



University of
Zurich^{UZH}



JACOBS
CENTER

Annual Report

Jacobs Center for Productive Youth Development

2022



www.jacobscenter.uzh.ch

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Of children, parents, and other mythical creatures: Creativity and diversity as strengths of the JCYPD



Moritz Daum

Prof. Dr.
Director
Professor for Developmental
Psychology Jacobs Center
Department of Psychology

In everyday life, there is often a shortage of time. And with little time, it is tempting to use the tools of artificial intelligence (AI) that are now available (or not, see Simon Sommer's greeting). When I entered "Please write a preface for the annual report of the Jacobs Center for Productive Youth Development (www.jacobscenter.uzh.ch), maximum length: 2900 characters including spaces. Highlight the achievements of the Jacobs Center in the past year", ChatGPT (chat.openai.com) gave me the following first sentences: "It is my great pleasure to present to you the annual report of the Jacobs Center. As a language model based on the GPT-3.5 architecture from OpenAI, I know firsthand how important it is to gain and share scientific knowledge. Especially in the social sciences, where complex social phenomena are studied, a solid research base is essential."

We are just beginning to understand the consequences of the easy application of AI for society. However, it is important to note that AI does not (yet) generate its own knowledge. It needs to be fed information. The JCYPD makes an important contribution to expanding and deepening knowledge, especially knowledge with a focus on the explicitly stated goal of "improving the lives of young people at the individual, institutional, and societal levels, so that they can engage socially and contribute to society."

But let us start from the beginning again: It is my great pleasure to present to you the annual report of the Jacobs Center for Productive Youth Development (JCYPD) for the year 2022. As a scientist, developmental psychologist, and director of the JCYPD, I know firsthand how important it is to gain scientific knowledge, test its solidity, and share it. Especially in the field of young people's development, where the complex interplay of social contextual phenomena and individual changes must be investigated, a solid research base based on collaboration, interdisciplinarity, diversity, and creativity is essential.

In the present report, these aspects are very clear in the short sections on the work at the JCYPD: there are references to mythical creatures in the magnetic resonance tomograph; how the mental health of parents affects their children. It is asked why women reduce their workloads when they become mothers, how genes and money are linked, how language and culture or social environment and personality influence each other, and what the effects of frequent external care are on early childhood development.

Although or precisely because these topics are different, the JCYPD is establishing itself as a hub of an interdisciplinary network that investigates the issues mentioned at the scientific level to expand and deepen our knowledge of human development in its environment.

I thank the Jacobs Foundation and the University of Zurich for the trust that has been sustained in the JCYPD. And I thank all the employees of the JCYPD and all cooperation partners for their constructive and benevolent collaboration and look forward to its sustainable continuation.

Greetings



Elisabeth Stark

Prof. Dr.
Pro-Rector Research of UZH
and Vice-President of the Jacobs
Center Steering Committee

As Vice-President Research of the University of Zurich (UZH), and especially as a newly appointed member of the Steering Committee of the Jacobs Center for Productive Youth Development, I am honored to express my admiration and full support to the Center's members and their research. The Center's impressive work in promoting successful child and adolescent development research has caught my attention for some time. It is a privilege to be a part of such a forward-thinking institution. The Center's mission fits particularly well to UZH's focus areas of healthy lifelong development and equality of opportunities for as many young people as possible.

The JCPYD's commitment to conducting longitudinal studies that produce cutting-edge research is truly admirable. It is heartening to see the impact of this research on shaping the future of child and adolescent development. The success of the JCPYD in networking and collaboration with international scholars has helped to position it as a leader in interdisciplinary developmental research in Switzerland and beyond.

Finally, I would like to acknowledge the invaluable support of the Jacobs Foundation in enabling the Center's accomplishments. Through such support, the Center can continue to contribute meaningfully to society, making a difference in the lives of children and adolescents globally.



Simon Sommer

Co-CEO of the Jacobs
Foundation and President
of the Jacobs Center
Steering Committee

Technological progress seems to be overtaking us at the moment. Whether I wrote this greeting myself or whether it was written by an artificial intelligence is no longer apparent to the reader. In this rapidly changing world, children and young people face unprecedented challenges – but social and technological change also opens up unprecedented opportunities.

Understanding the contexts of early human development is essential to mastering these challenges and seizing opportunities. The researchers at the Jacobs Center have dedicated themselves to this gigantic task, and this annual report impressively demonstrates the breadth and depth of their research. What is being done at the Jacobs Center, no AI can do.

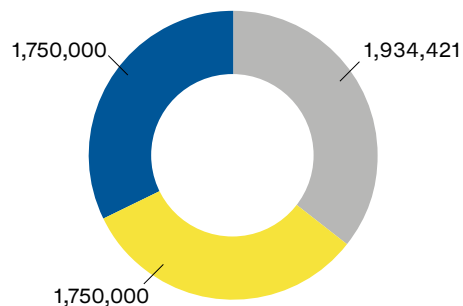
The Jacobs Foundation would like to thank all the staff of the Jacobs Center for their great commitment in 2022, and the University of Zurich for its continued excellent collaboration.

Key figures

The Jacobs Center is a joint venture between the University of Zurich and the Jacobs Foundation. Total funding: CHF 70 million over 20 years, shared equally by UZH and JF. UZH and JF each contribute CHF 1.75 million annually. In 2022, the Jacobs Center acquired new third-party funding in the amount of CHF 2.3 million (ring diagram 2022, compared to 2021)

Finance 2021

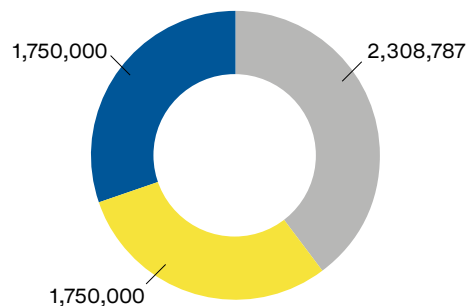
5,434,421 CHF



- University of Zurich
- Jacobs Foundation
- Third-party funds

Finance 2022

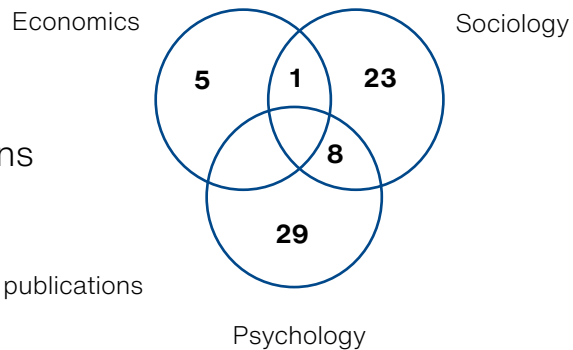
5,808,787 CHF



Publications

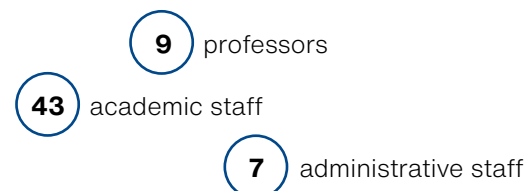
66 scientific publications

including **9** interdisciplinary publications



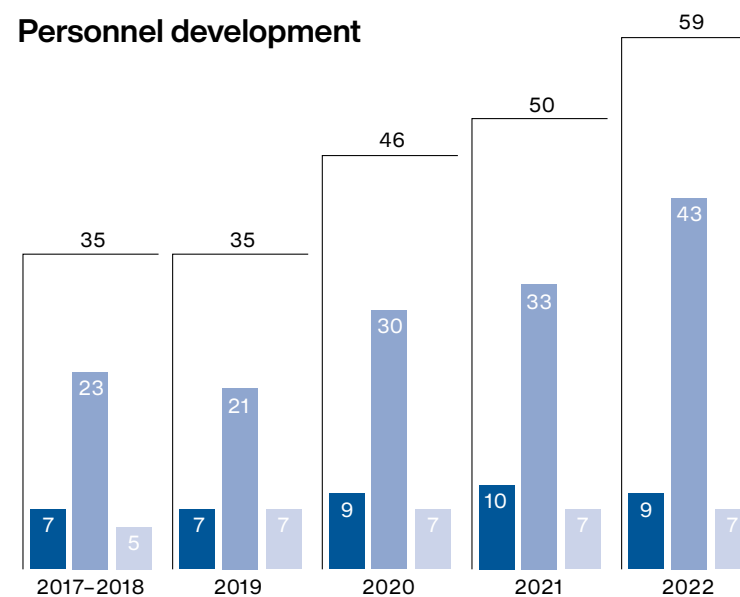
The Jacobs Center

59 highly motivated employees



We also work internationally and interdisciplinarily with numerous professorships from different institutions.

Personnel development



- Professors
- Academic staff
- Administrative staff

The Jacobs Center team



- 01 Elisa Alonso Herrero
- 02 Margit Averdijk
- 03 Ivan Barón
- 04 Laura Bechtiger
- 05 Sabrina Beck
- 06 Marco Bleiker
- 07 Julien Bodelet
- 08 Réka Borbás
- 09 Ana Bràs Monteiro
- 10 Marlis Buchmann
- 11 Lea Buzzi
- 12 Kaspar Burger
- 13 Ana Costa-Ramón
- 14 Moritz Daum
- 15 Plamina Dimanova
- 16 Marta Dobrijevic
- 17 Nico Ehrhardt
- 18 Manuel Eisner
- 19 Elena Federici
- 20 Ines Florin
- 21 Céline Gloor
- 22 Marta Golin
- 23 Sabine Gysi
- 24 Mirjam Habegger
- 25 Timo Haller
- 26 Doris Hanappi
- 27 Natascha Helbling
- 28 Jens Heumann
- 29 Hira Imeri
- 30 Lydia Johnson-Ferguson
- 31 Stefan Kappeler
- 32 Stephanie Kernich
- 33 Martin Kindschi
- 34 Cesar Leos-Toro
- 35 Helge Liebert
- 36 Miriam Löffler
- 37 Michelle Loher
- 38 Mirella Manfredi
- 39 Francesca Mele
- 40 Lea Mörsdorf
- 41 Thomas Poppenwimmer
- 42 Cecilia Potente
- 43 Nina Raduner
- 44 Nora Maria Raschle
- 45 Sudharshan Ravi
- 46 Denis Ribeaud
- 47 Sofia Scatolin
- 48 Olivier Schönbeck
- 49 Kevin Schönholzer
- 50 Maria Schönholzer
- 51 Francesco Serra
- 52 Lilly Shanahan
- 53 Michael Shanahan
- 54 Sandro Stutz
- 55 Albert Thieme
- 56 Valentina Vylobkova
- 57 Lisa Wagner
- 58 Stephanie Wermelinger
- 59 Ulf Zöllitz

Nora Raschle's research team

The mythical creatures in the MRI scanner

Nora Raschle and her research team investigate parent-child relationships and their influence on neural development. We sat down with four of the team members to learn more about their current projects, enthusiastic children and what they appreciate about teamwork.



