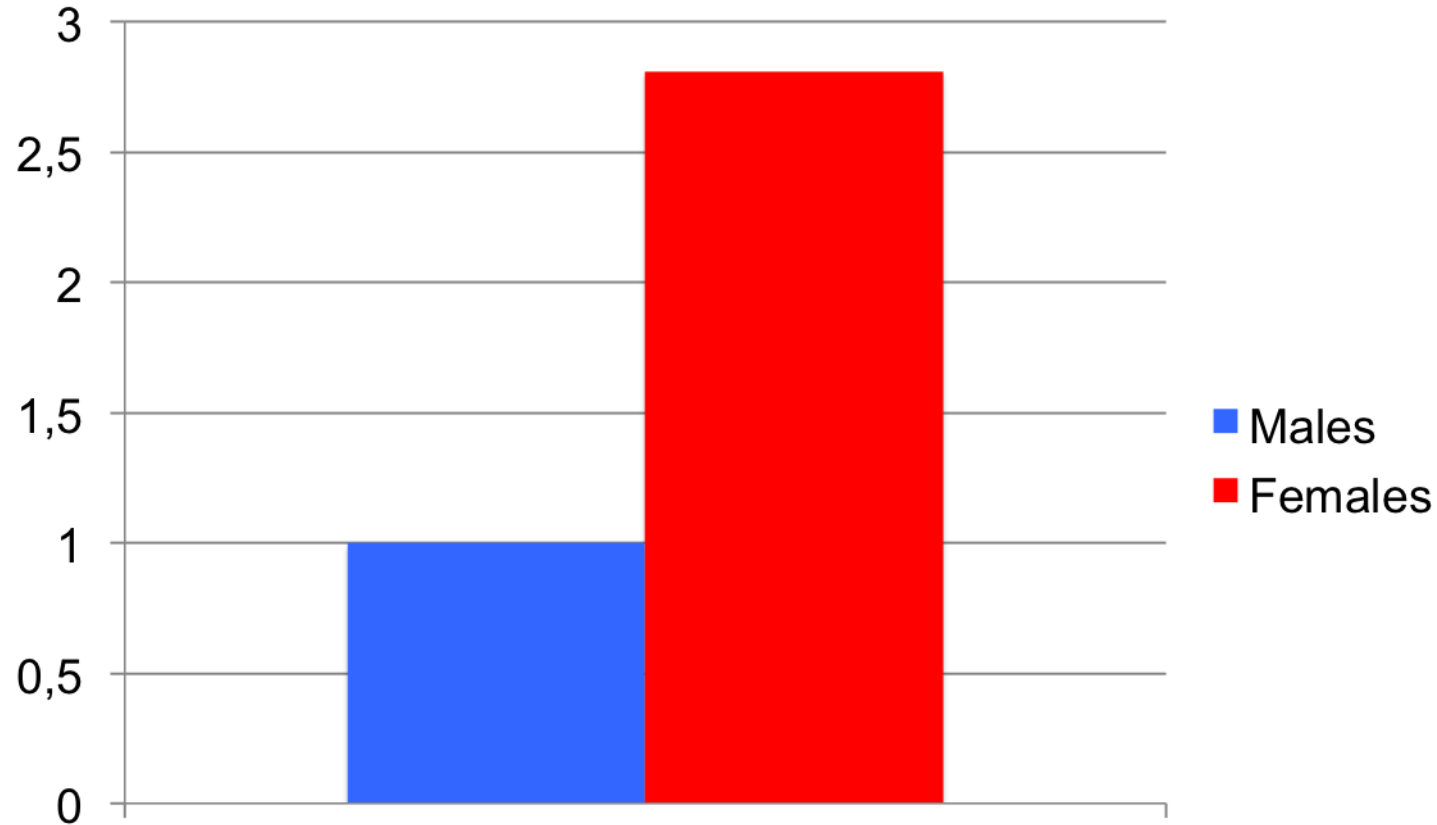
- High socioeconomic position
  - OR = 1.8
- Victim of bullying
  - OR = 2.0
- Negative life events in childhood
  - OR = 6.0

