

VNOP-CAS Research Days *Researchers in Development*

2019

Program and abstracts

Thursday, November 21st and
Friday, November 22nd

Utrecht University



Utrecht Centre for Child
and Adolescent Studies **cas**

Contents

Word of Welcome	2
Program	3
Workshops	5
Keynote	6
Poster Presentations	7
Parallel Sessions Overview	8
Paper sessions 1	11
Paper session 1A: Neural processes and measurement	
Paper session 1B: Peer victimization at school	
Paper session 1C: Textual processing and social information search . .	
Symposia	18
Symposium 1A: Parents' mentalizing about their child	
Symposium 1B: Cross-national perspectives on adolescent wellbeing .	
Paper sessions 2	
Paper session 2A: Stress and anxiety across childhood	23
Paper session 2B: Peer relations and interactions	
Paper session 2C: Adjustment of refugees and minorities.	
Venues	31

Word of Welcome

Dear guest,

We are very pleased to welcome you to our joint Research Days 2019 in Utrecht. With two days of workshops, symposia, paper and poster sessions, we have put together a stimulating program for you: our PhD students and researchers. We hope everyone will have the opportunity to develop him- or herself in various ways (academically, socially, culturally, etc.) during these two days.

In this booklet, you will find the final program for both days, including information about the poster session and titles and abstracts of paper presentations and symposia.

The first day is organized especially for PhD students and includes a round of workshops and an exciting social activity.

On the second day, PhD students are joined by researchers of VNOP and CAS for another interesting program including a key-note by dr. Odilia Laceulle (Utrecht University), three rounds of symposia and a poster session.

Lastly, we cordially invite you to have a drink with us at the end of the program on Friday. Enjoy!

Kind regards,

The 2019 organizing committee:

Sjoerd van Halem	Tilburg University
Lilly Bogičević	Utrecht University
Isabel ten Bokkel	KU Leuven
Lysanne te Brinke	Utrecht University
Lisan Henricks	Radboud University Nijmegen
Loes Janssen	Leiden University
Amanda van Loon	Utrecht University
Miranda Lutz-Landesbergen	Erasmus University Rotterdam
Esther Mertens	Utrecht University
Ana da Silva Pinho	University of Amsterdam
Scarlett Slagter	University of Amsterdam

On behalf of the board and committees of VNOP and CAS.

Program

Thursday, November 21st

Location: Martinus J. Langeveld building, Heidelberglaan 1, 3584 CS Utrecht

Timeslot	Activity	Location
12:30 - 13:15	Registration	Event room
13:15 - 13:25	Plenary opening	Event room
13:30 - 15:00	Workshops – part I	
	<i>Work-life balance</i>	Event room
	<i>Making a scientific poster</i>	E3.14
	<i>Open science</i>	E1.18
15:00 - 15:15	Break	
15:15 - 17:00	Workshops – part II	
	<i>Work-life balance</i>	Event room
	<i>Making a scientific poster</i>	E3.14
	<i>Open science</i>	E1.18
17:00 - 21.30	Social activity	Bar Josefien (Utrecht)

Friday, November 22nd

Location: Het Oude Tolhuys, Weg naar Rhijnauwen 13-15, 3584 AD Utrecht

Timeslot	Activity	Location
09:00 - 09:30	Registration	Plein
09:50 - 10:00	Plenary opening	Waterliniezaal
10:00 - 11:00	Keynote <i>Dr. Odillia Laceulle - When the kids aren't alright: diverging trajectories in adolescent psychopathology</i>	Waterliniezaal
11:10 - 12:10	Paper sessions 1 <i>1A: (Neural)physiological measurements</i> <i>1B: Peer victimization at school</i> <i>1C: Textual processing, social information search, and social relations</i>	Waterliniebar Hulstkamp Sonneveld
12:10 - 13:15	Lunch break	Plein
13:15 - 14:15	Symposia <i>1A: Parents' mentalizing about their child</i> <i>1B: Cross-national perspectives on adolescent wellbeing</i>	Waterliniebar Hulstkamp
14:15 - 14:30	Coffee break	Plein
14:30 - 15:30	Paper sessions 2 <i>2A: Stress and anxiety across childhood</i> <i>2B: Peer relations and interactions</i> <i>2C: Adjustment of refugees and minorities</i>	Waterliniebar Hulstkamp Sonneveld
15:30 - ...	Poster session and drinks	Plein

Workshops

1. Happy Scientist: prevent a burn-out and find your work-life balance

By Ellis Vyth (Ellis Vyth Training)

Are you always busy: busy at work, busy at home, no time for yourself? Do you say 'no' to unimportant activities? And which activities make you happy?