Nora Raschle's research team

A hospital with a portal to a world of magical animals and a “big camera that takes pictures” (otherwise known as an MRI device) – welcome to data collection in the Smilies study. The Smilies team, led by Nora Raschle, works closely with families to conduct its research. Instead of intimidating children with unfamiliar devices with long names, Elena Federici, Plamina Dimanova, Sofia Scatolin and Réka Borbás tell stories and arrange puzzles and films while collecting their data.

The scientists are interested in the family unit and the influence of cross-generational relationships on the socio-emotional development of children. How do children develop the capacity to deal with one another and to process and regulate their feelings? The team wants to use MRI to analyze the brain structures of 240 participants from 65 families to answer this question and gain related insights. For recruitment purposes, researchers present the project at parent-teacher meetings and send letters to households in the Canton of Zurich. Federici is very pleased that these efforts have gone well so far. “Many parents use the project to give their children a positive first experience with hospitals,” she says.

And for the children, who are between the ages of 6 and 14, the data collection process is a big adventure. “Some of the kids don’t want to leave the MRI device or ask when they can come back,” says Dimanova. “

And a lot of parents also enjoy the half hour in the MRI device, since they get a break from childcare,” she adds with a laugh.

A moment of joy

“It was a great moment of joy when we invited the first family to the hospital last fall and the whole set-up worked as planned,” says Borbás. According to Dimanova, the path leading up to that moment was a long one: In addition to the MRI measurements, behavioral data and an online survey are also part of the data collection for the project. Smilies started last year, and the first publication with findings from the study could be ready in three to four years. The team is planning a small side project in the spring of 2023 that uses young adults as a reference group. Around thirty friendship dyads with participants between the ages of 18 and 30 are being recruited so that researchers can map a segment of the population between childhood and adulthood and to provide insights into close relationships outside of family structures.

The impact of stress and childrearing practices on the brain

Nora Raschle’s team is also working on the interdisciplinary and cross-institutional STRESS project. Mirjam Habegger, who has been supervised by Nora Raschle and Todd Hare since last April, wants to find out what determines people’s stress coping mechanisms and how they impact emotional regulation and related brain networks. She is using the corona pandemic, along with data from mother-child research and the longitudinal z-proso study, to explore how this particular stress situation influenced the functional connectivity of different brain regions.

Since a child’s upbringing can be both a stressor and a protective factor, Habegger has a separate project to explore how certain childrearing practices can impact the development of brain networks. She is interested in finding out which childrearing practice has the biggest impact and in what period upbringing makes the most difference. While earlier studies often focused on extreme outliers such as neglect, Habegger is interested in the normative range of childrearing. The data also allows her to observe how parent-child perspectives overlap when it comes to issues around living together.



Habegger was one of several new additions to Raschle’s team last year. The team has doubled in size, a development that Borbás is pleased about. “Working together with all these great people is enriching and makes the process of designing studies more dynamic,” she says. The team’s visit to two conferences last year, in Paris and Lausanne, are also considered to be among the highlights of 2022.

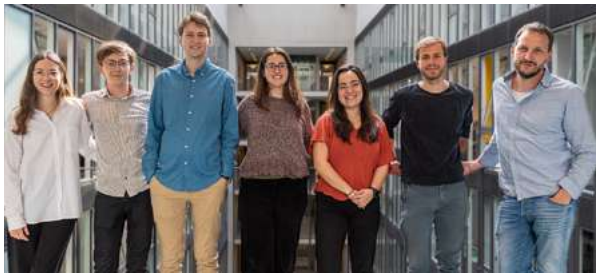
Text: Selina Widmer | Editor: Angela Odermatt

Conversation with: Elena Federici, Plamina Dimanova, Sofia Scatolin, Dr. Réka Borbás, Mirjam Habegger

Ana Costa-Ramón's research team

Why do women work less when they become mothers?

An interview with health economist Ana Costa-Ramón revealed a dynamic year: 2022 brought new research findings and opportunities for international exchange.



Research team of the field of economics

Ana Costa-Ramón has been Assistant Professor of Economics at the University of Zurich since 2020. Her research focuses on issues surrounding the economics of health, work and gender. As part of her work at the Jacobs Center, she has published papers on the long-term effects of C-sections and the health of newborns. Since 2022, she has been Research Affiliate at the Centre for Economic Policy Research (CEPR), an independent international research institute based in London.

Ms. Costa-Ramón, you've been at the Jacobs Center for three years now. What sets JCPYD apart from other research institutes?

The Jacobs Center provides a unique environment for researchers who work in the field of child development. The scope of the topics and methods is fascinating and provides an opportunity to learn from different disciplines and fields of research.

What topics did you and your team focus on last year?

I focused on a collaborative project with Anne Brenøe, Ursina Schaede and Michaela Slotwinski (“(Not) Thinking about the Future: Inattention and Female Labor Force Participation”).

We tried to find out why women decide to work less when they become mothers. We wanted to test a hypothesis about whether women factor in the long-term costs of reduced labor force participation, for instance when it comes to retirement income, the risk of divorce, lower earnings or difficulties reintegrating into the job market.

We conducted a randomized controlled study with teachers in Switzerland in order to explore this question. In the study, we presented participants with objective information about the long-term costs of reducing one's working hours and then investigated whether this additional knowledge influenced their actual working hours in the next school year. Our study is the first one that researches whether receiving information about the long-term financial impact of reducing one's workload leads to women actually increasing their working hours.

[In the future we also want to analyze the impact of the intervention in this study on the development of children in these teachers' classrooms.](#)

Last year you reported on the importance of interdisciplinary economic research.

Did you work on any projects of this kind in 2022?

There is a growing number of interdisciplinary projects in the field of economics. In one of my on-going projects, I'm working together with Christina Salmivalli, who is a Professor of Psychology at the University of Turku in Finland. She and her team developed an anti-bullying program called KIVA in 2007 and 2008, and she used a randomized controlled study to evaluate KIVA, with more than 300 schools participating. We are now working on linking this data with public data about education and income in Finland and investigating whether the KIVA intervention had any long-term effects. I believe that the number of interdisciplinary projects of this kind are only going to increase in the coming years.

What individual challenges are awaiting you in 2023?

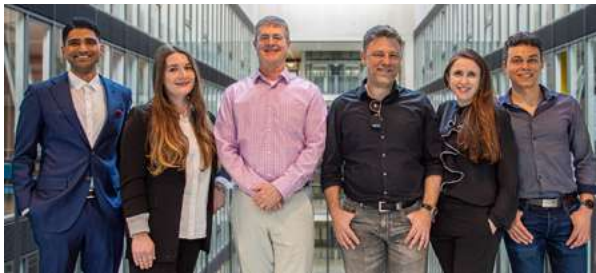
My biggest challenges as an assistant professor are expanding my research agenda and advancing the projects I'm currently working on. Over the past few years, everyone at the JCPYD has invested a lot of time in reflecting on projects and ideas and forming teams. Now I'm excited about the results that we're going to see next year!



Michael Shanahan's research team

Exploring the connection between genes and money

Michael Shanahan's research group focuses on social genomics. Our conversation with Cecilia Potente sheds light on what factors the team is putting under the microscope.



Michael Shanahan's research team

What is the association between our daily lives and socioeconomic circumstances, such as education and income, and our gene expression? How does our mRNA change as a result of outside influences? Researchers in the field of social genomics are trying to answer these kinds of questions. Michael Shanahan's research team, which Dr. Cecilia Potente is a member of, brings this highly topical scientific subfield to the Jacobs Center.

Interdisciplinarity as a method

Since completing her Master's degree in Economics and Social Science at Bocconi University in Italy, Potente has been drawn to research that is interdisciplinary in nature. "During my PhD at Oxford University, I learned how to approach research in a truly interdisciplinary manner and saw the kinds of findings you can get when combining disciplines and methods," she says. "I also discovered my passion for demographics and social genomics."

Potente has been part of the Jacobs Center's Social Genomics Group since 2018, allowing her to explore these research questions more deeply as part of her postdoctoral studies.

In 2022, she focused on two topics: One concerned the relationship between socioeconomic factors and gene expression in relation to the aging process. The research team was able to demonstrate that socioeconomic factors such as education, income and subjective perception of social status are connected to the aging process already in early adulthood.

Unlocking potential through exchange

Potente also explored the effects of our genetic make-up on later stages of life – a topic that she already published on in 2021. The National Longitudinal Study of Adolescent to Adult Health, a representative study using health data from the US from 1997 to 2018, served as the basis for her project. Potente used this data to investigate how body weight development patterns over the first four decades of life are connected with gene expression signatures for common forms of morbidity, such as cardiovascular disease, type two diabetes and inflammation. “Weight at birth plays an important role, especially for the signatures connected to cardiovascular disease and type two diabetes,” she concludes.

The observations from both of her research areas are impressive in terms of their implications. “Social genomics as a sub-field has a lot of potential, but it’s still too early to draw conclusions about how to structure societal institutions such as the healthcare system. We need more information about the relationships here in order to make statements of this kind,” says Potente. Developing these findings remains one of her main goals for 2023.

Rediscovering the value of face-to-face interaction

Pursuing this goal requires exchange with other scientists, and being able to do this in person again was one of Potente’s highlights of 2022. “The conversations and discussions I have with researchers from my areas of interest and other fields are really valuable,” she says, adding that she benefited from participating in various events of this kind last year. “These conversations vary a lot depending on the topic or size of the event,” she says. “The bigger and more general the meeting, the bigger the opportunity for me to introduce my research to a wider audience and to get inspired by other fields.”



Events that are smaller and more narrowly focused, on the other hand, present good opportunities to go into more depth in one’s own research area. Potente says that she benefited from being able to attend a mix of these kinds of events last year. “Next year I’m looking forward to having the opportunity not only to work on my own research area but also to learn and get inspired by interdisciplinary exchange, whether it’s from my work at the Jacobs Center or at external events,” she says.

Moritz Daum's research team

Researching at the intersection of languages and disciplines

For the past year and a half, developmental psychologist Moritz Daum has led the JCPYD with the aim of promoting interdisciplinary and collaborative research. In 2022 his research team achieved important milestones in communication and child development, paving the way for projects in 2023.



Moritz Daum's research team

Moritz Daum's Developmental Psychology Group researches multilingualism in children – a fitting topic for life in a cosmopolitan city like Zurich. The group has been interested in multilingualism's impact on childhood development for some time now. Stephanie Wermelinger's work, which investigated the influence of multilingualism on children's communication skills, is an example of research in this area. Wermelinger's findings are quite interesting: for instance, that bilingual children have a larger repertoire of communication methods, which is likely due to their more frequent experience with misunderstandings and reaching the limits of their linguistic capabilities. Their flexibility towards switching between communication strategies is also higher.

