



# 4th z-proso International Network (zIReN) meeting

Bayes Centre, University of Edinburgh



THE UNIVERSITY  
of EDINBURGH



University of  
Zurich<sup>UZH</sup>



## WORKSHOP PROGRAMME

**1<sup>st</sup>-3<sup>rd</sup> September 2022**  
**Edinburgh (UK)**

### **Thursday, 1<sup>st</sup> September 2022**

The Bayes Centre, 47 Potterrow, Edinburgh EH8 9BT

#### **9:00-9:30** Arrival and coffee

The atrium of the Bayes Centre

#### **Welcome & updates from the z-proso team**

The Bayes Centre Room G.03

#### 9:30-9:40 *Welcome & introduction to z-proso*

#### 9:40-10:00 *z-proso Phase VI (2021-2024)*

**Denis Ribeaud**, Jacobs Center for Productive Youth Development, University of Zurich

#### 10:00-10:20 *Fieldwork z-proso data collection wave 9 (2022)*

**Céline Gloor**, Jacobs Center for Productive Youth Development, University of Zurich

#### 10:20-10:30 *Brief updates on the JEA special issue and the NextGen study*

**Lilly Shanahan**, Jacobs Center for Productive Youth Development & Department of Psychology, University of Zurich

#### 10:30-10:50 *Human development through the z-proso lens: Reflections on achievements and future directions*

**Manuel Eisner**, Institute of Criminology, University of Cambridge & Jacobs Center for Productive Youth Development, University of Zurich

#### 10:50–11:20 Coffee Break

The atrium of the Bayes Centre



## **Research talks session 1: Decades-to-Minutes (chair: Ingrid Obsuth)**

The Bayes Centre Room G.03

11:20-11:40 *The 'Decades-to-Minutes' study: An update on key findings and new directions*

**Aja Murray**, Department of Psychology, University of Edinburgh

11:40-12:00 *Associations between bullying victimisation in adolescence and daily life stress and social experiences in adulthood*

**Sam Henry**, Department of Psychology, University of Edinburgh

12:00-12:20 *The role of student-teacher relationships in the association between adverse parenting and emotion dynamics – combining longitudinal and ecological momentary assessment data*

**Anna Talty**, Clinical and Health Psychology, University of Edinburgh

12:20-12:50 Questions and Discussion

12:50–14:10 Catered lunch

The atrium of the Bayes Centre

## **Research talks session 2: Offending behaviour (Chair: Lilly Shanahan)**

The Bayes Centre Room G.03

14:10-14:30 *Panel effects in self-reported offending in longitudinal studies: A quasi-experiment using the z-proso study*

**Hugo Gomes**, Center for Psychology, University of Porto

14:30-14:50 Does early victimization influence legal socialization? Evidence from the Zurich project on the social development from childhood to adulthood

**Amy Nivette**, Department of Sociology, Utrecht University

14:50-15:10 Questions and Discussion

**Research talks session 3: Temporal perspectives (Chair: Aja Murray)**

The Bayes Centre Room G.03

15:10–15:30 *Does unstructured unsupervised socializing with peers induce short-term mindsets?*

**Sebastian L. Kübel**, Max Planck Institute for the Study of Crime Security and Law

15:30–15:50 *Effect of early and enduring interactions with the police on short-term mindsets*

**Jessica Deitzer**, Department of Criminology, Max Planck Institute for the Study of Crime Security and Law

15:50–16:10 *The association of adolescent stressful life experiences on adult future self-continuity and concurrent outcomes*

**Benjamin Ganschow**, Institute of Education and Child Studies, University of Leiden

16:10–16:40 Questions and Discussion

16:40–17:10 Coffee break

The atrium of the Bayes Centre

17:10-18:10 Early career network launch (Led by **Sam Henry**)

The Bayes Centre Room G.03

18:30-20:30 Dinner at Scott's Restaurant

4-6 Victoria Ter, Edinburgh EH1 2JL



## **Friday, 2<sup>nd</sup> September**

The Bayes Centre, 47 Potterrow, Edinburgh EH8 9BT

### **9:15-9:45** Arrival and coffee

The atrium of the Bayes Centre

### **9:45-10:00** Introductions from organisers/PIs

The Bayes Centre Room G.03

### **Research talks session 1: Parents** (Chair: **Manuel Eisner**)

The Bayes Centre Room G.03

10:00-10:20 *Change dynamics and associations of self-control, parental involvement, internalizing problems, and prosociality from early to late adolescence*

**Fabiola Silletti**, Department of Education, Psychology, Communication, University of Bari Aldo Moro

10:20-10:40 *Youth-to-parent aggression in adolescence and associations with parenting behaviors*

**Laura Bechtiger**, Jacobs Center for Productive Youth Development, University of Zurich

10:40-11:00 *Parental practices in childhood as longitudinal predictors of substance use later in life: The mediating role of self-control*

