

CHILDREN FROM FAMILIES WITH PROBLEMATIC PARENTAL SUBSTANCE USE

Study of 15-25 year olds, estimating parental substance use problems, their school performance and adverse outcomes in early adulthood



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TODAYS TALK

1. The aim of my PhD thesis
2. Very briefly about the data (as it's important to understand both the strengths and limitations of the thesis)
3. Findings:
 - Family structures, living with a parent with problematic SU and outcomes in early adulthood
 - Estimate of Danish youth experiencing problematic parental substance use (PPSU)
 - School problems related to PPSU



MY PHD PROJECT

15-25 year olds' reports of parental substance use problems

+
supplementary register data for young people and their parents (period 1989-2015/2018)

Estimate



School

Family structure

Image: Kristina Flour / Unsplash

HOW DO WE BEST INVESTIGATE AN OFTEN HIDDEN PROBLEM? (FROM MY QUANTITATIVE PERSPECTIVE 😊)

Questionnaire surveys

Benefit: insight into families that are otherwise not in contact with the "system" + the hidden families

Problem: all those who don't participate... non-participants have been shown to have higher levels of different problems compared with participants

Register research

Benefit: covers the entire population + historical data

Disadvantage: only covers the most severe cases with alcohol-related hospitalizations, convictions for drug-related crimes, those seeking drug and alcohol treatment...

WHO IS INCLUDED IN THE TWO SURVEYS?