From misunderstandings to communication theory

Since these findings are not confined to multilingual children but could also apply to children with hearing impairments or adults in a new language environment, Daum and his team want to pursue the findings in more depth. Their first step, in 2022, was to work out a theoretical framework and several hypotheses. The plan is to test them in 2023 and clarify which experiences are important for acquiring communication skills. "The idea is to develop a model for how communication skills develop over one's lifetime," explains Daum.

A broad set of data is needed to compare theoretical models like these with reality. Collecting this kind of data is the goal of the *kleineWeltentdecker* app, which was developed several years ago. The app is a kind of diary where parents can record the developmental progress of their children from birth until they enter school. The data yielded by the app is impressive in its scope, spanning areas such as motor skills, cognition, language and social-emotional development. In 2022, the JCPYD started a major research project funded by the Swiss National Science Foundation dedicated to analyzing this vast data set in several subprojects.

Interdisciplinarity thanks to an app

Daum's research group wants to explore which areas of child development involve environmental and biological factors and how these factors interact with one another. Researchers are examining this interplay by comparing developmental indicators in premature and full-term infants. The project is structured as an interdisciplinary cooperation with Giancarlo Natalucci from the neonatal department at University Hospital Zurich. The goal is to look at different developmental features and determine where biological maturation processes or life experience after birth plays a greater role. Daum says this project is different from many other research projects that focus solely on recording various developmental milestones.

"In contrast, our project focuses on the many small developmental steps that lie between the milestones," he explains.

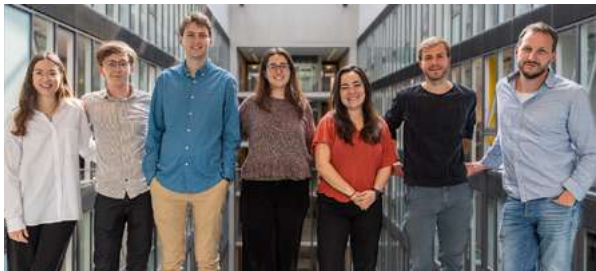
Additional goals have also been set for the *kleineWeltentdecker* app for 2023. Since the app is not used by all parents regularly, there are gaps in the data. In order to close these gaps, researchers are trying to use algorithms to trace all the steps of particular children's developmental trajectories. An additional project with JCPYD economist Ulf Zölitz aims to investigate the extent to which the app promotes parents' awareness of their children's needs and developmental milestones. The central question of the project is interdisciplinary in nature: how much the app acts as an intervention for children and parental awareness.



Ulf Zölitz's research team

How does social environment influence personality?

How does social environment influence personality development in children and young adults? Does it impact school performance or educational decisions? Ulf Zölitz and Marta Golin want to take a closer look. The two researchers are investigating how young people's social environment – their parents, friends, classmates and teachers – impacts the development of their personalities.



Research team of the field of economics

Ulf Zölitz, an economist and peer research expert, and Marta Golin have both benefited greatly from having colleagues from other disciplines at the Jacobs Center. "I've learned a lot from my colleagues in psychology and sociology," says Zölitz. He says that the JCPYD's focus on collecting new primary data makes the Center particularly attractive. Several long-term data collection studies are housed at the Jacobs Center, and this helps track the personality development of children and adolescents over a 15-year timespan – thus generating unique new research findings.

How do parents raise their children?

Last year Zölitz and Golin conducted a large field study – the global parent survey – that researched differences in childrearing styles in various countries around the world. How parents raise their children and the values they impart depend heavily on economic and cultural factors. It is often said that parents in certain regions are stricter and invest more in the educational success of their children than in Europe. Is that in line with the data, however? And what might be the reason for differences of this kind?

In order to answer these questions, Zöllitz and Golin surveyed 45,000 parents in 42 countries and are expecting to reach their first conclusions sometime this year. “Studies of this kind are important to researchers who are trying to understand global differences in educational decisions and effort,” says Golin.

Field studies with participants from various countries are also becoming more important in other research projects as well. Zöllitz emphasizes that there has been an increased focus on finding out whether certain research results hold true for all countries. Researchers use multi-setting studies to attempt to find out whether there is external validity – in other words, how universal a research finding is. “For researchers, practitioners and policymakers, it’s critically important to know, for instance, whether an educational intervention that’s successful in the United States could also work in Switzerland,” says Zöllitz.

Do online lectures lead to worse grades?

Sometimes research topics basically force themselves on us due to external events. One example is the impact of online lectures on student performance, a topic Zöllitz and his co-authors became interested in during the coronavirus pandemic, when distancing rules made it necessary to limit or forbid attendance at in-person lectures. For this reason, JCPYD researchers investigated the impact of attending virtual rather than in-person lectures on test scores. Surprisingly, the study results showed that more frequent online lectures had no negative impact on grades.

In contrast to the results of studies at primary and secondary schools, these findings show that universities can hold at least some of their lectures online without damaging the learning success of their students. But what if other things get lost if university lectures are conducted online? That’s what one 2022 paper by Zöllitz and co-author Xiaoyue Shan from the Wharton School at the University of Pennsylvania hints at. The duo looked into how classmates impact the personality development of young adults. Using a field experiment, they were able to demonstrate that students appeared to be able to adopt character traits from their academically successful classmates. It is possible that this effect is weaker in an online environment. Zöllitz and Golin remain committed to studying effects such as these in 2023. Both agree that they are not going to run out of interesting and socially relevant questions to explore.



Lilly Shanahan's research team

How parents' mental health impacts their children

Parents influence the development of their children in a multitude of ways that have far-reaching societal implications. This was the finding of one of many projects conducted by Lilly Shanahan's Risk and Resilience research group.



Lilly Shanahan's research team

Lilly Shanahan's research group at the Jacobs Center investigates risk factors from childhood to adolescence that can lead to the development of stress-related symptoms and illnesses such as depression or addiction. The team also researches factors that can strengthen young people's resilience to these symptoms and diseases. According to Shanahan, multidisciplinary, teamwork and having a long-term perspective are especially important to conducting innovative research in this area. The Jacobs Center, which is home to several long-term studies, provides an ideal environment in this regard.

Longer-term effects of depressive symptoms in mothers

One important recent research topic of Shanahan's diverse group is Laura Bechtiger's dissertation, which analyzes the connection between mental illness in mothers and child development. Until now, these connections have mostly been explored in relation to children's mental health, but other dimensions of child development have rarely been taken into account. Bechtiger's dissertation comprises several studies and demonstrates that the mental state of mothers influences performance in school, unhealthy behavior and – as she is currently researching – the social skills of children until age 15. Depressive symptoms such as intense sadness, feelings of guilt, low motivation

and sleep pattern changes make it very difficult for these mothers to create a family environment that promotes education. Most of all, symptoms of chronic depression in mothers can impact the education, health and social prospects of children. Shanahan emphasizes that mothers should not be assigned blame in this context. Rather, the results should prompt reflection on the roles that society assigns to mothers and the kind of support that they receive.

Shanahan points to the example of additional family responsibilities during the COVID-19 pandemic: They were primarily carried out by mothers regardless of how much (paid) work they were already doing. At the same time, depression and anxiety among mothers rose in part due to these additional burdens.

One of the studies in Bechtiger's dissertation was published in *Pediatrics*, a research journal for pediatricians. Shanahan says the team was especially pleased with the placement of this article, since pediatricians routinely interact with mothers and may be able to offer interventions. She also sees intervention potential in other areas: faster expert treatment of poor mental health symptoms in mothers and children, more equitable allocation of childrearing work and better support from employers for parents.

The unique collaborative character of the Jacobs Center

These far-reaching societal implications show how important it is to have an interdisciplinary perspective when trying to uncover complex relationships in the field of child and youth development. Shanahan says that teamwork is indispensable for her research: "The principle that deeper, more robust and more far-reaching knowledge can only be accessed when working in a team is central to interdisciplinary research." She adds that group discussions of research results and examining them from a variety of perspectives is enriching and helpful for discovering errors in one's thinking as well as new approaches. One unique aspect of the Jacobs Center is the collaborative character of the relationships between researchers at all stages of their careers. This kind of collaboration – horizontal as well as vertical – makes the environment particularly inspiring, says Shanahan. "Without it, the analysis of complex and far-reaching interconnections, like the ones in Laura Bechtiger's dissertation, wouldn't even be possible," she says.



New third-party funded research projects

SNSF: Developmental diary app ("kleineWeltentdecker" app)

With the help of the "kleineWeltentdecker" smart-phone app, users can track the development of their children in different areas – continuously and longitudinally. The developmental diary app, which is available at weltentdeckerapp.ch, allows caregivers to monitor developmental skills in four different areas – language, motor, cognitive and social-emotional development – from birth to the age of six.

PI: Moritz Daum | 891,678 CHF

SNSF: CH.Doc Project – Prevalence of and Pathways to Non-Medical Use of Prescription Medications Among Adolescents and Young Adults in Urban Switzerland

Non-medical use of prescription medicines (NUPM) is increasing in the western world, especially among adolescents and young adults.

This project will provide new insights into the prevalence of and pathways towards NUPM, which is critical for developing effective prevention and interventions. By including data from the United States, it will also provide an in-depth look at NUPM in an international context.

PI: Michelle Loher | 233,009 CHF

SNSF: SMILIES – Socio-emotional Brain Develop- ment: An Intergenerational Perspective

Socio-emotional skills are various skills for social and emotional functioning that are important for our daily lives. At the neural level, socio-emotional skills are supported by corticolimbic brain regions, including the neocortical and subcortical areas. Intact corticolimbic function and structure are associated with increased well-being, while deviations are reported in psychopathologies. Socio-emotional development is strongly dependent on early experiences between caregiver and child and is associated with maturation of corticolimbic brain regions. To date, no study has systematically investigated the effects of intergenerational transfer on corticolimbic structure, function and connectivity using magnetic resonance neuroimaging (MRI) in parent-child dyads.

PI: Nora Raschle | 782,272 CHF

HMZ Grant: STRESS subproject

The aim of the new STRESS flagship project at *Hochschulmedizin Zürich* (HMZ) is to understand, diagnose and treat the effects of stress on human mental and physical health. Researchers from different fields – psychology, psychiatry, neuroscience, cellular and molecular biology, engineering, cardiology and translational bioinformatics – will collaborate to study risk and resilience to stress throughout life.

Stress has long-term negative effects on mental and physical health and is a strong risk factor for chronic diseases, especially psychiatric and cardiovascular diseases. As a result, the prevalence of stress-related diseases has grown in importance as a public health problem in recent years.

Despite this, it remains difficult to diagnose stress-related pathologies, especially in children and adolescents.

PI: Nora Raschle | 149,513 CHF

Jacobs Foundation: CRISP

CRISP (Creating Impact Science Program) aims to strengthen long-term intensive partnerships with selected alumni of the Jacobs Foundation Research Fellowship Program based on their individual merits. CRISP engages active, committed and outstanding alumni, provides pathways for engagement in Jacobs Foundation programs and priority countries, and includes activities that translate solid evidence into practice. CRISP offers funding over five years and is compatible with other programs within the Jacobs Foundation portfolio: Learning Minds, Learning Schools and Learning Societies.