**Izabela Zych**, Department of Psychology, Universidad de Córdoba

11:00-11:30 Questions and Discussion

11:30-12:00 Coffee break

The atrium of the Bayes Centre

**Research talks session 2: Substance use (Chair: Denis Ribeaud)**

The Bayes Centre Room G.03

12:00–12:20 *Associations between drug use and well-being in the period of young adulthood: Insights from hair analysis in a community sample*

**Lydia Johnson-Ferguson**, Jacobs Center for Productive Youth Development, University of Zurich

12:20–12:40 *Childhood correlates of cocaine use among young people in Zurich*

**Cesar Leos-Toro**, Jacobs Center for Productive Youth Development, University of Zurich

12:40–13:00 *Tobacco use, cannabis use, self-control and violence: Disentangling relations from early adolescence to early adulthood*

**Michelle Loher**, Jacobs Center for Productive Youth Development, University of Zurich

13:00-13:30 Questions and Discussion

13:30–14:40 Catered lunch

The atrium of the Bayes Centre

**Research talks session 3: Violence against women (Chair: Aja Murray)**

The Bayes Centre Room G.03

14:40–15:00 *Examining the link between violence against women and violent extremism*

**Bettina Rottweiler**, Security and Crime Science, University College London

15:00–15:20 *Guardianship, perceived safety, and bystander intervention*

**Shaina Herman**, Max Planck Institute for the Study of Crime Security and Law

15:20–15:40 *Predictors and mediators of violence against women attitudes among second-generation refugee, migrant and native adolescents in Zurich, Switzerland*

**Lana Ghuneim**, School of Law, University of Sheffield

15:40–16:10 Questions and Discussion

16:10–16:40 Coffee break

The atrium of the Bayes Centre

**Research talks session 4: Peers and teachers** (Chair: **Ingrid Obsuth**)

The Bayes Centre Room G.03

16:40-17:00 *Increased stress reactivity threshold in victims of bullying*

**Jens Heumann**, Jacobs Center for Productive Youth Development & Social Genomics, University of Zurich

17:00-17:20 *A longitudinal investigation of the dual system model of adolescent risk-taking: Evaluating the effect of affiliating with high-risk taking peers*

**Lydia Gabriela Speyer**, Department of Psychology, University of Cambridge

17:20-17:40 *Teacher-student, teacher-parents and teacher-teacher relationships as predictors of educational outcomes*

**Vicente J Llorent**, Department of Education, Universidad de Córdoba

17:40-18:10 Questions and Discussion

19:00-20:30 Dinner at Howie's Restaurant

29 Waterloo Place, Edinburgh EH1 3BQ



**Saturday, 3<sup>rd</sup> September**

Mary Kings Close Tour: 12:15 and 12:30 starts for two groups.



## DAY 1

### **Research talks session 1: Decades-to-Minutes**

#### **The 'Decades-to-Minutes' study: An update on key findings and new directions**

Aja Murray<sup>1</sup>, Lydia Speyer<sup>2</sup>, Ruth Brown<sup>3</sup>, Yi Yang<sup>1</sup>, Xinxin Zhu<sup>1</sup>, Zhuoni Xiao<sup>1</sup>

<sup>1</sup>Department of Psychology, University of Edinburgh, UK

<sup>2</sup>Department of Psychology, University of Cambridge, UK

<sup>3</sup>Clinical Psychology Department, University of Edinburgh, UK

The 'Decades-to-Minutes' study is an ecological momentary assessment (EMA) sub-study of z-proso. In this presentation I will provide an update on key findings from the study since the last z-proso meeting. These updates include new findings on daily life stress, substance use, and emotion regulation and an exploration of 'place-based' factors on mental health using linkage to geospatial information system (GIS) databases. Future directions, including ongoing and planned work using the dataset to illuminate development from a 'multi-timeframe' perspective will also be discussed.

#### **Associations between bullying victimisation in adolescence and daily life stress and social experiences in adulthood**

Sam Henry<sup>1</sup>, Izabela Zych<sup>2</sup>, Ingrid Obsuth<sup>3</sup>, Lilly Shanahan<sup>4,5</sup>, Denis Ribeaud<sup>4</sup>, Manuel Eisner<sup>4,6</sup>, Aja Murray<sup>1</sup>

<sup>1</sup>Department of Psychology, University of Edinburgh, UK

<sup>2</sup>Department of Psychology, Universidad de Córdoba, Spain

<sup>3</sup>Clinical and Health Psychology, University of Edinburgh

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<sup>5</sup>Department of Psychology, University of Zurich, Switzerland

<sup>6</sup>Institute of Criminology, University of Cambridge, UK

Bullying has a number of undesirable consequences for young people, both perpetrators and victims. While substantial research has examined the long-term consequences of bullying on mental health and well-being, how it manifests on a day-to-day basis is less well understood. In the present study, we will explore how bullying and victimization in early adolescence relate to daily life stress in early adulthood, in order to investigate the potential long-term effects bullying has on everyday life. Using ecological momentary assessment (EMA) data, we will implement dynamic structural equation modeling to examine whether early-adolescent experiences of bullying – victim, perpetrator, or both – predict frequency

## DAY 1

and variance of stress, provocations, and aggressive behaviors, as well as the relationship between the latter two. Understanding how previous experiences of bullying contributes to day-to-day behavior and mental health can help researchers generate new hypotheses about the long-term impact of bullying, while potentially pinpointing specific intervention targets by utilizing an ecologically valid assessment technique.