During this workshop, we will discuss how to create work-life balance. You will prioritize your activities in work and life, and you will experience how to say 'no' to unimportant activities. Furthermore, we will practice how to improve the communication with your supervisor. After this workshop, you go home with practical tools how to change the way you deal with the scientific workload and become happy again in doing research.

Ellis Vyth obtained a PhD in Nutrition and Health Sciences and worked in science for 10 years. She is an experienced trainer who knows all the ins and outs of the scientific community. In a training, Ellis loves to help people to discover their own qualities and drivers in life. Website: www.ellisvyth.nl.

2. Creating an amazing scientific poster

By Toon Verlinden (The Floor is Yours)

How can you stand out in a room with hundreds of other scientific posters? How do you get the most out of what may seem like a rather useless activity? In this workshop we will show you how to build up a strong scientific poster, step by step. A poster that is clear, that is actually being read by your audience and that adds value for both you and your audience.

What we will cover amongst other things:

- How do you get your audience's attention? (Why should they listen to you?)
- Your poster pitch in one minute
- Your poster layout
- How to summarize a 30 page paper down to a single poster
- Examples of successful research posters
- Designing a poster and where to find good images

3. Open Science Practices in psychology

By Eeske van Roekel (Tilburg University)

Due to the replication crisis, the open science movement is rapidly gaining popularity. Although Developmental Psychology was a bit late to the party, open science practices are becoming increasingly important in our area as well. In this workshop, we aim to discuss different topics and problems with regard to open science, such as:

- Pre-registration with secondary data
- Posting preprints
- Sharing data
- Creating a reproducible workflow
- How to handle co-authors/supervisors who are ‘against’ open science

For every topic, we will have a short introduction, followed by discussion of different hypothetical scenario’s in smaller groups.

Keynote

When the kids aren’t alright: diverging trajectories in adolescent psychopathology

By. dr. Odilia Laceulle

Adolescence represents a critical period for the onset of many mental disorders. The way young people deal with adolescent specific developmental tasks might partly explain the development of psychopathology. At the same time, failing developmental tasks can insufficiently explain why the differences between adolescents increase over time. An individual differences approach – personality in particular – may contribute to our understanding regarding these diverging trajectories.

In this talk I will a) provide a brief overview of the literature on developmental psychopathology during adolescence, b) present studies on the joint effects of personality and developmental tasks on adolescent psychopathology and c) discuss how trajectories towards psychopathology may become more pronounced over time as a result of increasing differences in personality.

Poster Presentations

Overview of the posters that will be presented on November 22nd from 15:30 onwards.

	Name	Title
1.	Laura van der Aar	Is it possible to train self-concept? Behavioral and neural evaluation of a naturalistic training program for adolescents
2.	Esther Bernasco	Studying the role of peers in the development of autonomy and internalizing problems
3.	Liedewij Borremans	From behavioral problems of children to relationship problems with children: The effects of LLInC - study design
4.	Ymke de Bruijn	Ethnic diversity in Dutch picture books
5.	Marieke de Bruine	Mediators and moderators for the link between peer victimization and inflammation
6.	Annebel Christiaens	Development of the self during school transition
7.	Simone Dobbelaar	Individual differences in the relationship between prosocial behavior and behavioral control in middle childhood
8.	Lina van Drunen	Evidence for environmental influences on the neural processing of self-concept in middle childhood
9.	Kim Jansen	Who teaches right and wrong? Parents, peers, and adolescents behavioral development: the role of moral cognitions
10.	Sanne Kellij	Victims of bullying may have a negative social-cognitive style: A systematic review
11.	Qi Meng	The development of social-emotional functioning in Chinese preschool children with a cochlear implant: A longitudinal study
12.	Zoë Rejaän	Postdivorce coparenting patterns and relations with adolescent adjustment
13.	Sofie Weyn	Environmental sensitivity is related to children and adolescents' functioning in school context
14.	Annemiek Witte	Predicting infant-father attachment: The role of pre- and postnatal triadic family alliance and paternal testosterone levels
15.	Shannon Yuen	Social-emotional functioning and family dynamics in children with hearing loss

Parallel Sessions Overview

This section lists the titles of the presentations within the symposia. The next sections will give you more information about these symposia, including the presenting author and abstract.