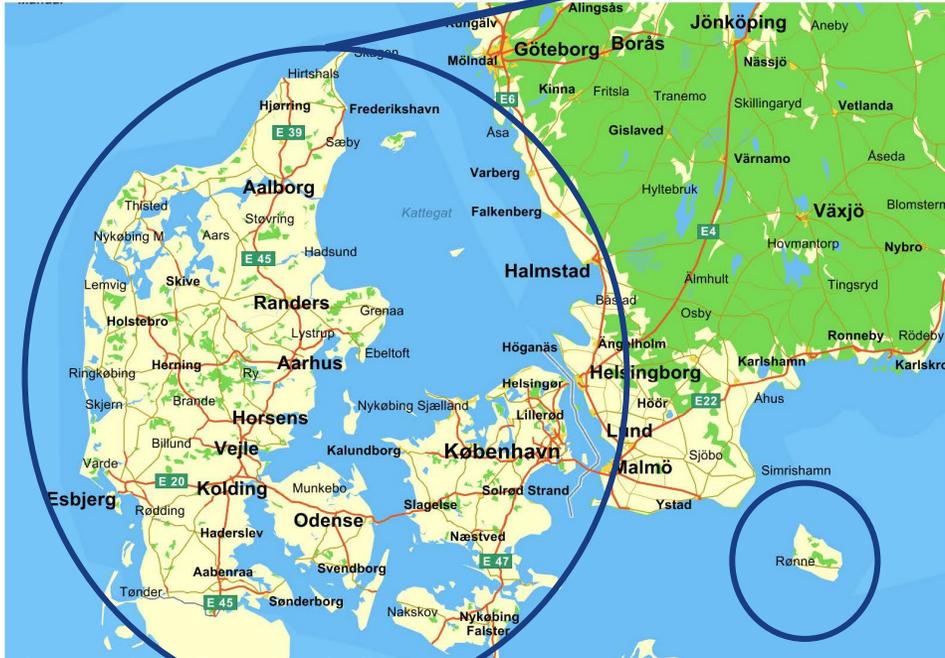


Image from Eniro/krak.dk

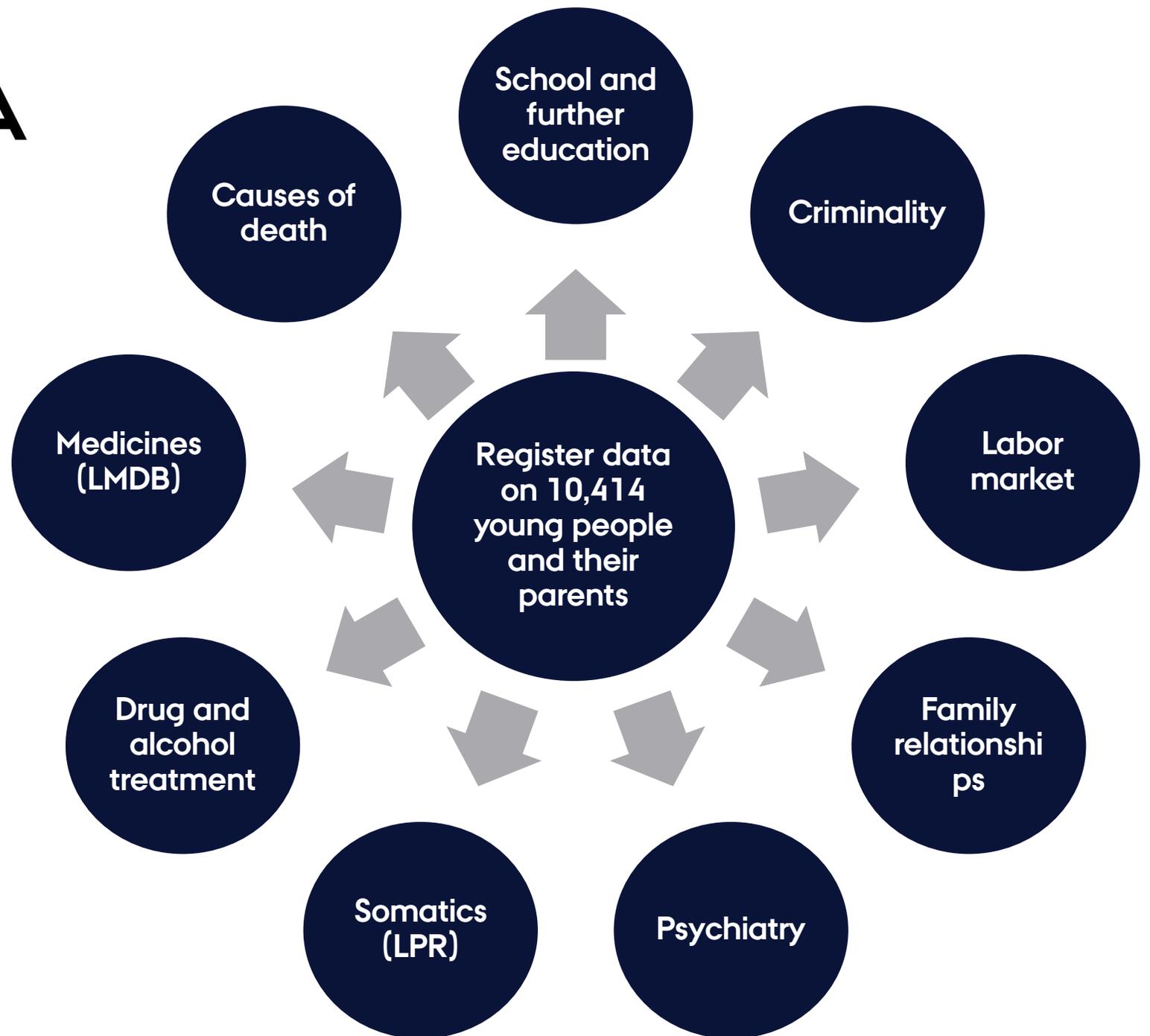
A representative sample
of Danish young people
aged 15-25 years

10,414 young people
invited (Survey 1 in 2014/
Survey 2 in 2015)