### **The role of student-teacher relationships in the association between adverse parenting and emotion dynamics – combining longitudinal and ecological momentary assessment data**

Anna Talty<sup>1</sup>, Lydia Speyer<sup>2</sup>, Manuel Eisner<sup>3,4</sup>, Denis Ribeaud<sup>3</sup>, Aja Murray<sup>5</sup>, Ingrid Obsuth<sup>1</sup>

<sup>1</sup>Clinical and Health Psychology, University of Edinburgh

<sup>2</sup>Department of Psychology, University of Cambridge, UK

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<sup>5</sup>Department of Psychology, University of Edinburgh

**Introduction:** Negative affectivity, emotional inertia, and emotional lability are distinct aspects of emotional dysregulation, increasingly implicated as transdiagnostic risk factors in the aetiology of psychopathology. Adverse parenting has shown to be associated with emotion regulation difficulties in early adulthood and it has been suggested that a positive student-teacher relationship may attenuate this association. This project aimed to explore these links using longitudinal and ecologically-valid data.

**Method:** A sample of n=262 young people enrolled in the 'Decades-to-Minutes' (D2M) study provided data from the ages of 7 to 20 via parent- and self-report questionnaires and ecological momentary assessment. Data were analysed using Dynamic Structural Equation Modelling (DSEM).

**Results:** Student-teacher relationships significantly predicted negative affectivity and emotional lability and significantly interacted with adverse parenting to impact levels of negative affectivity. Adverse parenting did not predict emotional dysregulation outcomes in adulthood.

**Conclusion:** The findings suggest student-teacher relationships as potential protective factors in the socioemotional development of children and young people.

**DAY 1**

**Research talks session 2: Offending behavior**

**Panel effects in self-reported offending in longitudinal studies: A quasi-experiment using the z-proso study**

Hugo Gomes<sup>1</sup>, David P. Farrington<sup>2</sup>, Manuel Eisner<sup>2,3</sup>

<sup>1</sup>Center for Psychology, University of Porto

<sup>2</sup>Institute of Criminology, University of Cambridge, UK

<sup>3</sup>Jacobs Center for Productive Youth Development, University of Zurich, Switzerland

Current knowledge about the development of offending behavior is largely reliant on information derived from longitudinal research. However, the longitudinal design may influence the quality of self-report measures. There is some evidence in the literature suggesting that participants' reports of offending behavior decrease as a function of the number of prior interviews. This potential biasing factor is often referred to as testing effects (i.e., 'any alterations of a subject's response to a particular item or scale caused by the prior administration of the same item or scale' Thornberry, 1989, p. 361). Nevertheless, methodological research on the extent to which testing effects influence the quality of self-reports of offending is very scarce. In the present study using the Z-Proso data, we have considered a group of participants who missed some waves of data collection as a treatment group. On the other hand, using propensity score matching, we were able to create a control group of participants that participated in all waves of data collection. Our findings will provide evidence on the extent to which self-reports of offending are affected by testing effects in large-scale longitudinal studies. These results will provide evidence on the extent to which longitudinal studies are impacted by testing effects, as well as provide valuable information on how to mitigate these biasing factors and improve the validity of longitudinal assessments of offending behavior.

**Does early victimization influence legal socialization? Evidence from the Zurich project on the social development from childhood to adulthood**

Christof Nagel<sup>1</sup>, Amy Nivette<sup>1</sup>, Ingrid Obsuth<sup>2</sup>, Denis Ribeaud<sup>3</sup>, Manuel Eisner<sup>3,4</sup>

<sup>1</sup>Department of Sociology, Utrecht University, Netherlands

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Experiences of violent crime during adolescents' formative years have been linked to legal socialization in previous research. However, extant studies tend to be limited by the availability of relevant covariates for the matching process. The present project proposes a structural approach to identify the consequences of early victimization among respondents that participated in longitudinal panel survey from childhood to adolescent in Zurich. The aims of the project are to combine different matching procedures (Propensity Score Matching, Entropy Balancing, Coarsened Exact Matching) using a large host of covariates measured at age 7-9 to separate groups into a treatment condition with 'criminal/violent' victimization at age 11/13 compared to a matched control group in order to study effects and dynamics on four outcomes: legal cynicism, police legitimacy, cooperation, and reporting behavior. This approach not only provides new empirical insights into a salient issue within the legal socialization literature, but also an alternative strategy to estimate effects over time using matching techniques.