PI: Nora Raschle | 105,000 CHF

Cogito: Science comic

With the Growing Brains project, an easily accessible, non-fiction comic book (graphic novel) is being developed for a broad audience in Switzerland. The comic team wants to use the book and accompanying events to promote understanding of scientific principles and scientific thinking – how science actually “works”. The team also wants to provide insights into the development of the human brain and behavior and show how the biological processes of human development are related to phenomena such as learning, health and cooperation between individuals.

PI: Nora Raschle | 45,000 CHF

Communities that Care (CTC)

CTC is a coalition-based prevention system that promotes healthy youth development and reduces youth behavioral problems at the community level. CTC was originally developed in the United States but has since been implemented in countries around the world and is currently listed as one of the “certified promising programs” by the prestigious Blueprints for Healthy Youth Development. The aim of this project is to examine and report on the risk and protective factor profiles of each community involved in the roll-out, based on data from 7th to 9th graders collected during the CTC roll-out.

PI: Margit Averdijk | 102,315 CHF

Michelle Loher (Lilly Shanahan's team)

When taking painkillers becomes drug abuse

Michelle Loher's doctoral thesis deals with medication abuse in Switzerland. She has already received support from the Swiss National Science Foundation for her work – after just one application.



Michelle Loher

Doctoral Research Associate
Developmental Neuroscience
in Lilly Shanahan's team

“Substance use is unbelievably complicated,” says Michelle Loher. “What contributes to a situation where a young person is using medications to get high?”

Michelle Loher aims to answer this question in her dissertation. Loher's enthusiasm for complex relationships becomes clear when she talks about her work. She wants to understand what factors and circumstances lead someone to abuse medication, a topic that receives little attention in Switzerland.

The urgency of Loher's work has been recognized by the Swiss National Science Foundation (SNSF): the 32-year-old researcher was able to secure funding after just one application. Previously, she obtained a start-up grant from the “Graduierenschule” at the University of Zurich. “This is a great opportunity for early-career researchers,” says Loher. “I received a CHF 20,000 grant that allowed me to write my SNSF application, a process that takes a considerable amount of time.”

Since July 2022, the doctoral student has been conducting research as part of Lilly Shanahan's team, with Boris Quednow acting as her co-supervisor. Loher is well acquainted with the Jacobs Center, having written her Master's thesis here in 2020. Since then she has been a senior scientist working with Denis Ribeaud and was the co-author of a publication about the Zurich Youth Survey, a long-term look at the development of juvenile violence and delinquency. The publication of this paper last fall marked the high point of the year for Loher.

Medication abuse: an under-researched topic

Loher is using data from the Zurich Youth Survey cohort study and the longitudinal z-proso study for her dissertation. She is fascinated by the topic of medication abuse during adolescence. "This is an age where so many things are happening at the same time. In the end it's about getting to know yourself," she says. Loher wants to use longitudinal data to find out whether cannabis consumption at age 13 has an influence on medication abuse at age 20.

What role is played by mixed consumption, or the simultaneous consumption of different substances?

Are there differences between the sexes?

How much medication abuse is there among young people in Zurich?

Her research questions continue to make headlines. "The stricter regulations on cough syrup with codeine, an opioid painkiller and cough suppressant, that entered into force in 2019 shows that this topic is being more widely discussed," she says. However, there continue to be gaps in the research concerning the abuse of medications in Switzerland. There is greater academic expertise on this issue in the US, where the opioid crisis has claimed many lives. That's why Loher will have a one-year stint as a researcher at the University of Michigan in 2024 – an important step in her academic career.

From care worker to researcher

"It's been clear to me since my Master's in Psychology that I wanted to go into research," says Loher, who previously trained as a nursing care worker in Winterthur. Looking back, she speaks positively about her time in this field, citing the experience as important and enriching. However, she is also open about how much she enjoys her work at the Jacobs Center. "Research is simply a lot of fun," she says, smiling.



z-proso

An interdisciplinary network that researches life course development of young people



2022 brought a wealth of research findings, with researchers from the z-proso network publishing around 25 papers in this year alone. Nearly two decades of work lie behind this figure, with z-proso having been built up under the leadership of Manuel Eisner, Denis Ribeaud and most recently, Lilly Shanahan. The figure also shows the dynamic strength of an interdisciplinary network that extends far beyond the core team in Zurich and includes Cambridge, Edinburgh, Pittsburgh, Utrecht and Barcelona.



Team z-proso

Manuel Eisner | Prof. Dr., Co-Principal Investigator

Denis Ribeaud | Dr., Co-Principal Investigator

Lilly Shanahan | Prof. Dr., Co-Principal Investigator

Lea Buzzi | Research Associate

Céline Gloor | MA, Research Associate

Ines Florin | lic. phil., Secretary

The Zurich Project of Social Development from Childhood to Adulthood (z-proso) kicked off 2022 with a new round of data collection. The participants were now around 24 years old, and a remarkably high number – 1,160 – agreed to participate in the latest wave of surveys. In December of the previous year, Céline Gloor and Anna Tobler had recruited a survey team of 13 people. The most intensive phase of the data collection took place from March to mid-May; afterwards, a mini-lab was available for additional surveys until the summer holidays. Each participant passed through four to six stations in the lab. They were also given the option of participating in the survey via Zoom.

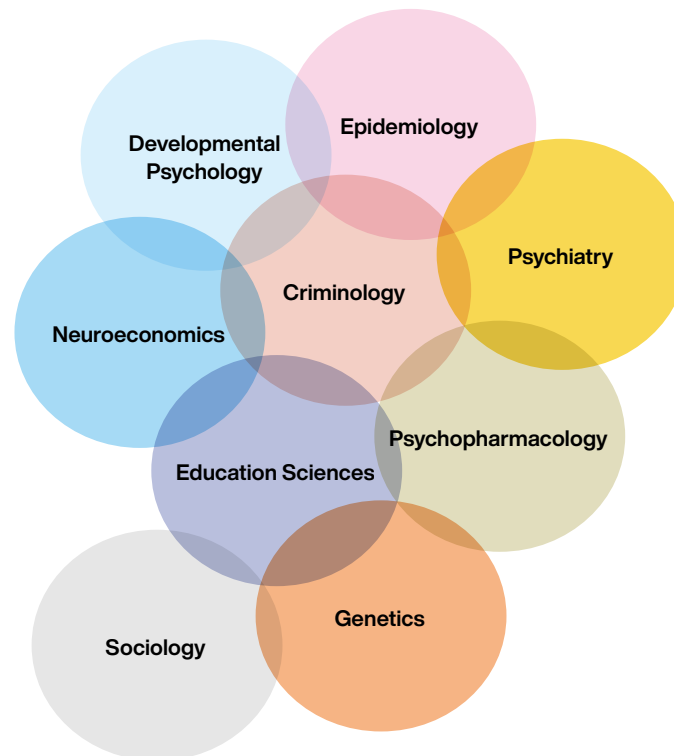
This round of data collection marked the ninth wave of surveys conducted in z-proso. Participants also had their pulse measured, underwent cognitive testing and submitted new hair samples under the supervision of Boris Quednow and Lilly Shanahan. The consent form allowed for the recruitment of test subjects for participation in later add-on studies, including the continuation of the z-GIG study (Todd Hare) and an environmental snapshot study with questions about mood and behavior in day-to-day life (Aja Murray).

Lea Buzzi and Céline Gloor spent the second half of the year focusing on preparing and documenting the new data. Within just a few months, the data was ready for use by cooperation partners. The team also heavily focused on the study design for z-proso NextGen, which was developed by Lilly Shanahan and Denis Ribeaud together with Laura Bechtiger. NextGen adds a new generation to z-proso by tracking z-proso participants who have now become parents themselves. The aim is to find out how the childhood experiences of the participants impact their behavior as parents. Researchers also want to gain insight into the intergenerational transmission of behaviors. Four measurement times are planned for the study. An important event for all z-proso researchers took place in the second half of 2022: the fifth research meeting of zIREN, z-proso's international research network, which was held in person with around 40 participants in Edinburgh. The meeting was organized by the research teams in Edinburgh along with the z-proso research directors and received support from the Jacobs Center.

A multi-faceted network

Over the past 18 years, z-proso has evolved into an impressively dense global research network that includes not only numerous universities but also a large number of disciplines. Having researchers from the fields of psychology, sociology, criminology, genetics and neuro-economics allows for holistic observation of how people's social behavior develops during childhood, adolescence and later in life.

Disciplinary Cloud



The core of z-proso is the team led by Manuel Eisner, Lilly Shanahan and Denis Ribeaud from the Jacobs Center for Productive Youth Development. Within the Center itself there are many additional researchers who are either involved in the project or make use of its data. In 2022, this included the teams led by Ulf Zölitz, Nora Maria Raschle, Mike Shanahan and Lilly Shanahan. Furthermore, z-proso has various cooperation partners at the University of Zurich, including Todd Hare and Ana Cubillo from the Department of Economics, Markus Baumgartner and his forensic pharmacology and toxicology team, and Boris Quednow from the University Hospital of Psychiatry Zurich. Annekatriin Steinhoff from the University of Bern and Urs Hepp, who contributed to research on how the COVID-19 pandemic affected young people, are part of z-proso's Swiss research network. The Decision Science Laboratory at ETH Zurich is also an important partner who has developed and provided the infrastructure for carrying out the study; it was also the place where the ninth survey wave of z-proso was conducted. The z-proso International Research Network (zIREN) brings together researchers who actively work with and publish based on z-proso data. Here are just a few of the researchers who were especially active in 2022: Aja Murray from the University of Edinburgh helped to develop the "Decades to Minutes" (D2M) add-on project, which investigates the impact of daily experiences on the psychological development of young people.

Additional current projects are underway at the Max Planck Institute for the Study of Crime, Security and Law (Jean-Louis van Gelder), University College London (Bettina Rottweiler), University of Utrecht (Amy Nivette), University of Amsterdam (Ivy Defoe und Giuseppe Sorrenti), University of Cordoba (Izabela Zych), University of Barcelona (Noemi Pereda), and Carnegie Mellon University (Dan Nagin). Very important work in connection with the zIREN network is also carried out by the Violence Research Centre, led by Manuel Eisner at the Institute of Criminology at the University of Cambridge.