# Results – gender gap in psychosomatic symptoms – step 1



Crude OR

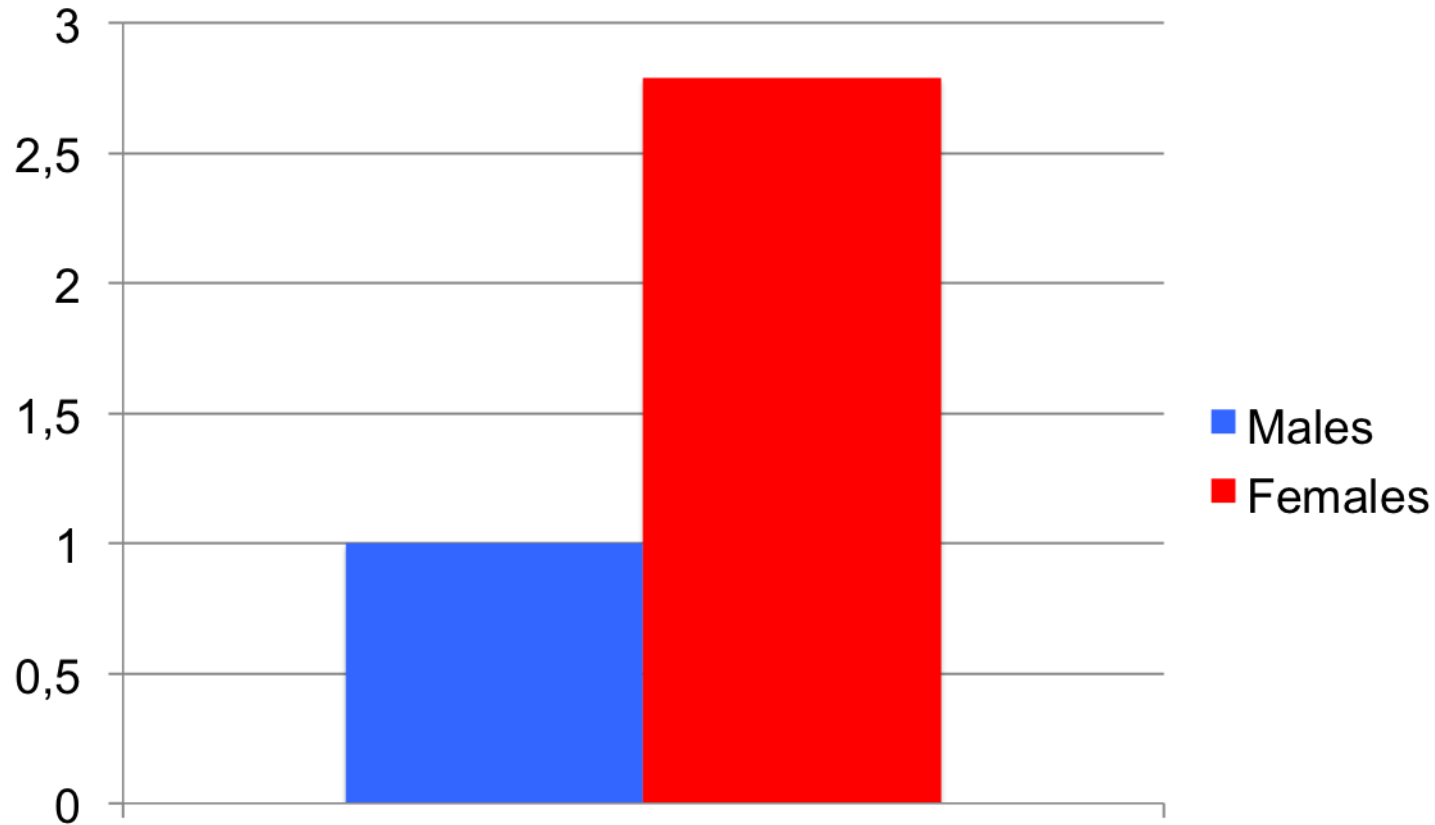
# Results – gender gap in psychosomatic symptoms – step 2