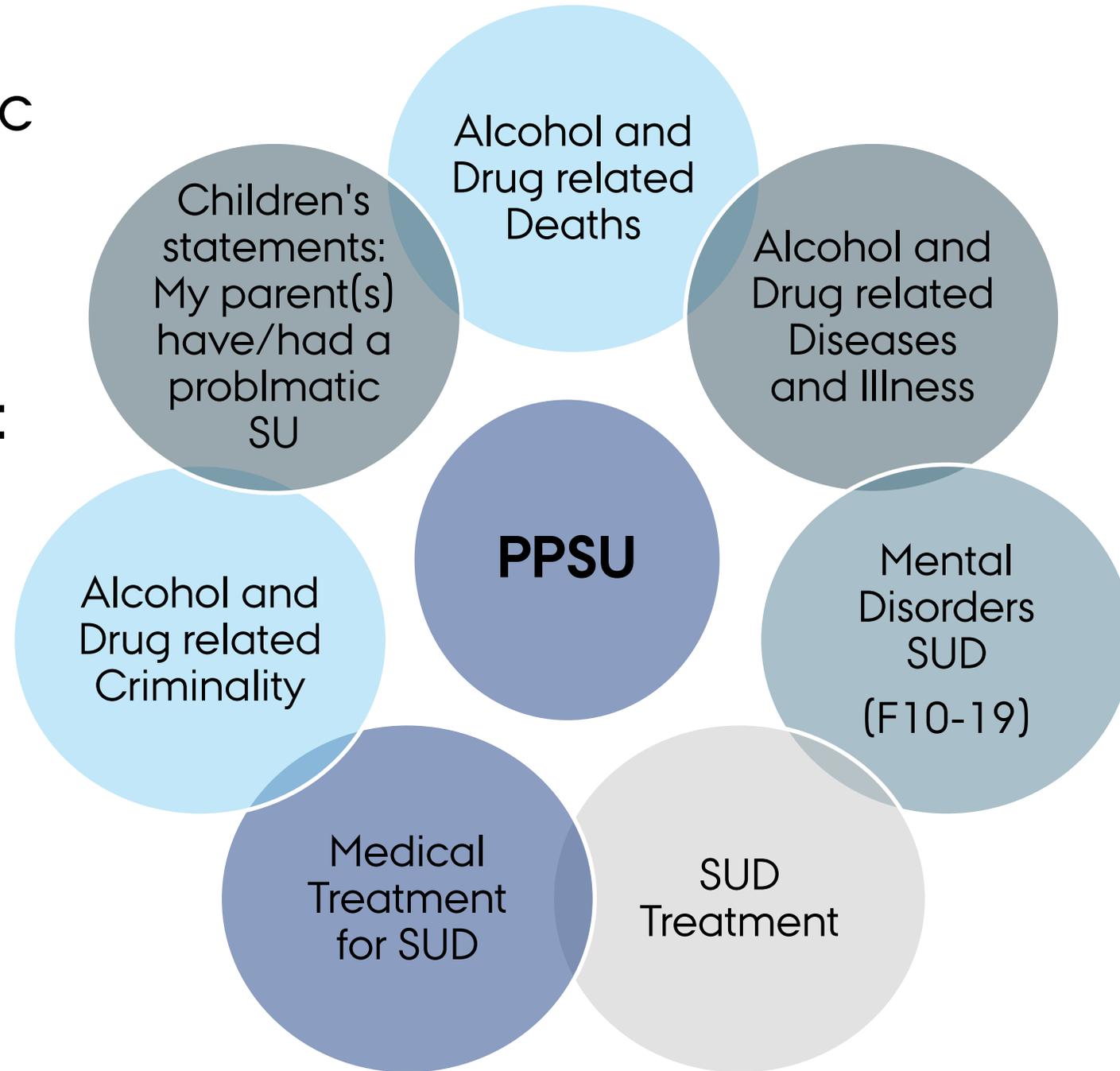
5755 young people
were interviewed

REGISTRY DATA

Various registers linked to all 10,414 young people and their parents from birth (=1989 for the eldest participants) to the time of the survey (=2015 with survey2)



**Problematic
Parental
Substance
Use
defined by:**



Estimate



School

Family
structure

Image: Kristina Flour / Unsplash

AIM OF THIS STUDY

The study examined the impact of various childhood family structures, including the presence or absence of PPSU on adverse outcomes in young adulthood:

1. NEET (Not in Education, Employment or Training)
2. Hospitals admissions
3. Mental disorders
4. Criminality



NEET



HOSPITAL ADMISSIONS



MENTAL DISORDERS



CRIMINALITY



0 YEARS

15 YEARS

15 YEARS

20 YEARS

5 DIFFERENT FAMILY STRUCTURES

Living with both parents all 15 years

- 1) without PPSU
- 2) with PPSU

Not living with both parents all 15 years

- 3) without PPSU
- 4) with PPSU, 0-4 years living with parent
- 5) with PPSU, 5-15 years residing with the respective parent

HYPOTHESIS:

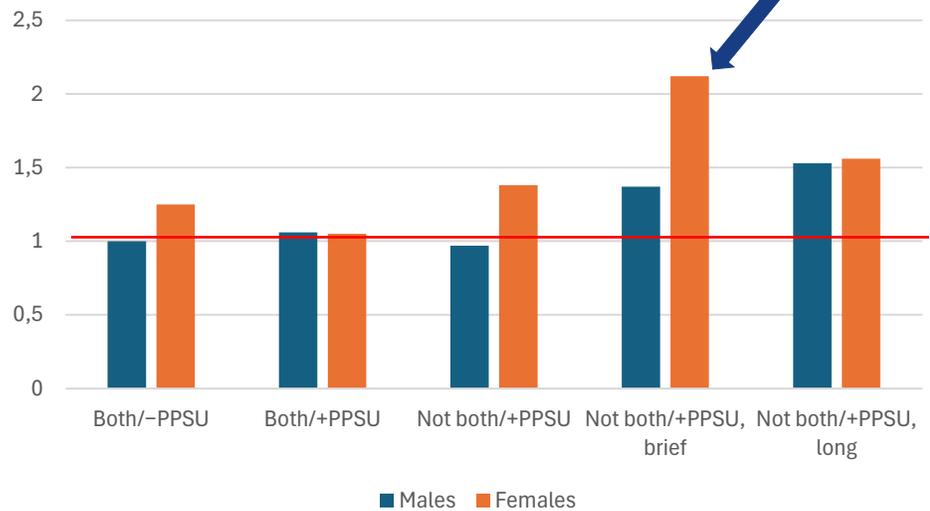
1) Protective factor of living with both parents

2) PPSU would increase the likelihood of later problems in early adulthood (15-20 years old)