### **Research talks session 3: Temporal perspectives**

#### **Does unstructured unsupervised socializing with peers induce short-term mindsets?**

Sebastian L. Kübel<sup>1</sup>, Jessica R. Deitzer<sup>1</sup>, Willem E. Frankenhuis<sup>1,2</sup>, Denis Ribeaud<sup>3</sup>, Manuel Eisner<sup>3,4</sup>, Jean-Louis van Gelder<sup>5</sup>

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Unstructured socializing with peers without adult supervision (UUS) is a strong predictor of adolescent deviance. In the existing literature, UUS is thought to provide opportunities for crime and to reward deviant behavior. We argue that UUS may also encourage short-term mindsets. We provide two potential explanations for this hypothesis: differential reinforcement and observational learning through peers. We test our hypothesis in fixed effects models using longitudinal data from the z-proso project. Support for our assumptions would imply that short-term mindsets not only predict UUS, but that the reverse is true as well: UUS contributes to short-term mindsets, locking them into a negative reciprocal relation. This study is an important contribution to the debate on how socializing with peers may influence one's decision making and behavior.

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### **Effect of early and enduring interactions with the police on short-term mindsets**

Jessica R. Deitzer<sup>1</sup>, Willem E. Frankenhuis<sup>1,2</sup>, Denis Ribeaud<sup>3</sup>, Manuel Eisner<sup>3,4</sup>, Jean-Louis van Gelder<sup>5</sup>

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Early-adolescent arrest has the greatest impact on future involvement in crime. This may be because of how such an event alters adolescent's orientation towards the future at a young and impressionable age. Contact with police can lead adolescents to expect additional police or criminal justice system contact in the future, as well as spillover effects into their social, educational, and occupational lives. Low perceived opportunities can invoke a short-term mindset, prioritizing present rewards over future ones that may not materialize. This can help explain why early contact with police can hold enduring, later-life effects. Using fixed effects models and longitudinal data from the z-proso project, we investigate whether police contacts have a greater impact on adolescent's short-term mindsets when it occurs early in life or when police contacts accumulate over time. The answer to these questions can inform criminologists about nature of the potential detrimental effects of police contacts in adolescence, including what type of police contacts it is most important to avoid.

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### **The association of adolescent stressful life experiences on adult future self-continuity and concurrent outcomes**

Benjamin Ganschow<sup>1</sup>, Sven Zeibel<sup>2</sup>, Job van der Schalk<sup>1</sup>, Hal Hershfield<sup>3</sup>, Jean-Louis van Gelder<sup>4</sup>

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<sup>2</sup>Department of Psychology of Conflict, Risk and Safety, University of Twente, Netherlands

<sup>3</sup>Anderson School of Management, University of California, Los Angeles

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In this pre-registered study, we investigate how acute stressful life events and chronic stressors experienced in early, middle, and late adolescence influence young-adults' future self-continuity (i.e., connectedness, vividness, and valence of the future self). Furthermore, we investigate the relationships between stressful life experiences, future self-continuity, and adult concurrent outcomes of general well-being, delinquent, debt, academic achievement, and not being in education, employment, or training (NEET). In line with our hypothesis, we found that experiencing more stressful life events predicted less future self-connectedness and the largest relationship to events in late adolescence. In addition, experiencing chronic stress from corporal discipline during early adolescence predicted less future self-valence in early adulthood. Consistent with previous findings, connectedness was positively associated with general well-being, less delinquency, less indebtedness, better academic and being employed or training, while valence to better general well-being, less delinquency, less debt, and being NEET.

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### Research talks session 1: Parents

#### **Change dynamics and associations of self-control, parental involvement, internalizing problems, and prosociality from early to late adolescence**

Fabiola Silletti<sup>1</sup>, Nicolò M. Iannello<sup>2</sup>, Sonia Ingoglia<sup>2</sup>, Cristiano Inguglia<sup>2</sup>, Rosalinda Cassibba<sup>1</sup>, Manuel Eisner<sup>3,4</sup>, Denis Ribeaud<sup>3</sup>, Pasquale Musso<sup>1</sup>

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Early adolescence is a turning point in children's journey towards young adult life since it serves both as a backdrop for the insurgence of internalizing problems and as a window to improve youths' prosocial behavior across adolescence. However, the dynamics characterizing these developmental paths are debated. Risk-and-resilience and positive youth development (PYD) approaches are major theoretical frameworks helping advance our knowledge in this field. Particularly, PYD focuses on adolescents' resources, such as self-control, and ecological assets, such as parental involvement, to explain mechanisms to thrive.

Framed from these integrative perspectives, this longitudinal study aimed: (a) to shed light on the stability and continuity of internalizing problems, prosociality, self-control, and parental involvement during adolescence; (b) to investigate associations between levels of self-control and parental involvement in early adolescence and the developmental trajectories of internalizing problems and prosociality in later adolescence.