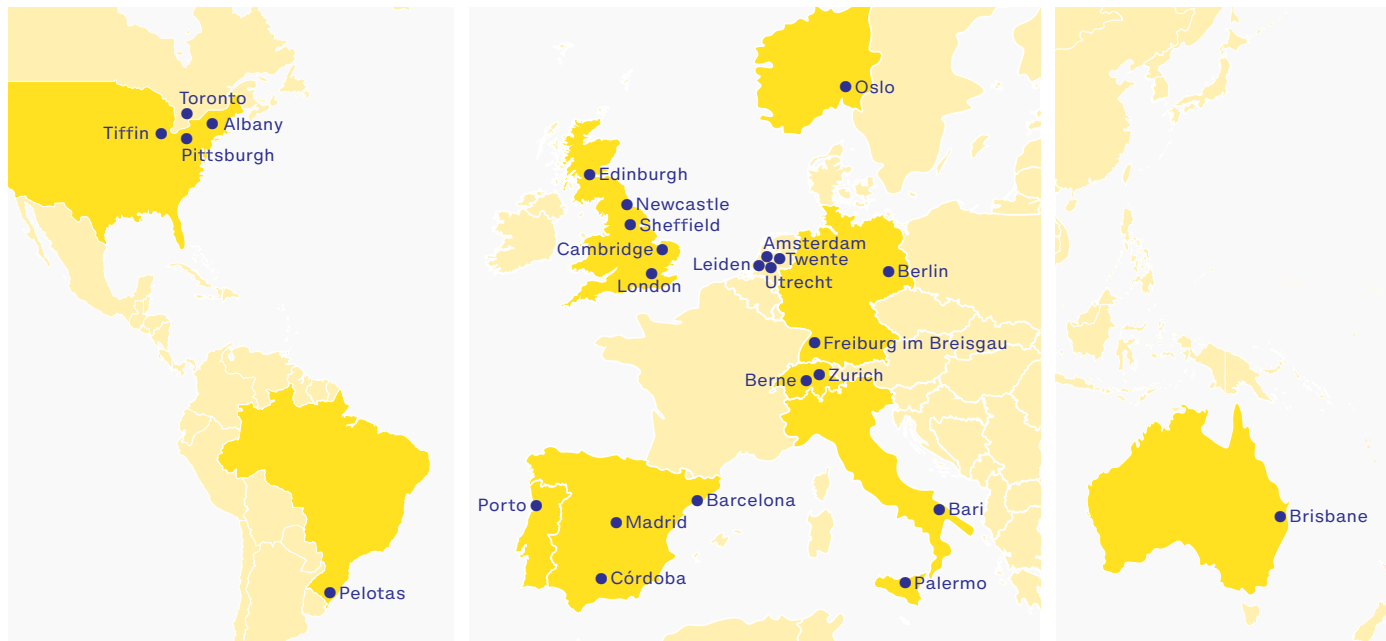
“This global network provides immeasurable benefits for the development of early-career researchers,” says project leader Denis Ribeaud. “And working on the survey team can be an important experience for young Master’s graduates who are transitioning to doctoral studies.” Many reciprocal research visits also take place between the various zIREN locations. In 2022, the exchange PhD student Samuel Henry spent time in Zurich working on the D2M project; his stay was supported by the Scottish Funding Council’s Saltire Emerging Researcher Scheme. Also deserving of mention is Annekatrin Steinhoff, a member of

the zIREN network who currently works at the University Hospital for Child and Adolescent Psychiatry and Psychotherapy at the University of Bern. She received an SNSF starting grant totaling CHF 1.8 million. “Her application was based on her previous research with z-proso,” says Lilly Shanahan, co-director of the project. “We’re very proud that this grant will allow her to conduct a five-year research project with her own team.”

Successes and challenges

With around 25 peer-reviewed publications, the z-proso network published more articles in 2022 than ever before, and some of these articles have been frequently referenced by other researchers, with some cited over 300 times. The relevance of the z-proso findings and their ability to enact change can also be seen in attention from the media. Z-proso continues to be on solid footing thanks to SNSF funding and Research Integration Funds from the Jacobs Center. The COVID-19 pandemic, which extended into 2022, posed a challenge for the project as it made fieldwork more difficult. However, the pandemic was also a historic moment that provided a great opportunity for longitudinal studies. Thanks to its well-functioning team and pre-existing infrastructure and resources, z-proso has been able to gain additional insights into how young people experienced this period.

Current z-proso Collaborations, 2021–2022



BUNAVIA

Who's on the right educational path?

The BUNAVIA project is about to kick off its first round of data collection. As part of the interdisciplinary network at JCPYD and the Sociology Department at the University of Lausanne, BUNAVIA hopes to improve the developmental and learning environment of children during their time in compulsory education.



Project manager Doris Hanappi reports on the current status of the project.

Ms. Hanappi, can you tell us what BUNAVIA is all about?

“Buna via” comes from Romansch and means “good path”. We wanted to use developmental and life course research to investigate what is needed to put children on the right path in terms of their development and education.

So does that mean that Swiss children aren't on a “good path”?

Switzerland is one of the world's most educated countries. Still, there is considerable educational inequality within and between the regions of Switzerland. Various new studies and reports show that socioeco-

nomical inequality in terms of access to education and learning outcomes has grown. There is where BUNAVIA comes in. We want to create a foundation for evidence-based approaches that can reduce educational inequality in Switzerland. We are using annual surveys to track children from kindergarten age through secondary school, with a particular emphasis on transitions within the educational system since these are critical points in pupils' development.

What issues are you focusing on?

BUNAVIA is focusing on three main areas: first, how life is organized and structured outside of school; second, the values and the identity of the parents; and third, the significance of family and friend networks. Starting in fall 2023, we will work together with the Department of Sociology at the University of Lausanne and the Decision Science Laboratory at ETH Zurich to conduct annual surveys with around 2,000 parents and children in the Canton of Zurich and 1,500 parents and children in the Canton of Valais. These surveys will shed light on the social, environmental and other contextual factors that could be relevant to children's development and education. For instance, we want to analyze the impact of parental support for performance-related activities (e.g., financial support for special prep courses) and non-performance-related activities (e.g., participation in athletic and cultural activities). We will also record other factors such as parents' expectations, attitudes and professions or sleeping patterns, physical activity and media use on the part of the children.

Laura Bernardi: "I'm very happy that the BUNAVIA project is being conducted in the cantons of Zurich and Valais. This will help us observe the diversity of educational, family and social systems and practices in German- and French-speaking Switzerland and understand the developmental and learning conditions involved."

Can you name some milestones that the BUNAVIA project achieved last year?

Thanks to BUNAVIA, the JCPYD is a partner of the Zurich Learning Progress Survey Consortium. The main BUNAVIA survey is now incorporated in the Learning Progress Survey, and the Zurich Department of Education wants to use this to trace the learning and educational paths of pupils during their time in compulsory schooling.

Another important success was the mini pilot study that was carried out to evaluate and improve the survey we developed for the annual data collection. The results are promising: We concluded that different groups of parents, depending on their age, sex and cultural background, make different investments in the development of their children.

One of BUNAVIA's central aspects is its participatory character. Why is this so important?

When you actively involve policymakers and real-world practitioners in the study design early on, you can increase the reach and the impact of the project. BUNAVIA brings social relevance and scientific findings together, from data collection with parents and schools to communicating the results. For instance, we offer workshops that show how teachers and schools can make better use of parents as a "resource". For us, the child is the main focus: How can they be best supported in a changing family and learning environment?

After extensive prep work, BUNAVIA is about to launch. What kinds of findings and implications do you hope the study will generate?

In general, I hope that BUNAVIA will strengthen the research capacity and networks at the Jacobs Center and raise the visibility of our research results. Societal effects observed over larger timescales and geographies, like the kind BUNAVIA will investigate, promise to make lasting contributions to evidence-based and value-based policies that could increase equal opportunity in education in Switzerland.

Kaspar Burger's research team

Getting to the bottom of unequal educational opportunities

Kaspar Burger's team focuses on the exciting connections between educational processes and human development over the life course. Francesca Mele and Kevin Schönholzer share insights into their findings and experiences from 2022.



Kaspar Burger's research team

Using data and quantitative evaluation methods to draw conclusions about educational paths and social inequality: this is the main ambition of the researchers working in Kaspar Burger's team. Their interdisciplinary approaches and methodological knowledge set their research apart. Francesca Mele and Kevin Schönholzer, both third-year PhD candidates in Burger's team, know first-hand what that means in practice.

The role of individual agency in the life course

For Mele, 2022 was shaped by two projects in particular. The first project, conducted in collaboration with Kaspar Burger and Marlis Buchmann, uses longitudinal data from the Jacobs Center's Swiss COCON study. The researchers used this data to investigate how individual agency and socioeconomic factors predict transitions into more or less academically demanding educational paths at the first and second secondary level. Mele dove headfirst into analyzing complex relationships within the study. "Our study was able to demonstrate that individual agency plays an important role in managing early transitions," she says. "Disadvantaged students in particular benefited from being hard-working and putting in the effort."

In her second project, Mele joined Kaspar Burger, Jeylan Mortimer and Xiaowen Han in investigating the intergenerational transfer of work orientation, which is a possible additional factor that leads to the reproduction of social inequality. The results indicate that professional self-determination, an important intrinsic dimension of work, is in fact transmitted from parents to their children. This finding sheds light on an additional mechanism through which social inequality is perpetuated over generations. For Mele, the results that 2023 will bring are also important. “I would like to continue working with longitudinal studies that are available to researchers in different countries,” she says.

Welfare state family policy and its impact on educational inequality

2022 was an eventful year for Kevin Schönholzer as well. “What was particularly challenging and exciting for me was my work on an article about the connections between educational inequality and family policy,” he says. According to Schönholzer, this research question is quite demanding in terms of the underlying data. He used multiple data sets to investigate the extent to which various family policy measures, such as parental leave or child allowances, contribute to success in school for the children involved. The sticking point: Success in school is measured via standardized testing at age 10, so the policies in question need to have already been in place several years earlier, between birth and age five.

Schönholzer says that the analysis led to some interesting findings. “In our sample, when the state spends more money on early childhood interventions or family support, the relationship between the parents’ academic success and the performance of children in school becomes weaker,” he says.

Promoting methodological knowledge

The research that Mele and Schönholzer deal with on a daily basis requires more than just field-specific knowledge of education. Both researchers agree that handling quantitative data in a creative, knowledgeable way is central to their work. Together with Laura Bechtiger from the JCPYD and the Faculty of Education at the University of Cambridge, Mele and Schönholzer organized an interdisciplinary workshop on developing quantitative methods in December 2022. “We wanted to create a platform for junior academics to strengthen their understanding of the newest quantitative techniques, and we wanted to do this through interdisciplinary exchange,” says Mele. According to Schönholzer, the two-day event focused on interactive formats. “For us it wasn’t just about expanding participants’ knowledge but also about giving them the opportunity to network and work together,” he says.