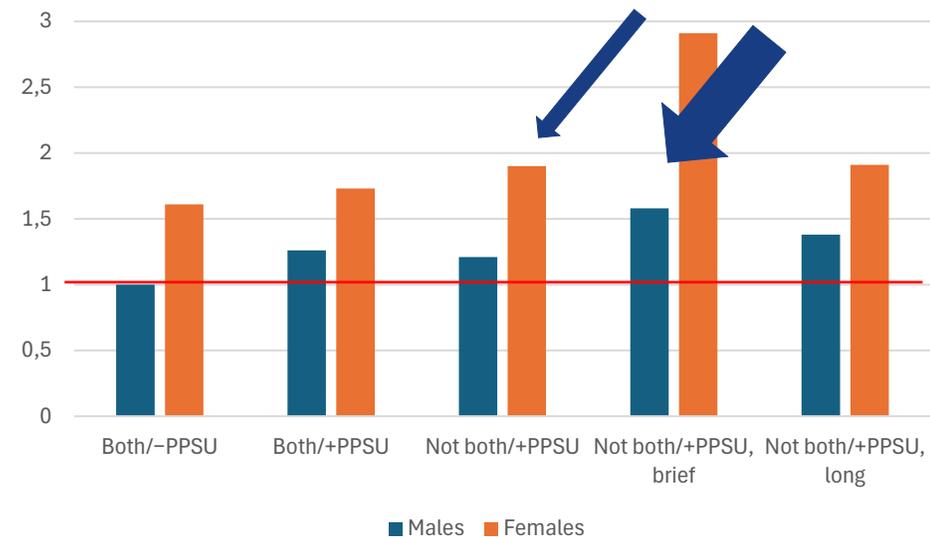
3) **Number of years** living with a parent with substance use problems will further increase the likelihood of later problems

(this would especially go for family type 2 and 5)

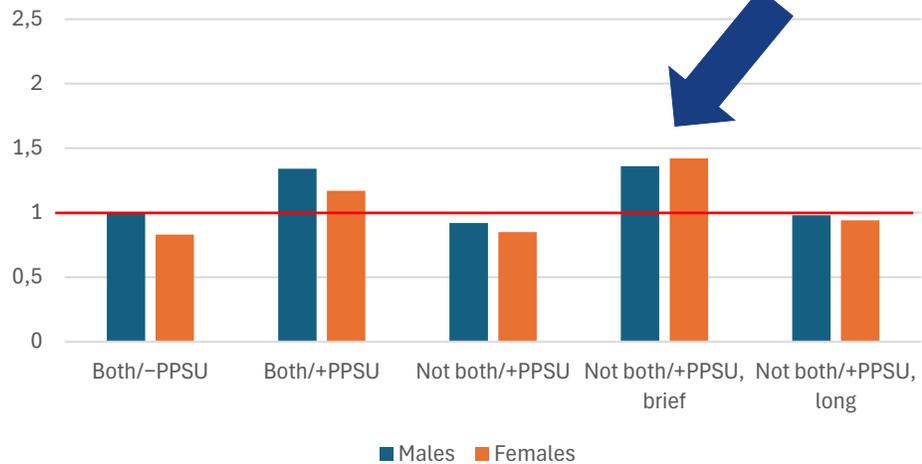
Odds of NEET



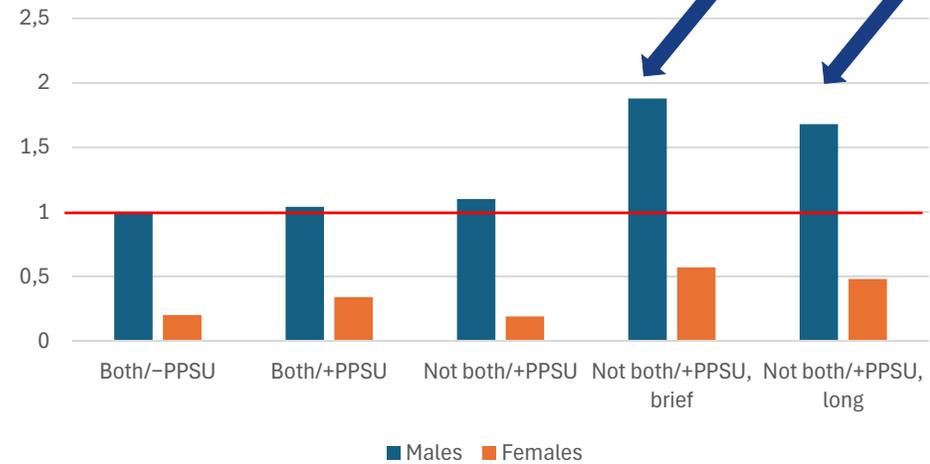
Odds of Mental Disorders



Odds of Hospital Admission



Odds of Crime



It doesn't matter so much whether the child lives with the parent who has a problematic substance use. There are other factors at play.*

Only children from one family type had a higher likelihood of problems at the age of 15-20: not living with both parents, +PPSU/0-4 years.