Longitudinal data from the Zurich Project on the Social Development from Childhood to Adulthood (z-proso) were used. We focused on four waves of z-proso, which occurred when participants (N = 1675) aged approximately 11, 13, 15, and 17 years. Self-reported measures of internalizing problems (anxiety-depression), prosociality, self-control, and parental involvement were used, and a latent growth curve (LGC) approach was applied. Results revealed a decrease in self-control, parental involvement, and prosociality, but an increase in internalizing problems, across time. Higher levels of self-control and parental involvement in early adolescence were related to lower decreasing changes in prosociality over time. The decrease in self-control and parental involvement over time was accompanied by an increase in internalized problems, but levels of self-control and parental involvement in early adolescence were not associated with rates of change in internalizing problems.

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Findings suggest that levels of self-control and parental involvement experienced in early adolescence may represent key factors for the sociopsychological functioning in later adolescence.

### **Youth-to-parent aggression in adolescence and associations with parenting behaviors**

Laura Bechtiger<sup>1</sup>, Gregor Vasconcelos<sup>1</sup>, Denis Ribeaud<sup>1</sup>, Manuel Eisner<sup>1,2</sup>, Lilly Shanahan<sup>1,3</sup>

<sup>1</sup>Jacobs Center for Productive Youth Development, University of Zurich, Switzerland

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<sup>3</sup>Department of Psychology, University of Zurich, Switzerland

As children enter adolescence, they strive for more autonomy and independence from parents, which can be associated with an increase in parent-child conflict in early to mid-adolescence (Branje, 2018; Shanahan et al., 2007). Even though conflict during this period of renegotiation of the adolescent-parent relationship is normative (Branje, 2018), it can also be accompanied by increased aggression (Klahr et al., 2011). Violence in families is an important public health issue and an established risk factor for child adjustment (Gershoff, 2002). Understanding the prevalence, consequences, and mechanisms of family violence such as abusive and neglecting behaviors toward children and inter-parental conflict on children's development has been an important endeavor in the last decades of research (Harold & Sellers, 2018; Miller et al., 2018; van Eldik et al., 2020). Yet, violence in families is not always parent-initiated. Indeed, child-to-parent aggression is relatively common in adolescence: almost a quarter of early adolescents in the community are physically aggressive toward their parents (Margolin & Baucom, 2014). However, this remains one of the most understudied forms of family violence, with a particular lack of longitudinal studies. Considering that youth-to-parent aggression occurs in a considerable proportion of families and that it often coincides with parental aggression against children and other maladaptive parenting behavior, this lack of research is surprising.

Therefore, this presentation will present preliminary results of a project that aims to 1) describe patterns of youth-to-parent aggression from middle childhood (age 11) to young adulthood (age 20) and 2) examine the potential dynamic associations of maladaptive parenting behaviors and youth-to-parent aggression. In z-proso, youth-to-parent aggression was child-reported at ages 11, 13, 15, 17, and 20 with three items as part of the SBQ (physically attacked, yelled at, and threw things at parents). Maladaptive parenting was child-reported at the same assessment points.



## DAY 2

### **Parental practices in childhood as longitudinal predictors of substance use later in life: The mediating role of self-control**

Joaquín Rodríguez-Ruiz<sup>1</sup>, Izabela Zych<sup>1</sup>, Denis Ribeaud<sup>2</sup>, Annektrin Steinhoff<sup>2</sup>, Manuel Eisner<sup>2,3</sup>, Boris B. Quednow<sup>4,5</sup>, Lilly Shanahan<sup>2,6</sup>

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<sup>6</sup>Department of Psychology, University of Zurich, Switzerland

Previous research has shown that different parenting practices can have a prospective impact on adolescent substance use. However, little is known about mechanisms mediating this relation. Based on the Self-control Theory, the current study aimed to explore the longitudinal link between several parenting dimensions (involvement, positive parenting, parental supervision, child disclosure, authoritarianism, aversive parenting and other sanctions) and adolescent substance use, mediated by self-control.

To do this, linear regression and mediation analyses were performed using z-proso data corresponding from wave 4 (age 11), wave 5 (age 13), wave 6 (age 15), wave 7 (age 17) and wave 8 (age 20).

Aversive parenting and low levels of child disclosure and authoritarianism at age 11 were related to substance use at age 13. Low scores on involvement and child disclosure at wave 4 were a risk factor for substance use at age 15, 17 and 20. Low positive parenting at age 11 increased the odds of substance use at age 15. All these relations were mediated by low self-control, which was the strongest predictor of substance use. Authoritarianism and aversive parenting did not directly impact on substance use at age 13, but they did indirectly via self-control.

These outcomes have implications for policy and practice. Involving parents and increasing their knowledge about desirable parental practices and ways to help their children in the development of adequate self-control could be an effective element in substance use prevention strategies.