COCON

Cohort differences in the development of civic engagement during adolescence



Civil society engagement in adolescence over the past decade



Marlis Buchmann

Prof. em. Dr. Dr. h. c.
Principal Investigator
COCON study
Professor of Sociology



Jeanine Grütter

Prof. Dr.
Professor of Psychology
at University of Constance

Democratic societies depend on the civic orientation and communal engagement of the populace to function effectively. Adolescence represents a stage of life when these civic virtues develop. In times of rapid social change, it is important to understand how different facets of societal change are associated with the development of various components of civic engagement during adolescence.

To date, however, little is known about whether adolescents' civic development has changed over the past decades. This research gap exists because only a few studies consider the role of historical change in developmental change. Our study discusses four major factors of societal change and their role in

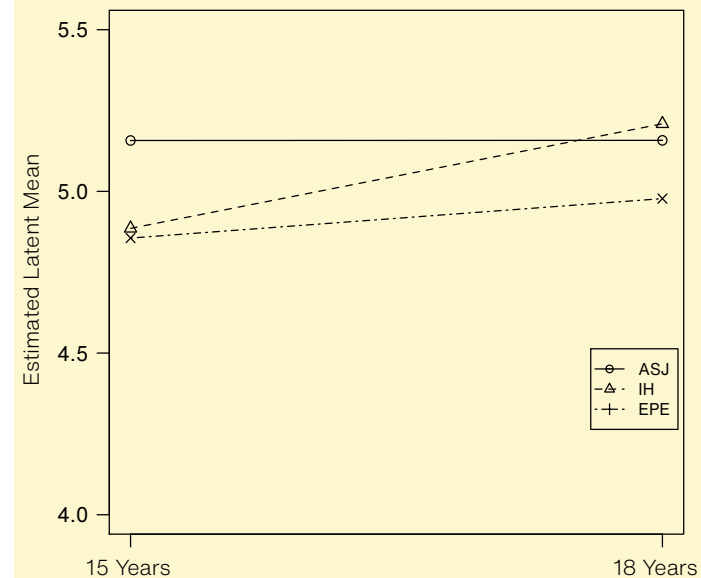
adolescents' development of civic engagement across cohorts: increasing social inequality, growing cultural individualization, shifts in the structure of the life course, and the proliferation of new media. The study compared civic development from mid- to late adolescence (age 15 to 18) in two cohorts born almost a decade apart in Switzerland, with the earlier cohort born in 1991 (1,258 participants) and the more recent one in 2000 (930 participants). Civic engagement was operationalized as a multidimensional construct, including the three related components of attitudes about social justice, informal helping and belief in political efficacy.

Development-related changes in historical comparison

Increase in social inequality was assumed to render adolescents more sensitive to unequal opportunities as expressed in higher attitudes about social justice in the more recent cohort. However, the findings showed similar levels in these attitudes in both cohorts at age 15 and no developmental differences between mid- and late adolescence (see Figure). However, differences were found for informal helping and political efficacy beliefs: At age 15, adolescents of the more recent cohort reported lower levels of political efficacy beliefs and informal helping than those in the earlier cohort. Thus, these two components may have declined over time. When looking at developmental change, both informal helping and political efficacy beliefs slightly increased from mid- to late adolescence. For historical differences in developmental changes, we observed a flatter increase in informal helping in the 2000 cohort as compared to the 1991 cohort. Adolescents born later experienced a lower increase in their development of informal helping than those born earlier.

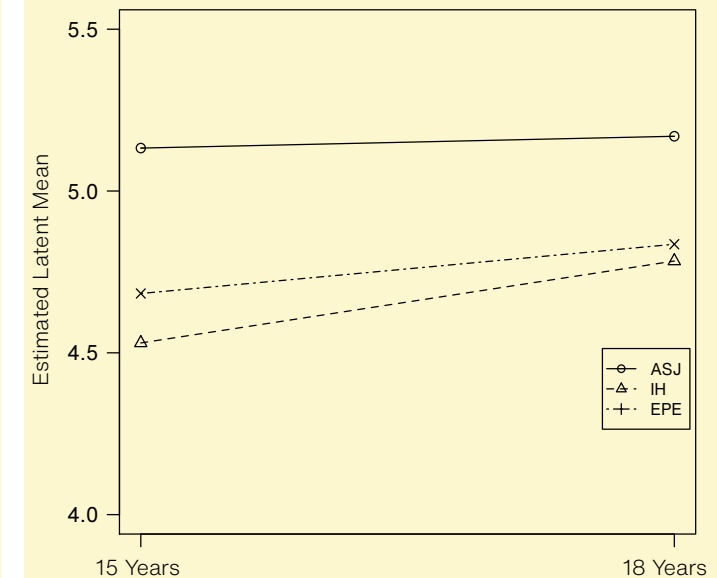
Development of civic engagement

Cohort born 1991



Potential societal explanations relate to the changing structure of the life course such as the postponement of adult roles and the concomitant prolongation of adolescence. This may postpone the development of civic orientation and engagement for the common good. Our increasingly individualized culture may also promote heightened concern for the self and thus lower communal engagement during adolescence.

Cohort born 2000



Waning engagement for the common good may be approached with appropriate interventions. For example, to counteract the decreasing trend for informal helping from mid- to late adolescence, higher education may emphasize more prosocial and community values, which are often treated as side-issues given the focus on academic achievement.

The Zurich Youth Surveys (ZYS)

Data analysis and results

The Zurich Youth Survey (ZYS) was conducted for the fourth time in 2021, following previous waves in 1999, 2007 and 2014. The ZYS uses repeated, methodologically identical surveys of adolescents to gain insight – beyond what is available in official statistics – into the actual extent and structure of youth violence and its causes as well as how it develops over the long term.



Denis Ribeaud
Dr.
Research leader ZYS

In 2021, the fourth Zurich Youth Survey (ZYS) was carried out in schools with around 4,500 adolescents in 7th, 9th and 11th grade. In 2022, the ZYS research team focused on analyzing the data, writing up their report and sharing their findings.

In March and June 2022, study authors Denis Ribeaud and Michelle Loher presented their initial findings from the study to the Canton of Zurich's extended Coordination Group on Youth Violence. In September, their report was presented to the public at a press conference and published online on the Jacobs Center website.

The findings show that from 2014 to 2021, there has been a steady rise in all forms of sexual violence and bullying (Figure 1) as well as an increase in robberies and blackmail, with the latter being attributable to specific groups of repeat offenders.

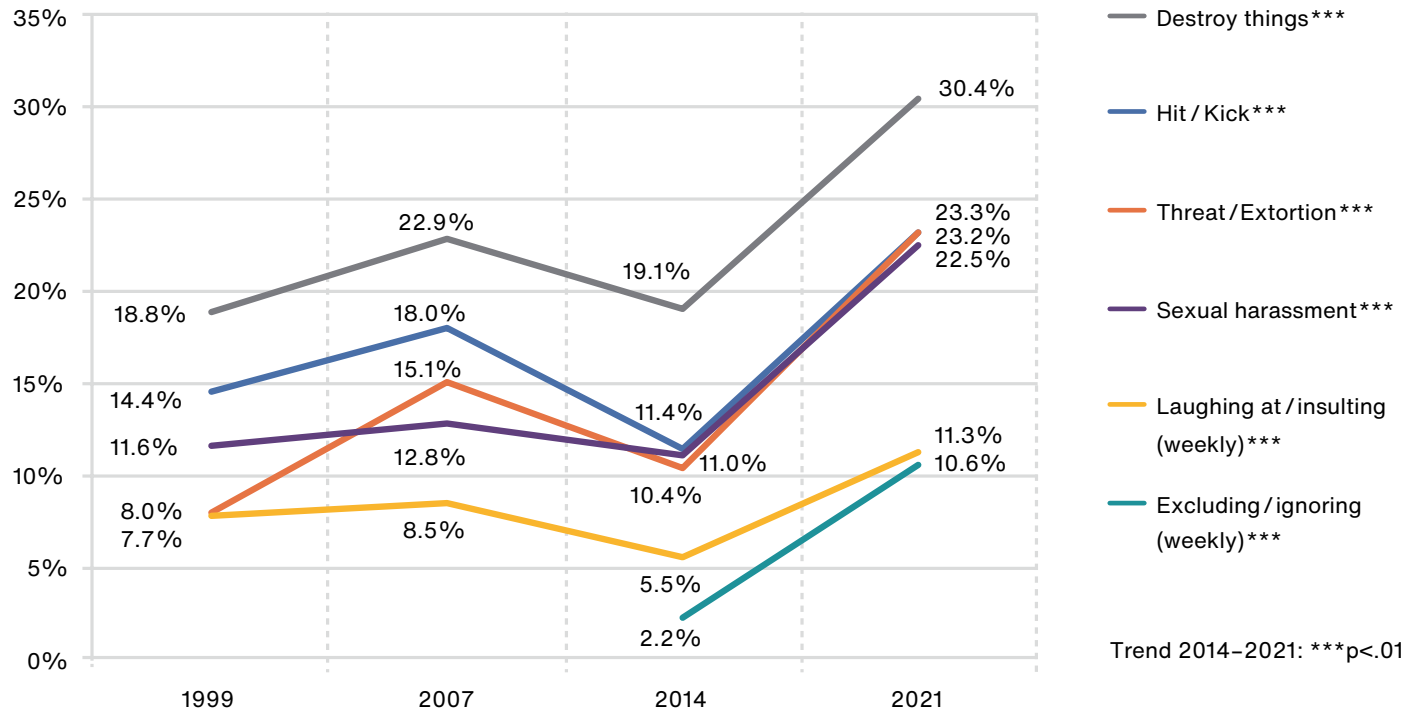
The study also published comprehensive data on the abuse of prescription medication for the first time, which showed concerning rates of opioid use by ninth graders. These results were featured in the publication *Suchtpanorama 2023* by *Sucht Schweiz*, a Swiss foundation that addresses addiction problems.

From academia to the real world

With the aim of transferring their findings to the real world as soon as possible, the ZYS team held presentations with various specialist audiences, for instance at the Swiss National Congress on Preventing Violence and Promoting Relationship Skills in Adolescents, at the Canton of Zurich’s Conference of Lawyers and Social Workers, the Canton of Zurich’s Strategic Cooperation Body on Domestic Violence, and the City of Zurich’s Working Group on Adolescents in Public Space. Additional presentations will be made in 2023.



Figure 1
Rise of bullying at Zurich schools from 1999 to 2021



Frequent external childcare can affect children's behavior

The Jacobs Center for Productive Youth Development at the University of Zurich has conducted a study to examine how external childcare influences the development of children into young adulthood. The data was collected as part of the Zurich Project on the Social Development from Childhood into Adulthood (z-proso) and consisted of around 1,300 schoolchildren aged between 7 and 20 in the city of Zurich.



Margit Averdijk
Dr.
Research leader

Effects at primary school age

Around 67 percent of the children in the survey received external childcare before entering kindergarten. 32 percent of these children attended a daycare center and 22 percent a playgroup. Another 22 percent received care from an external family member, 3 percent from acquaintances or neighbors, and 12 percent from daycare mothers. The researchers asked the children as well as their parents and teachers about externalizing or internalizing behavior problems, delinquency and substance use. The survey showed that the behaviors observed in primary school-aged children differed depending on the respondents and the type of external daycare.