* All analyses controlled for
ethnicity (Danish origin vs. immigrants/descendants),
parents' highest level of education (primary education only vs. any additional education),
parental mental disorder (any record in the PCR except F10-F19 diagnoses, which were included in the PPSU measure)

parental receipt of social benefits (≥ 3 consecutive years vs. < 3 consecutive years).

HYPOTHESIS:

1: Protective factor of living with both parents - **YES**

2: PPSU would increase the likelihood of later problems in early adulthood – **PARTLY YES** (primarily if present with other problems)

3: Number of years living with a parent with substance use problems will further increase the likelihood of later problems - **NO**

IMPLICATIONS

-> social welfare and healthcare professionals in contact with young people - important not only to consider PPSU, but also the interplay with family environment, dysfunction and relations and how this affects the well-being

-> be in dialogue with parents who enter alcohol and drug treatment about how children are affected by PPSU.

CONCLUSION

Family Structure Impact: Living with both parents protected against later adverse outcomes.

PPSU Consequences: PPSU combined with not living with both parents increased the odds.

Duration with PPSU Parent: Contrary to expectations, longer periods living with a parent with PPSU did not correlate with worse outcomes compared to shorter periods.

Health and Legal Risks: Young people with PPSU & not living with both parents -> higher risks for hospital admissions, mental disorders, and criminality. (Females -> NEET)

Interventions should be mindful of these factors to better support affected individuals.

Estimate



School

Family structure

Image: Kristina Flour / Unsplash

ESTIMATE OF 15-25 YEAR OLDS HAVE PARENTS

15,2%

Includes both alcohol and drugs
+ past and current consumption



Where does the system meet parents?

Period: 1989-2015 Parents with alcohol/drug-related...	Young people, 15-25 years old N=10,414
Diseases and illnesses (National Patient Register)	1.7% (177/10,414)
Mental health disorders (psychiatry registry)	3.7% (388/10,414)
Convictions (crime register)	8.3% (860/10,414)
SUD treatment (SIB/NAB)	4.1% (n=423/10,414)
medical treatment for substance use disorders (LMDB)	8.8% (920/10,414)
cause of death	0.4% (45/10,414)
Overall (1 or more of the above switches)	15.3% (1,594/10,414)



Estimating perceived parental substance use disorder: Using register data to adjust for non-participation in survey research

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ABSTRACT

Aims: To estimate the prevalence of parental substance use disorder (PSUD) in the general population based on young adults' reports adjusted for non-participation using register-based indicators of PSUD.

Design: A national sample survey study combined with a retrospective register-based study. Setting Denmark. Participants 10,414 young people (aged 15-25 years) invited to two national sample surveys in 2014 and 2015 (5,755 participants and 4,659 non-participants).

Measurements: A crude prevalence of PSUD was calculated based on participants' reports. Parental data from medical, mortality, prescription, and treatment registers (from the young adults' birth until the time of the surveys) were used to estimate a register-based prevalence of PSUD for both participants and non-participants. Differences between participants and non-participants were analysed using bivariate comparisons. Inverse probability weighting was used to adjust for bias due to non-participation. The crude prevalence of PSUD based on survey data was adjusted using the ratio of incidence proportion of the register-based PSUD compared with the survey-based PSUD.

Findings: A total of 731 (12.7%) of the 5,755 survey participants reported PSUD. Register-based PSUD was more common among non-participants (856/4,659; 18.4%) compared with participants (738/5,755; 12.8%, OR = 1.53, 95% CI 1.38-1.70). The adjusted estimate of the survey-based PSUD increased by 2.5 percentage points, from 12.7% to 15.2%.

Conclusions: In the absence of register data, youth-reported PSUD is likely to underestimate the number of young people experiencing PSUD.

1. Introduction

Parental substance use disorder (PSUD) can have numerous negative consequences for children and young people in terms of health and welfare, including increased risk for emotional and health problems, poor performance in school, juvenile delinquency, and problems with substances in adolescence and beyond (Hanson and Chen, 2007; Johnson and Leff, 1999; Jääskeläinen et al., 2016; Smith and Wilson, 2016; Christoffersen and Sothill, 2003). Additionally, children in families with PSUD are more likely to be exposed to adverse experiences, such as insufficient and inadequate nurturing, inadequate supervision and monitoring, maltreatment, physical and psychological abuse and neglect, and domestic violence (Johnson and Leff, 1999; Christoffersen and Sothill, 2003; Raitasalo and Holmila, 2017).