Paper sessions 1 (11:10-12:10)

Paper session 1A: (Neural)physiological measurements (Waterliniebar)

- **S1A.1** Moments that matter? On the complexity of using triggers based on skin conductance to sample arousing events within an experience sampling framework.
Sjoerd van Halem (Tilburg University)
- **S1A.2** The neural correlates of giving in different social contexts in adolescence.
Suzanne van de Groep (Leiden University)
- **S1A.3** Diminished error related negativity and error positivity in patients with externalizing disorders: a meta-analysis.
Miranda Lutz (Erasmus University Rotterdam)

Paper session 1B: How to tackle peer victimization at school: contextual challenges and solutions (Hulstkamp)

- **S1B.1** Speak up or stay silent: Teacher-related factors predicting victims' disclosure of victimization.
Isabel ten Bokkel (KU Leuven)
- **S1B.2** Trainingteachers4victims: An intervention study to prepare pre-service teachers for preventing and reducing their students' bullying.
Fleur van Gils (KU Leuven)
- **S1B.3** The contributions of implicit attitudes and interpersonal proximity to a safe social climate in schools.
Nathalie Hoekstra & Hannah Peetz (Radboud University Nijmegen)

Paper session 1C: Textual processing, social information search, and social relations

(Sonneveld)

- **P1C.1** Prospective Associations between Social Status and Social Anxiety in Early Adolescence
Lisan Henricks (Radboud University Nijmegen)
- **P1C.2** Abandoning assumptions: Effects of working memory load on the processing of refutation texts.
Amy de Bruïne (Leiden University)
- **P1C.3** Adolescents' search for social information, when facing decisions under uncertainty.
Scarlett Slagter (University of Amsterdam)

Symposia (13:15-14:15)

Symposium 1A: The importance of mothers' and fathers' mentalizing about their child - research and practice **(Waterliniebar)**

- **S1A.1** Does mothers' and fathers' mentalizing during early childhood predict preschoolers' self-regulation?
Moniek Zeegers (University of Amsterdam)
- **S1A.2** Parental mentalization and warmth as predictors of children's self-conscious emotions and prosocial behaviors.
Milica Nikolic (University of Amsterdam)
- **S1A.3** New and expectant fathers' mind-related comments on their baby - The father trials study.
Kim van Dijk (VU Amsterdam)

Symposium 1B: Cross-national perspectives on adolescent well-being: time trends, social inequality, and social media use **(Hulstkamp)**

- **S1B.1** Cross-national time trends in adolescent mental health from 2002 to 2018 and the explanatory role of schoolwork pressure.
Alina Cosma (Utrecht University)
- **S1B.2** Cross-country variation in the social gradient in adolescent mental health: Can it be explained by meritocratic ideology?
Dom Weinberg (Utrecht University)
- **S1B.3** Social media use and wellbeing among adolescents across 29 countries.
Maartje Boer (Utrecht University)

Paper sessions 2 (14:30-15:30)

Paper session 2A: Stress and anxiety across childhood (Waterliniebar)

- **P2A.1** Can schools reduce adolescent stress? A multilevel meta-analysis of the effectiveness of school-based intervention programs.
Amanda van Loon (Utrecht University)
- **P2A.2** Exploring changes in motor activity: The relationship between mother-infant attachment relationship, infant fear and infant motor activity observed during the strange situation.
Lianne van Setten (VU Amsterdam)
- **P2A.3** Recognition of anxiety disorders in children: a cross-sectional vignette-based survey among general practitioners.
Semiha Aydin (Leiden University)

Paper session 2B: Peer relations and psychopathology (Hulstkamp)