According to the parents, primary school pupils were more likely to show aggression, display symptoms of ADHD and experience anxiety and depression the more time they had spent in a daycare center before entering school. This finding was also supported by some of the children's own assessments. According to the teachers, hyperactivity, lack of impulse control, inattention or aggression were more likely to occur in schoolchildren who had spent more than two days a week with a daycare mother or at least three days a week in a playgroup.

Problem behavior usually disappears

How can these findings be explained? “It’s possible that external childcare may lessen the strength of child-parent attachment and interaction,” says first author Margit Averdijk. However, it is also possible that children in center-based care or playgroups learn problem behavior from their peers and sometimes use it to get attention from caregivers.

“Although we can’t directly check which of these mechanisms is the most likely explanation for our results, both of them support our findings,” explains the researcher. The good news is that the problematic behavior observed in primary school-aged children decreases as the children get older and mostly disappears from the age of 13. Symptoms of ADHD were the only symptoms to persist into adolescence.

No general link to substance use in adolescents

Moreover, the researchers found no evidence that generally links external childcare settings to delinquency and substance use in adolescents. An exception was the link between daycare attendance and substance use, which persisted into young adulthood for those from vulnerable backgrounds. “Our study indicates that these children are also more likely to experience anxiety or depression as they grow older, which may become more acute as a result of the parents’ absence,” Averdijk explains.

Interpret with caution

“Our study sheds light on some possible unfavorable links between external childcare and children’s later development,” says last author and sociology professor Manuel Eisner. However, he warns not to jump to conclusions and adds that while the study meets the highest scientific standards, it is based on observational data and surveys that do not always allow clear conclusions to be drawn about causation. Furthermore, the study was not able to take into account the quality of childcare received outside of the family.

You can find the full study here [WEBLINK ↗](#)



Communities that Care (CTC)



Communities that Care (CTC) is a coalition-based prevention system, with the aim to promote the healthy development of adolescents and to reduce behavioral problems of youth on the community level.



Margit Averdijk
Dr.
Research leader CTC

Behavioral issues such as tobacco use, youth crime or mental health problems in adolescents are a big problem in many societies. There is often a lack of coordinated evidence-based prevention approaches on the municipal level that can help tackle the problem. To close this gap, researchers developed the Communities That Care (CTC) approach.

CTC is a coalition-based prevention system for municipalities that promotes young people's healthy development and reduces youth behavioral problems. CTC was originally developed in the United States but has since been implemented in countries around the world and is currently listed as one of the "certified promising programs" by the prestigious Blueprints for Healthy Youth Development. The aim of this project

is to examine and report on the risk and protective factor profiles of each community involved, based on data from 7th to 9th graders collected during the CTC roll-out. Between 2015 and 2019, Radix introduced a pilot run of CTC in three Swiss German municipalities. Currently Radix is either rolling out the CTC project in 35 additional Swiss German municipalities or planning to do so. The data from the youth survey will be analyzed at the Jacobs Center.

2022

Events and news

January

Grant awarded to JC PhD students for peer mentoring R Group



Congratulations to our PhD students Laura Bechtiger and Lydia Johnson-Ferguson: As two of the co-leaders of the peer mentoring R Group at the

UZH Psychology Department, they received new funding from the UZH Graduate Campus to keep their fantastic activities going in 2022.

To learn more about the group's activities, see: Peer Mentoring Project R Group (R) [WEBLINK ↗](#)

February

SNSF Doc.CH funding for Michelle Loher



Congratulations to Michelle Loher, who was awarded four years of funding by the SNSF to pursue a PhD with the Doc.CH mechanism. In her project, Michelle will examine pathways to non-medical use of prescription drugs among young people.

SNF Doc.CH [WEBLINK ↗](#)

The Jacobs Center Research Seminar Series

Jennie Noll, PhD

Professor, Dept. of Human Development and Family Studies, Director, Child Maltreatment Solutions Network PI, NICHD P50 Capstone Center for Healthy Children, Penn State University



Shifting contexts: Could this be the new resilience?

March

The Jacobs Center Research Seminar Series

Laura E. Meine, PhD

Department of Psychology, University of Zurich



Reward Anticipation and Episodic Memory in Middle Childhood

Public Inaugural Lecture: Prof. Ana Costa-Ramón



The Causal Impact of Children's Health Shocks

A live stream of the event is available at: [WEBLINK ↗](#)

Dr. Réka Borbás successfully defended her thesis



Many congratulations to Dr. Réka Borbás, who successfully defended her thesis "Developing an intricate social brain – functional and structural correlates of socio-emotional skills and their association with mental well-being" with the highest possible honors (summa cum laude).

April

The Jacobs Center Research Seminar Series

Dr. Mirella Manfredi

Jacobs Center for Productive Youth Development, University of Zurich
Department of Psychology, University of Zurich



Processing meaning across different modalities, contexts, and populations: Evidence from neurophysiology

Causal Inference workshop

with Professor Miguel Hernán



At the Workshop on Causal Inference at the Jacobs Center, Professor Miguel Hernán gave a lecture on causal diagrams, which have revolutionized how researchers ask: “What is the causal effect of X on Y?” By summarizing and communicating assumptions about the causal structure

of a problem, causal diagrams have helped clarify apparent paradoxes, describe common biases, and identify adjustment variables. As a result, a sound understanding of causal diagrams is becoming increasingly important in many scientific disciplines. Causal diagrams will be helpful for future interdisciplinary research discussions at the Jacobs Center.

Miguel Hernán ist Professor für Biostatistik und Epidemiologie an der Harvard Chan School of Public Health und Mitglied der Fakultät des Harvard-MIT Program in Health Sciences and Technology. [WEBLINK ↗](#)

The Jacobs Center Research Seminar Series

Prof. Dr. Christopher Hopwood

Department of Psychology,
University of Zurich



Personality and the Environment

Workshop on professional networking organized by the R Group, a peer mentoring group at UZH



Professors Nora Raschle and Lilly Shanahan recently each led a session at a workshop on professional networking, which was organized by the R peer mentoring group at the University of Zurich. This group is co-led in part by Jacobs Center PhD students Lydia Johnson-Ferguson and Laura Bechtiger.

The R Group initiative aims to connect R users with different backgrounds and career levels. It also organizes a career talk series, roundtable discussions and other workshops. Jacobs Center PhD students are active organizers of and participants in this group.

Peer Mentoring Project R Group (R) [WEBLINK ↗](#)

May

Visiting Professorship for Prof. (em.) Dr. Dr. h.c. Marlis Buchmann in Finland

From 1 May 2022 to 30 April 2024, Marlis Buchmann will serve as Visiting Professor within the Faculty of Social Sciences, University of Turku, Finland, at the INVEST Research Flagship Center.

Panel discussion: “The impact of war trauma on development”, organized by the Developmental Science Network Zurich



The current war and refugee situation in Ukraine has an impact on various levels of society, both within the country and globally. In this panel discussion, we looked at the impact of traumatic experiences caused by war and evacuation on the development of children and adults. We discussed this topic with four leading experts from research institutions in Zurich.

More information: Development Science Network Zurich [WEBLINK ↗](#)

Train ride to the Rhine Falls

The Jacobs Center team outing in spring was a great success.



On 6 May, we took the wonderful Red Arrow Churchill train, which was built in the 1930s, and visited the Rhine Falls. It was a fantastic experience and an excellent opportunity to meet in person again.

Meet the Expert: Developmental Science Network Zurich



On 17 May, the newly founded Developmental Science Network Zurich offered the opportunity to talk directly with internationally renowned experts in a one-on-one meeting and to ask them all the questions you have always wanted to ask the scientists in the field of developmental science – topics ranged from birth to death, across cultures and species.

The Jacobs Center Research Seminar Series

Prof. Dr. Scott Hofer

Director, Institute on Aging & Lifelong Health
University of Victoria, Canada



Developing and Validating Digital Biomarkers for Lifecourse Research and Intervention: Innovations in Earlier Detection of Individual Change and the Design of Adaptive Interventions

The Jacobs Center Research Seminar Series

Prof. Dr. Christina Felde

University of Würzburg, Germany



Changing Gender Norms: The Effect of Paternity Leave on the Next Generation

The Jacobs Center Research Seminar Series

Prof. Dr. Jonas Radl

Associate Professor of Sociology,
Universidad Carlos III de Madrid Head of
Research Group "Effort and Social
Inequality", WZB Berlin Social Science
Center



Effort and dynamics of educational inequality:
Evidence from a laboratory study among
primary school children

Workshop "Improving Risk Models Across the Life Course" at Schloss Marbach, Germany



How do risky experiences early in life influence health and well-being in later life? And what are the best research methods to answer a question of this kind? These were the issues discussed by a team of the 14 scholars from psychology, sociology, economics, medicine and human development who met at Schloss Marbach. The event was sponsored by the Jacobs Center and the University of Victoria's Institute on Aging and Life-Long Health. The team plans to meet again in Victoria to report on their new research into these exciting questions.

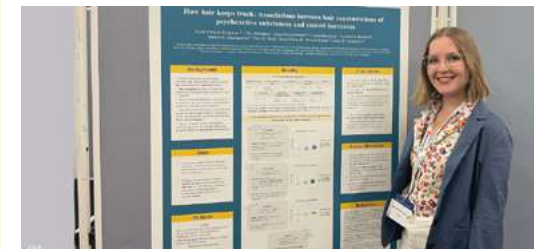
Workshop on three-generation cohort studies and mechanisms of intergenerational transmission



The Jacobs Center's Risk and Resilience group hosted a workshop on three-generation cohort studies and mechanisms of intergenerational transmission. We would like to thank Prof. Susan Branje from Utrecht University for providing her expert input on these topics.

June

Poster presentation at the Psychology and the Brain conference



Lydia Johnson-Ferguson, a doctoral student in the Risk and Resilience group at the Jacobs Center, presented a poster on the associations of psychoactive substances with steroid hormones in hair (e.g., cortisol, testosterone) at the annual Psychology and the Brain conference in Freiburg, Germany, on 15 June.

August

Visiting scientist at the JCPYD



As part of the Saltire Emerging Researcher scheme, Samuel Henry from the University of Edinburgh was accepted as a visiting researcher for five months (August–December) to work with z-proso data at the Jacobs Center.

September

z-proso International Research Network (zIReN) Meeting



The fourth meeting of the z-proso International Research Network (zIReN) took place from 1 to 3 September in Edinburgh. Manuel Eisner, Denis Ribeaud, Lilly Shanahan, Aja Murray and Ingrid Obsuth chaired the meeting with 34 researchers from 8 countries and 14 different universities presenting and discussing their latest findings and projects with z-proso data. It was an exciting and successful exchange, and the researchers were visibly pleased to be able to hold a meeting in person again.