It is important to shed light on how many children and families are affected by PSUD. Knowing the magnitude of the problem is an important first step in directing societal attention to detecting and helping affected families. Previous studies have estimated the prevalence of children and families affected by PSUD, but the majority are based on structured interviews of adults, parents' self-reported consumption of alcohol or drugs, or registrations of contact with different services (e.g., register-based data on hospital admissions, treatment for substance use disorders, or inpatient and outpatient mental health services) (Jääskeläinen et al., 2016; Christoffersen and Sothill, 2003; Dube et al., 2003; Sørensen et al., 2011; Taylor, 2011; Elgán and Leifman, 2013). Only a few studies have based the prevalence estimates on young people's perceptions of their parents' problems with substances (Elgán and Leifman, 2013; Bellis et al., 2014; Pisinger et al., 2017; Hanson et al.,

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CONCLUSION

1) We get a more comprehensive estimate by using both questionnaire data and registry data

2) 15.2% of Danish youth have parents with substance use problems (past or current problems)

Estimate



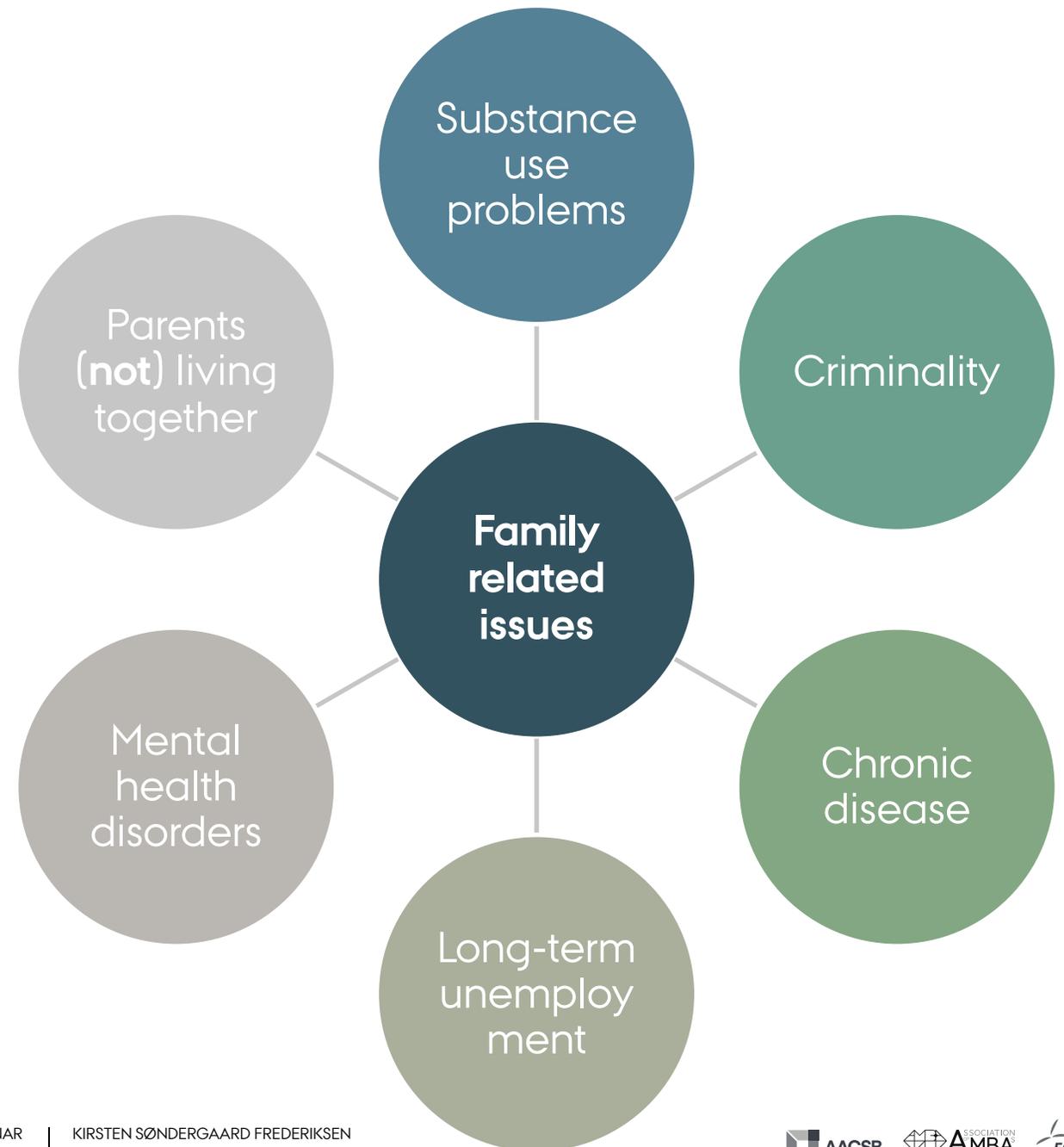
School