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### Research talks session 2: Substance use

#### Associations between drug use and well-being in the period of young adulthood: Insights from hair analysis in a community sample

Lydia Johnson-Ferguson<sup>1</sup>, Laura Bechtiger<sup>1</sup>, Annekatrin Steinhoff<sup>1</sup>, Denis Ribeaud<sup>1</sup>, Manuel Eisner<sup>1,2</sup>, Boris B. Quednow<sup>3,4</sup>, Lilly Shanahan<sup>1,5</sup>

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<sup>5</sup>Department of Psychology, University of Zurich, Switzerland

The peak age of substance use tends to be between ages 15 to 25 years old. Although there is a large literature on how early substance use predicts later well-being (e.g. Moss et al., 2014), longitudinal work on this topic within young adulthood is rare, especially in community (i.e., non-college-based) samples.

In a previous analysis, the z-proso team examined how frequent teenage cannabis use from ages 13 to 17 is associated with age 20 outcomes (i.e., psychosis symptoms, problematic substance use, physical aggression, internalizing symptoms, delinquency, general well-being, perceived social exclusion, and not being in education and employment; Shanahan et al., 2021). That paper did not, however, examine associations between age 20 cannabinoids use data and the psychopathology and functional outcomes.

The current paper examines correlations between age 20 cannabinoids use (as reported in the surveys and as measured in hair) and the age 20 psychopathology and functional outcomes. As the data become available, these same outcomes will be coded at age 24, and analyses will examine whether cannabis in hair at age 20 predicts changes in psychopathology and functional outcomes to age 24.

The paper may eventually expand to take into account developmental trajectories of cannabis use, co-use of other substances (e.g., cocaine) or polysubstance use, and, indeed, select other substances assayed in the hair analyses. It may also examine whether additional stressors and coping moderate associations between age 20 cannabis use and age 24 outcomes.

## DAY 2

### **Childhood correlates of cocaine use among young people in Zurich**

Cesar Leos-Toro<sup>1</sup>, Denis Ribeaud<sup>1</sup>, Laura Bechtiger<sup>1</sup>, Annekatrin Steinhoff<sup>1</sup>, Aja Murray<sup>2</sup>, Urs Hepp<sup>3</sup>, Boris B. Quednow<sup>4,5</sup>, Manuel Eisner<sup>1,6</sup>, Lilly Shanahan<sup>1,7</sup>

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Cocaine use has been steadily increasing in European markets in recent years. In 2019, four Swiss population centres (St. Gallen, Zurich, Basel, Geneva) were among the top 10 European cities where use was most prevalent according to wastewater cocaine metabolite analyses. It has been estimated that approximately 5 tons of cocaine are consumed each year in Switzerland translating to costs of several billions of Swiss francs in direct, indirect, and intangible costs. Very little is known about cocaine use in adolescence among Swiss youth and young adults or the influence of early childhood experiences on these behaviours; this is of concern given the negative health outcomes related to its use. Etiological antecedents including pro- and antisocial behaviours, and young people's physical and social environments may help explain these emergent differences in adulthood. This research project will examine childhood variables that may contribute to cocaine use prevalence and related behaviours at age 20. The current study will use data collected from the Zurich Project on Social Development from Childhood to Adulthood and extend developmental literature on antecedents of cocaine use among youth and young adults and help increase our understanding of how various risk and protective factors associated with cocaine use affect youth as they move into young adulthood.

## DAY 2

### **Tobacco use, cannabis use, self-control and violence: Disentangling relations from early adolescence to early adulthood**

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Adolescence is often a time of increased risk-taking and reckless behavior, including substance use and violence. Cannabis and tobacco are among the most widely consumed substances among young people (United Nations Office on Drugs & Crime [UNODC], 2022). Several studies have detected associations between cannabis use and violence. The exact nature of this relation, however, remains unclear. Moreover, the role of potential mediators in associations between substance use and violent behavior are not well understood. Self-regulation (or self-control; i.e., the adaptive regulation of conduct or internal state) is one such potential mediator. High self-regulation skills in childhood are negatively associated with aggressive and criminal behavior, and illicit substance use in early adolescence (e.g., Robson et al., 2020). In turn, low self-control has been linked to various antisocial and hazardous behaviors such as violent crime and substance use (e.g., Burt et al., 2014; Vazsonyi et al., 2017). The aim of the current study was to examine the longitudinal interrelations between self-control, cannabis and tobacco use, and violence in the z-proso study, using the following measures: self-reported self-control (ages 11, 13, 15, 17, 20), and self-reported substance use (tobacco, cannabis) and violence (ages 13, 15, 17 and 20).