More information: zIReN Meeting, Edinburgh, 2022 [WEBLINK ↗](#)

Zurich Youth Survey 2021



On 6 September, Denis Ribeaud held a press conference about the report on the Zurich Youth Survey (ZYS) 2021, which was published that same day.

Since 1999, thousands of young people in the Canton of Zurich have been surveyed about their experiences as victims and perpetrators of violence at intervals of seven to eight years. In this fourth ZYS survey, around 4,500 young people between the ages of 13 and 19 were interviewed from May to July 2021.

Further information

Factsheet [PDF ↗](#)

Study report (Denis Ribeaud and Michelle Loher) (German only) [PDF ↗](#)

Media release from the Canton of Zurich (German, with video of the media conference) [WEBLINK ↗](#)
ZYS 2021 web page [WEBLINK ↗](#)

Input presentation on the ZYS study



On 29 September, Denis Ribeaud gave an input presentation for the youth lawyers and social workers in the juvenile criminal justice system of the Canton of Zurich at the Debate House Charlemagne. The topic was “Trends in youth violence, delinquency and substance use from 1999 to 2021: Selected results from the Zurich youth surveys”.

More on the Zurich Youth Surveys (ZYS) [WEBLINK ↗](#)

The Jacobs Center Research Seminar Series

Prof. Dr. Elsbeth Stern

Chair for Research on Learning and Instruction ETH Zürich



Psychological Research on Intelligence and Education: How to Unite Estranged Siblings

October

Prof. Lilly Shanahan at UZH/ETH Psychological Counseling Services event



Professor Lilly Shanahan (PI of the JC's Risk and Resilience research area) participated in a podium discussion in honor of the 50th

anniversary of the UZH/ETH Psychological Counseling Services. This lovely event, held at the ETH Audi Max, highlighted the importance of emerging adulthood as a period of mental health development.

For more information on the UZH/ETH Psychological Counseling Services, see also:

«Seeking help with mental health problems is a strength» (UZH News) [WEBLINK ↗](#)

Psychological Counseling Services [WEBLINK ↗](#)

The Jacobs Center Research Seminar Series

Sina Schwarze

Max Planck Institute for Human Development, Berlin



Neural mechanisms of task switching in children: Age differences and training-induced plasticity

November

J.E.D.I. Symposium 2022

The Jacobs Encounters in Developmental Science from an Interdisciplinary Perspective: Educational impacts beyond test scores

Educational impacts beyond test scores

In a discussion with two panelists:

– Prof. Dr. Jens Ludwig (University of Chicago)

– Prof. Dr. Ulrich Trautwein (University of Tübingen)

We explored the value of going beyond test scores and whether other dimensions should be considered when analyzing educational impacts. We also discussed examples of randomized controlled trials that have gone beyond measuring test scores when analyzing child development outcomes and invited the audience to join in the discussion. The event was organized by Ana Costa-Ramón, Moritz Daum and Nora Raschle.

The Jacobs Center Research Seminar Series

Prof. Dr. Aline Bütikofer
Norwegian School of Economics



Pregnancy Loss - Stress, Investment, and Subsequent Children

The Jacobs Center Research Seminar Series

Dr. Charles Driver
Institute of Education
University of Zurich



Modelling Development as a Dynamic System

The Jacobs Center Research Seminar Series

Dr. Denis Ribeaud
Jacobs Center for Productive Youth
Development
University of Zurich



Trends in Youth Violence, Delinquency, and Substance Use 1999-2021: Selected Findings from the Zurich Youth Surveys

Lea Mörsdorf and Mirella Manfredi held Future Day workshop



This year, for the first time, a series of Future Day events were also held on the Oerlikon campus. In addition to children visiting their parents at the workplace, they had the opportunity to participate in free activities such as workshops or tours. Lea Mörsdorf and Mirella Manfredi held one such workshop, “How and what the brain tells us”, on 10 November.

“Sexual assault and adolescents”

Public lecture on the Zurich Youth Survey 2021 (ZYS) by Denis Ribeaud



This talk was given as part of BiblioTalk, an event organized by the Equality Office of the City of Zurich. It took place in the *Bibliothek zur Gleichstellung* in the City Hall and was also broadcast live.

The Jacobs Center Research Seminar Series

Dr. Ana Rodriguez-Gonzalez
Department of Economics and Centre
for Economic Demography Lund
University



The Side Effects of the Oral Contraceptive Pill

December

Workshop: Promoting quantitative perspectives in educational science

A Cambridge-Zurich Exchange (CAMZH)

Educational research lies at the intersection of various disciplines such as sociology, psychology and economics and overlaps with their diverse theoretical and methodological perspectives, but it also offers its own interdisciplinary perspective.

Nevertheless, there are hardly any interdisciplinary and international platforms that enable theoretical and methodological development of this kind, especially among junior researchers. This two-part workshop, which brought together junior researchers from different research groups

and sub-fields at the University of Zurich and the University of Cambridge, provided one such a platform. The organizing team of the workshop consisted of Francesca Mele, Kevin Schönholzer and Laura Bechtiger (Jacobs Center for Productive Youth Development, University of Zurich) and Laura Cashman, Miriam Broeks and Rubaiya Murshed (Faculty of Education, University of Cambridge).

The Jacobs Center Research Seminar Series

Prof. Dr. Christoph Stadtfeld

Social Networks Lab ETH Zurich



The emergence of social networks between university students: Insights from the Swiss StudentLife Study

JC PhD students receive funding renewal for peer mentoring R Group



Congratulations once again to our PhD students Laura Bechtiger and Lydia Johnson-Ferguson: They are two of the co-leaders of the UZH peer mentoring R Group and were able to renew the group's funding from the UZH Graduate Campus for another year.

To learn more about the group's activities, see: Peer Mentoring Project R Group (R) [WEBLINK ↗](#)

Jacobs Center Christmas Party in the UniTurm



The year 2022 came to a festive close with an atmospheric Christmas aperitif event at the University's UniTurm restaurant.

The Jacobs Center Research Seminar Series

Prof. Dr. Martin J. Tomasik

Institute for Educational Evaluation
University of Zürich



The Zürich Learning Progress Study 2023-2035:
Concept, Design and Opportunities for Collaboration



Our research in the media

People rather than avatars

Moritz Daum, Lutz Jäncke, Marc Szydlak

UZH-Magazin, March 2022

Article [PDF ↗](#)

Entire UZH Magazine (Issuu) [WEBLINK ↗](#)

New long-term study:

Are day-care centres not a pony farm after all?

Margit Averdijk

NZZ am Sonntag, 16 April 2022

Article [PDF ↗](#)

NZZ website (with login) [WEBLINK ↗](#)

Link to the study [WEBLINK ↗](#)

Youth violence:

The cards are reshuffled during puberty

Denis Ribeaud

NZZ, 2 May 2022

Article [PDF ↗](#)

NZZ website (with login) [WEBLINK ↗](#)

Does doing good or receiving good make you happier?

Lisa Wagner

20minuten, 20 May 2022 [WEBLINK ↗](#)

Irritated children

z-proso

UZH Magazine, June 2022

Article [PDF ↗](#)

Entire UZH Magazine [WEBLINK ↗](#)

The vocational apprenticeship provides a motivational boost for young people – the grammar school does not manage this

COCON

NZZ, 17 June 2022

Article [PDF ↗](#)

NZZ website (with login) [WEBLINK ↗](#)

What children need – answers from developmental psychologist and father Moritz Daum

Online Magazine of the Office of Youth and Career

Guidance for Life Well, August 2022

Article [WEBLINK ↗](#)

If we parents play learning policemen, we achieve nothing

Moritz Daum

The Swiss Parents' Magazine Fritz+Fränzi

Article [PDF ↗](#)

Turning up in the head

Nora Raschle, et al.,

UZH Magazine, September 2022

Article [PDF ↗](#)

Entire UZH Magazine [WEBLINK ↗](#)

Children learn when their brains are ready

Nora Raschle

Tages-Anzeiger, 12 September 2022

Article (with login) [WEBLINK ↗](#)

Zurich Youth Survey 2021 (ZYS 2021)

The forgotten girls

The forgotten girls (article, interview with Denis Ribeaud and commentary

SonntagsZeitung, 13 November 2022

Article [PDF ↗](#)

Youth violence – how bad is it really?

SRF, 18 Oktober 2022

[WEBLINK ↗](#)

Intensive offenders twice as active

P.S. Zeitung., 9 September 2022

Artikel [PDF ↗](#)

Increasing youth violence – trend reversal expected

NZZ, 7 September 2022

Article [PDF ↗](#)

Every fourth young person in the canton of Zurich is a victim of violence

SRF News, 6 September 2022

[WEBLINK ↗](#)

Other media reports

[WEBLINK ↗](#)

Nora Raschle at the online congress: early childhood switzerland

[WEBLINK ↗](#)

Portrait Kaspar Burger

Swiss Coordination Office for Research in Education
December 2022

SKBF-Magazin 4/22

Entire Magazine [PDF ↗](#)

Organizational chart

Jacobs Center for Productive Youth Development (JCPYD)



Steering Committee

UZH Elisabeth Stark (Vice President Research)
 Katharina Michaelowa (Dean, Faculty of Arts and Sciences)
 Harald Gall (Dean, Faculty of Business, Economics and Informatics)

Jacobs Foundation Simon Sommer (Co-CEO)
 Olaf von Maydell (Member, Board of Trustees)
 Gelgia Fetz Fernandes (Co-Lead, Learning Minds)

Scientific Advisory Board

Ronald Dahl
 Kenneth A. Dodge
 Alexander Grob
 Yvonne Kelly
 Jens O. Ludwig
 Ulrich Trautwein

Governing Board

Executive Director: Moritz Daum

Moritz Daum (Psychology) | Michael Shanahan (Sociology) | Ana Costa-Ramón (Economics) | Nora Maria Raschle (Guest)

Office
 Stephanie Kernich

Management Committee

Director = Chair of the Management Committee | all chairs of the three departments at JCPYD: sociology/psychology/economics | representation of passive members (advisory function)

Sociology

Psychology

Economics



Publishing information

Editorial team
University of Zurich
Jacobs Center
for Productive Youth Development
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CH-8050 Zurich

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Gena Olson

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GYSIN [Konzept+Gestaltung]

Pictures

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Kellenberger Kaminski Photographie GmbH and Thomas Poppenwimmer, Jacobs Center
Team photos: Thomas Poppenwimmer, Jacobs Center
Event and news photos: Jacobs Center

- p. 01 Evgeny Atamanenko, Shutterstock
- p. 04 Shutterstock (side column)
Frank Brüderli (portrait of Elisabeth Stark) | Jacobs Foundation (portrait of Simon Sommer)
- p. 07 Nora Raschle, Jacobs Center
- p. 08 Nora Raschle, Jacobs Center
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