Family structure

Image: Kristina Flour / Unsplash

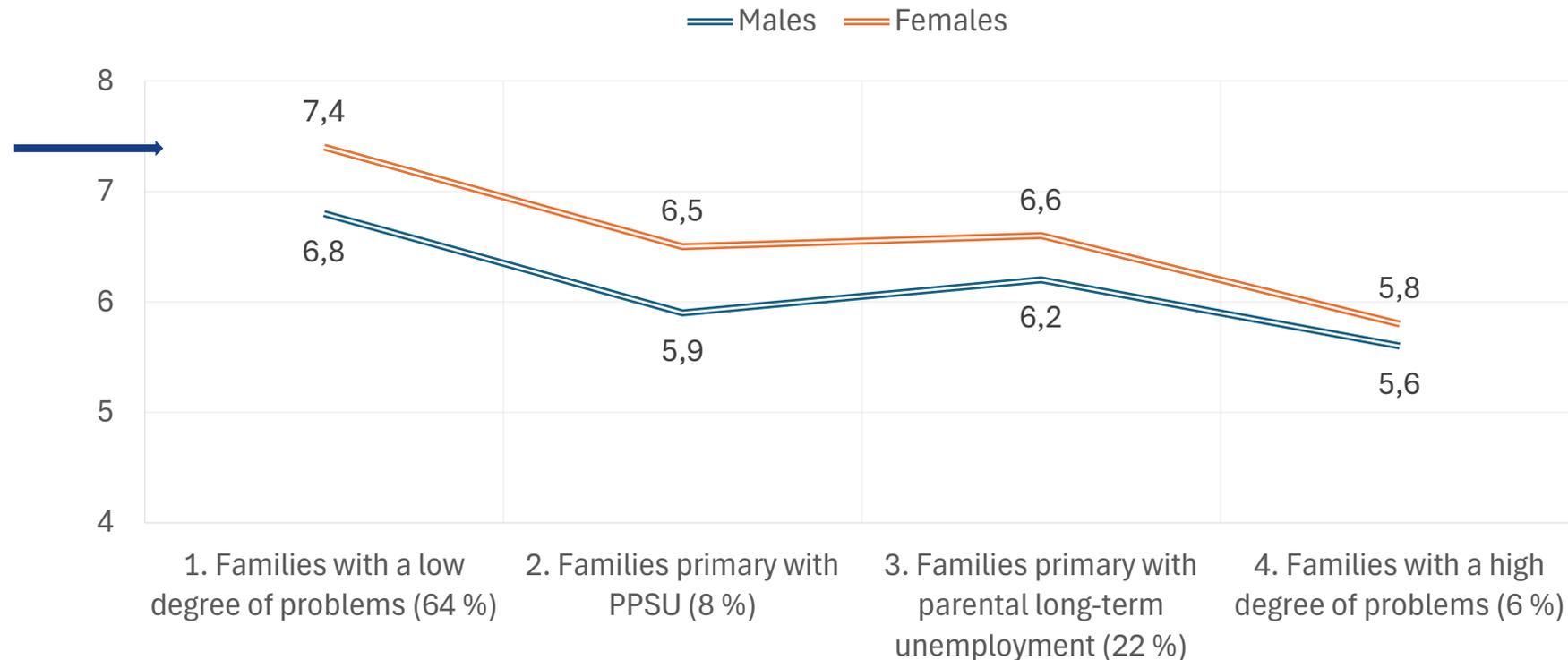
FAMILY-RELATED PROBLEMS IN THE FIRST 15 YEARS OF CHILDHOOD

Different problems of the parents/families



GRADE POINT AVERAGE, COMPULSORY SCHOOL (ON A SCALE FROM -03-12)

Average grade point at national level in 2015:
7,3



PERCENTAGE WHO DO NOT CONTINUE IN EDUCATION IN THE FOLLOWING 2 YEARS

Young people from families with different types/levels of problems:	LOW (n=4,347)	Families with PPSU (n=549)	Families with long-term unemployment (n=1,475)	HIGH (n=407)
Not in education	237 (5.5%)	48 (8.7%)	90 (6.1%)	45 (11.1%)
Men and women	Ref.	OR = 1.51 p = 0.044 95% CI: 1.01-2.26	OR = 0.91 p = 0.554 95% CI: 1.01-2.26	OR = 1.78 p = 0.016 95% CI: 1.11-2.26
Women's	Ref	OR = 2.16 p = 0.009 95% CI: 1.22-3.85	OR = 2.08 p = 0.002 95% CI: 1.32-3.28	OR = 3.41 p < 0.001 95% CI: 1.96-5.93



The impact of parental substance use disorder and other family-related problems on school related outcomes



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ABSTRACT

Aims: To identify young people with different levels of family-related problems, including parental substance use disorder (PSUD), and investigate differences in grades at graduation from compulsory school and further enrollment in education.