## DAY 2

### Research talks session 3: Violence against women

#### Examining the link between violence against women and violent extremism

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The growing evidence base of risk factors for violent extremism demonstrates overlaps with parallel problem areas like intimate partner violence, mass murder, and sexual assault. Relatedly, empirical research demonstrates violence legitimising norms of hypermasculinity as well as support for violence against women and girls (VAWG) tend to underpin both, gender-based violence as well as vulnerability to violent extremism. Yet, empirical research examining common risk factors and mechanisms underlying these domains is limited. Using a longitudinal sample of Swiss adolescents and young adults, the present analysis aims to address the lack of empirical research on the relationship between gender-based violence and violent extremism. The study employs random intercept cross-lagged panel models to examine between-individual and within-individual patterns of change in support for violent extremism and intimate partner violence. We examine how individual risk factors such as violent hypermasculine attitudes, justification of violence against women and girls, moral neutralisation of violence and social environmental factors, i.e., exposure to violence supportive peers impact upon intimate partner violence as well as violent extremist attitudes. Additionally, we analyse how within-individual changes in conflict coping skills, self-control and social support can in part explain those changes and hence, might protect against vulnerability to violent extremism and gender-based violence. Our findings may have important practical implications as we provide evidence which articulates common underlying risk- and protective factors for violent extremism and intimate partner violence. Establishing the relevance of overlapping risk factors for violent extremism and intimate partner violence may provide evidence for more targeted prevention and intervention programs. We relate our findings to the risk management of both intimate partner- and violent extremist offenders.

## DAY 2

### **Guardianship, perceived safety, and bystander intervention**

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Female sexual victimization by men is an all-too-common experience for young adult women. Interestingly, many incidents of sexual harassment and assault occur in the context of alcohol consumption and in convivial, social settings, such as a bar or social gathering where third parties are present. This suggests others present could serve as “guardians” to limit these negative interactions through preventative efforts or intervention. However, research on bystander intervention has been mixed. The bystander hypothesis, a social psychological theory, predicts that an individual's likelihood of helping decreases when passive bystanders are present during a troublesome incident due to a diffusion of responsibility. In contrast, criminological research grounded in collective efficacy and routine activity theory suggest the mere presence of others should increase the bystander intervention by decreasing the risks associated with intervention. This disconnect presents serious issues for bystander-intervention policy, and begs an important question: Who is most likely to intervene and when? To answer this question, we embedded a video scenario in the most recent wave of The Zurich Project on Social Development from Childhood to Adulthood (Z-Proso). The video depicts an ambiguous yet likely male-on-female sexual assault in a public barroom setting. Male and female participants rated the video in terms of their emotional reaction, interpretation of the aggressor's behavior, behavioral intentions to intervene, and several additional cognitive appraisals. Additionally, we link longitudinal data from prior waves to situational data allowing for a holistic examination of state and trait predictors of bystander intervention. We also estimate models separately by males and females to explore likely moderating effects. We discuss the different processes that motivate intervention and increase guardianship.

## DAY 2

### **Predictors and mediators of violence against women attitudes among second-generation refugee, migrant and native adolescents in Zurich, Switzerland**

Lana Ghuneim<sup>1</sup>

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The study explored attitudes in relation to violence against women (VAW) among adolescents in the z-proso sample. This is the first study to explore differences in the prevalence and predictors of attitudes in support of VAW among adolescents of three different migration backgrounds: refugee, migrant, and native, at ages 15 and 17.

The mean score of attitudes justifying VAW across the sample was low, but scores for refugees were marginally higher than those of migrants and natives. Significant differences were only found between refugees and natives at age 15, and between refugees and migrants and refugees and natives at age 17.

With regards to predictors of VAW attitudes for the whole sample at age 15, lower levels of parental education, higher levels of moral neutralisation and experience of corporal punishment were significantly associated with more supportive attitudes to VAW. Predictors at age 17 were a refugee background, lower levels of parental education, higher levels of moral neutralisation and experience of corporal punishment.

Separate analyses showed that at age 15, the only significant predictor of VAW attitudes for refugees was higher levels of moral neutralisation. In the case of migrants, higher levels of moral neutralisation and experience of corporal punishment were significant predictors. Finally, for natives, higher levels of moral neutralisation, experience of corporal punishment, and lower levels of parental education were significantly associated with VAW attitudes. Similarly, at age 17, the only significant predictor of VAW attitudes for refugees was higher levels of moral neutralisation. Migrants and natives had the same predictors: lower levels of parental education, higher moral neutralisation and experience of corporal punishment.

Mediation analysis at age 15 and 17, with natives being the reference group, showed that the effect of migration status on attitudes towards VAW is mediated by moral neutralisation for refugees but not for migrants and by experience of corporal punishment for both refugees and migrants.