Adjusted for family factors



# Results – gender gap in psychosomatic symptoms – step 3

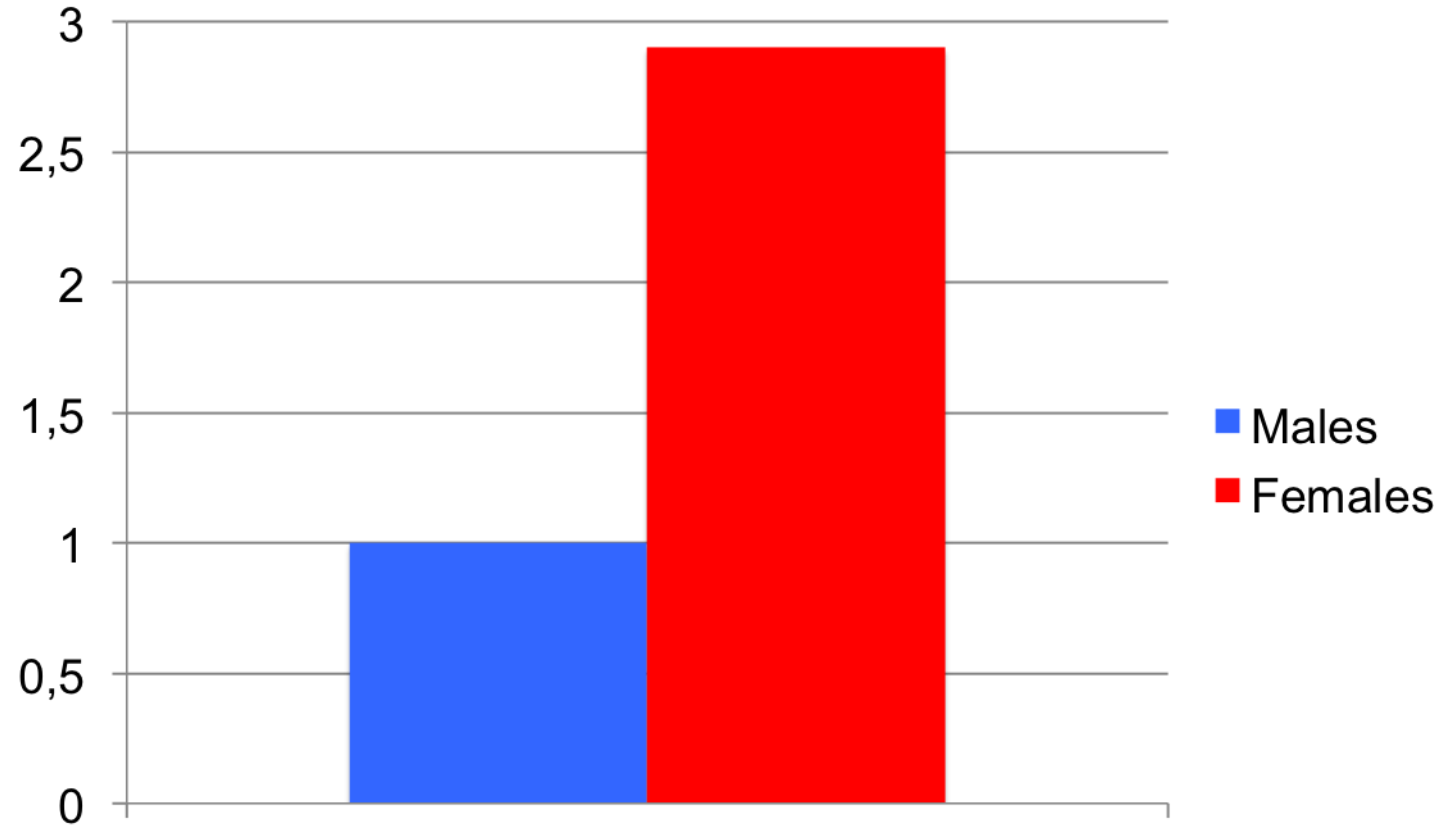


Adjusted for family factors & negative life events





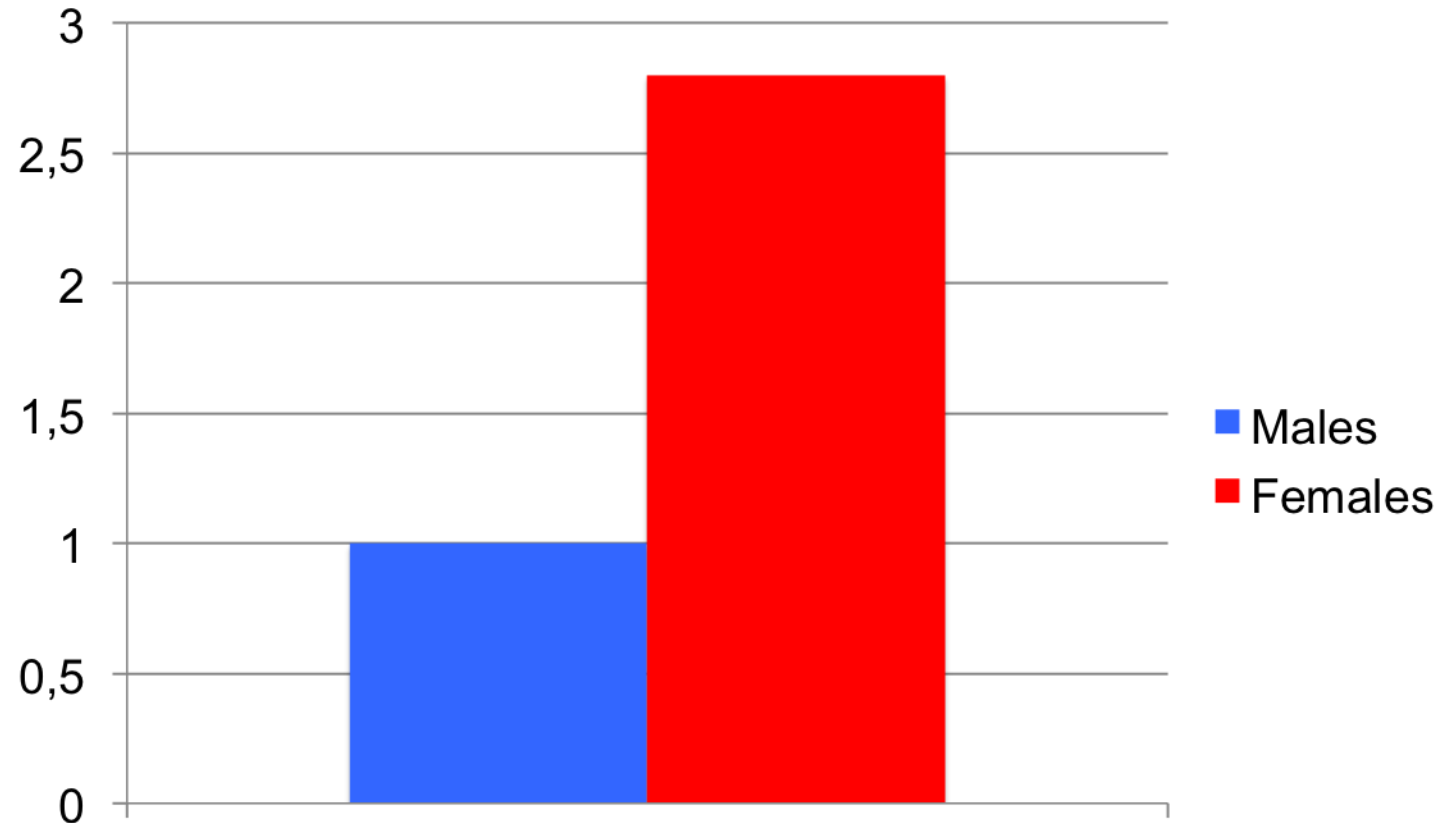
# Results – gender gap in psychosomatic symptoms – step 4



Adjusted for family factors, negative life events & school factors



# Results – gender gap in psychosomatic symptoms – step 5



Adjusted for family factors, negative life events, school factors, coping style & neurotic personality



# In conclusion

- The effect of socioeconomic position on psychosomatic symptoms was opposite for males and females
  - Females: Low paternal care, negative attitude towards school, victim of bullying, negative life events
  - Males: Victim of bullying, negative life events
- Explanations for gender disparities in reporting of psychosomatic symptoms among 17-18 year olds should be looked for outside family, school, events in early childhood, individual coping style and personality.



- Takk!
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- ...er her til torsdag 😊