Methods: Participants included 6784 emerging adults (aged 15–25 years) from samples drawn for two national surveys in Denmark 2014–2015. Latent classes were constructed using the following parental variables: PSUD, offspring not living with both parents, and parental criminality, mental disorders, chronic diseases and long-term unemployment. The characteristics were analyzed using an independent one-way ANOVA. Differences in grade point average and further enrollment were analyzed using linear regression and logistic regression, respectively. **Results:** Four classes of families were identified: 1. "Low adverse childhood experiences (ACE) families", 2. "Families with PSUD", 3. "Families with unemployment" and 4. "High ACE families". There were significant differences in grades, with the highest average among youth from "Low ACE families" (7.11, 95% CI: 7.04–7.18) and lower averages among youth from the other types of families ("Families with PSUD" = 6.20, 95% CI: 6.00–6.41; "Families with unemployment" = 6.39, 95% CI: 6.27–6.52; "High ACE families" = 5.66, 95% CI: 5.42–5.90). Youth from "Families with PSUD" (OR = 1.65; 95% CI: 1.19–2.29) and "High ACE families" (OR = 2.25; 95% CI: 1.58–3.20) were significantly more likely not to be enrolled in further education compared with "Low ACE families".

Conclusions: Young people who experience PSUD, both as the primary family-related problem as well as among multiple family-related problems, are at increased risk for negative school-related outcomes.

CONCLUSION

1. Four types of family with different levels of family problems
2. Lower average for children with multiple family problems
3. Young people from the two family types with substance abuse problems -> more likely to NOT continue in education in the following 2 years

1. Introduction

How do family-related problems affect children's success in school and their educational attainment? School is perhaps the most pivotal context outside the home and where children spend a significant amount of time. Success in school and academic achievements have an effect on the later health, well-being and problem behavior of individuals (Gauffin et al., 2013; Hawkins et al., 1992; Herke et al., 2020; Johnson and Leff, 1999). At a societal level, governments often focus on educational attainment as a tool to promote social mobility (Landersø and Heckman, 2017), and researchers have argued (and debated) how having a well-educated general population is economically beneficial (Browne et al., 2010; Hanushek, 2016). School is often seen as a catalyst for changes in families (Chilton et al., 2015), or at least as an institution with possibilities for reducing social inequalities and increasing social mobility (Iannelli, 2013).

This points to the importance of looking into the impact of adverse family background for success or failure in the educational system. Chil-

dren enter the school environment and navigate through the school years with varying levels of family-related problems and adverse childhood experiences (ACEs), including parental substance use disorders (PSUD), parental mental disorders, parental early death, neglect and domestic violence. Research has shown how different kinds of ACEs can impact not only family life but also children's relations to other children and adults, later mental health, and substance use (Bellis et al., 2015; Björkenstam et al., 2017; Dovran et al., 2019; Dunn et al., 2013; Kessler et al., 2010). The severity, level and number of ACEs also correlate with school hardship and learning difficulties (Dovran et al., 2019), schooling attainment (Cawley et al., 2001), as well as lack of school engagement, school absenteeism and repeating grades (Crouch et al., 2019; Robles et al., 2019).

PSUD is of particular interest, as it is a potentially modifiable ACE. Children living with PSUD experience more challenges in the school setting compared with their peers (Sher, 1997) and are at greater risk for low academic performance, skipping school days and dropping out of school (Berg et al., 2016b; Casas-Gil and Navarro-

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MAIN CONCLUSIONS OF THE THESIS

1. **Estimate.** Multiple data sources - more comprehensive estimate: 15.2% of 15-25 year olds have parents with a current or past substance use problem
2. **School.** Graduation and further education largely depends on the amount of family-related problems, but also the type of problems and the gender of the child.
3. **Family structures.** not living with both parents + parental substance use problems + short period of residing with the respective parent - significantly more problems in early adulthood

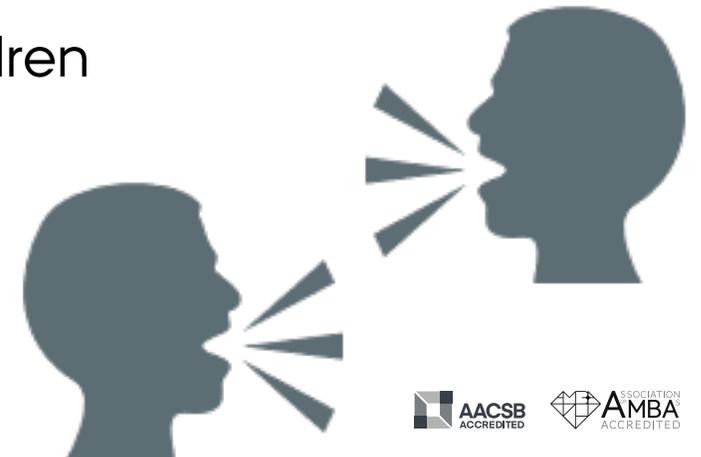
STATEMENT OPEN FOR DISCUSSION



Significant difference in the consequences for children, highly influenced by the type and quantity of other family issues.

In a family where PPSU is the primary concern and there are fewer conflicts and disruptions, the consequences are not more present compared with families without PPSU.

Consequences become much greater when parents and children also have to deal with conflicts, divorce, mental disorders, or criminality on top of it.



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