## DAY 2

### Research talks session 4: Peers and teachers

#### Increased stress reactivity threshold in victims of bullying

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Exposures to acute and chronic stressors are associated with manifold forms of physical and mental distress. Some scientists, using human subjects and animal models, have focused on biopsychological mechanisms that account for these associations, while others have documented the social origins of distress, most prominently socioeconomic status. In this paper, we join insights from these two strands of research, examining how a potent social stressor, victimization by bullies, alters people's threshold for judging whether other people are angry (which, in turn, can lead to increased chronic stressors in everyday life). We draw on data from the Zürcher Untersuchung zu Gehirn und Immunungenen (ZGIG), a subset of about 200 subjects from the z-proso longitudinal study of children and youth ( $n \approx 1400$ ). The small sample size of ZGIG allowed for extensive measurement of the stress process, and data from z-proso provided bullying data across five waves from ages 10 to 21. Facial emotion discrimination (FED) was measured at about age 22 using a morphing task in which subjects identified the midpoint in a superimposed spectrum of expressions between joy and aggression in 42 faces from the Chicago Face Database (CFD). We examine victim, perpetrator, and victim-perpetrator clusters of bullying, with unaffected individuals serving as controls. To draw causal inferences, we consider bullying quasi-experimentally as a non-randomly assigned treatment and balance observations based on the probability of receiving its treatment in a joint model. Results of a propensity-score-weighted mixed model show that subjects in the victim cluster rated higher levels of aggression in faces as neutral when compared with the unaffected group. The results support theories of blunted response due to overstimulation. Multinomial logistic regression results show that subjects from low socio-economic status (SES) households were more likely to fall into the victim cluster. The decomposition of the SES association shows that the effects are mainly due to low educational attainment of the parents.



## DAY 2

### **A longitudinal investigation of the dual system model of adolescent risk-taking: Evaluating the effect of affiliating with high-risk taking peers**

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According to the dual systems model of adolescent risk-taking, the cognitive control system required for self-regulation develops at a different rate compared with the socio-emotional system underlying sensation seeking and reward processing, resulting in a state of imbalance between the two system, which is greatest in adolescence. During this time of imbalance, adolescents have not yet developed the self-regulation skills necessary to inhibit impulsive reward drives, resulting in heightened risk-taking behaviours during this developmental period. In addition to being characterised by increases in risk-taking behaviours, adolescence is also characterised by an increase in sensitivity to social rewards, making adolescents particularly susceptible to social influence. Consequently, adolescents have been found to be more likely to engage in risk-taking behaviours if they affiliate with peers who have a higher propensity to engage in risk-taking behaviours. This effect of social influence on risk-taking may be especially prominent at the peak of the developmental imbalance of the systems underlying cognitive control and socio-emotional processing as, at that time, adolescents are increasingly driven by high social reward sensitivity while not having developed the cognitive resources required to inhibit any potentially risky behaviours. Thus, it is likely that spending time with peers who engage in risk-taking behaviours such as antisocial behaviours might additionally exacerbate such behaviours during the stage of developmental imbalance. Here, we use a latent change score modelling approach in combination with latent growth curve modelling to: 1) capture how the imbalance between self-regulation and sensation seeking develops across adolescence (ages 11, 13, 15, 17 and 20); 2) investigate how developmental trajectories of this imbalance relate to affiliations with risk-taking peers; and 3) test whether risk-taking peers affiliations moderate the association between individuals' trajectories of developmental imbalances and trajectories of anti-social behaviours, bullying perpetration and self-reported externalising problems.

## DAY 2

### **Teacher-student, teacher-parents and teacher-teacher relationships as predictors of educational outcomes**

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The success of laws, reforms, policies, innovations and initiatives in the school depends on the role of teachers. The teacher is the architect of education in the school system, and his relationship with the student influences the teaching-learning process. Many studies focused on the importance of teacher-student relationships for antisocial behaviours, health and school performance. This study expands the teacher's relationship with the rest of the school community members, having a complete vision of the role of teachers and their school relationships. This study aims to analyse the impact of the teacher's relationships with their students, other teachers and parents on the student's school performance. These relations will be studied in primary education, where each class has a reference teacher throughout the school year. The expected results will identify longitudinal relations between the teacher relationships and the school performance of their students. The conclusions could help understand better the relationships of the teachers who promote the best learning in their students. This study would have implications for educational policy, teacher training, both initial and continuous, curriculum planning, and the teaching-learning process in the classroom.



## **Acknowledgements**

**We would like to thank all the children, their parents, and teachers who made the z-proso study possible.**

**We would like to thank the funders of the workshop (Jacobs Center) and the current funders of the z-proso study (including SNSF and Jacobs Center).**

**We would like to thank the current principal investigators of the z-proso study: Prof. Manuel Eisner at the University of Cambridge and University of Zurich; Prof. Lilly Shanahan at the University of Zurich and Dr Denis Ribeaud at the University of Zurich.**

**Finally, we would like to thank the host of the workshop (University of Edinburgh) and the organisers of the z-proso workshop (Edinburgh team: Aja Murray, Ingrid Obsuth, Xinxin Zhu; Zurich team: Manuel Eisner, Lilly Shanahan, Denis Ribeaud, Ines Florin).**