- **P2B.1** Situational peer influence and risky decision-making in adolescence.
Evelien Hoeben (Utrecht University)
- **P2B.2** The longitudinal interplay between social network characteristics and psychopathology in multi-problem emerging adult men; Separating within- and between-person effects.
Lois Schenk (Erasmus University Rotterdam)
- **P2B.3** Moving forward and feeling connected: downward temporal comparisons relate to adolescents' desire for growth and interpersonal relatedness.
Cisem Gurel (University of Amsterdam)

Paper session 2C: Adjustment of refugees and minorities (Sonneveld)

- **P2C.1** Acculturation trajectories and school adjustment of Turkish/Moroccan and other European minorities.
Jessie Hillekens (KU Leuven)
- **P2C.2** Positive personality change following adversity in Syrian origin young adults who seek or have refugee status in The Netherlands.
Laurien Meijer (Utrecht University)
- **P2C.3** Parenting in times of refuge.
Hend Eltanamly (University of Amsterdam)

Paper Sessions 1

Timeslot: 11:10 - 12:10

Paper session 1A: (Neural)physiological measurements

Room Waterliniebar

P1A.1 Moments that matter? On the complexity of using triggers based on skin conductance to sample arousing events within an experience sampling framework

Presenting author: Sjoerd van Halem
Tilburg University

To sample situations that are psychologically arousing in daily life, we implemented an experience sampling strategy in which 82 Dutch young adults were triggered based on random time-intervals and based on physiological skin conductance scores across a period of 5 days. When triggered, participants had to fill in short surveys on affect, situational characteristics, and event characteristics on their smartphone. We found theoretically expected relationships between the skin conductance signal on the one hand, and self-reported arousal and positive energy (e.g., energetic, enthusiastic) on the other hand, although effect sizes were small. Unexpectedly, none of the negative affective scales (i.e., irritation, anxiety, negative valence) were predicted by skin conductance levels. Despite the (partial) validity of the signal, a simple algorithm that triggered the survey based on relative increases of skin conductance levels produced counterintuitive results due to a dependence between level and slope. In this talk I will present these results and explore what steps we have to take in the future.

P1A.2 The neural correlates of giving in different social contexts in adolescence

Presenting author: Suzanne van de Groep
Leiden University

Giving is essential for forming and maintaining social relationships, which is an important developmental goal for adolescents. Giving often entails giving up something valuable to benefit others, and as such it is highly context-dependent. For example, giving is more likely to occur when the adolescent has a relationship with the beneficiary. There is currently little understanding of the mechanisms that drive context-dependent giving and how they develop in adolescence. Understanding the neural components of giving in different social contexts may shed light on these mechanisms. In this preregistered study, we studied giving and its neural correlates in different social contexts across adolescence. Specifically, we manipulated the target of the donation (i.e., a friend or stranger) and whether participants were being observed (i.e., with a public and alone condition). Participants (N = 142, ages 9 – 18) performed a novel giving fMRI paradigm, in which they could make small or large donations to others in aforementioned social contexts. In line with our expectations, results showed that adolescents were relatively generous i. in the context of small

compared to large donations ii. when the target was a friend, and iii. when being observed. Furthermore, we found an age-related increase in social context differentiation. On a neural level, we found that the medial prefrontal cortex was activated for small compared to large donations, and that this activation increased with age. Playing for a friend compared to a stranger other elicited activation regions such as the inferior parietal lobule, insula, and lateral prefrontal cortex. Together, these results suggest that donation size and donation target are processed in separable brain networks. These findings provide insights into the modulation of neural processes that underlie giving decisions as a function of the social context, highlighting the role of prefrontal areas and social brain regions.

P1a.3 Diminished error related negativity and error positivity in patients with externalizing disorders: a meta-analysis

Presenting author: Miranda Lutz
Erasmus University Rotterdam

Externalizing problem behavior has been associated with problems in cognitive control, of which error processing is an important component. Deficits in error processing, which refers to the ability to detect errors and monitor performance, are reflected in the failure to adjust problem behavior in externalizing samples. Individuals with externalizing disorders are characterized by disruptive and problematic behavior that is directed outwards to the environment. Error processing can be examined by measuring brain potentials in cognitive tasks after committing an error (error related negativity; ERN) and after error awareness (error positivity; Pe). This is the first meta-analysis investigating whether the ERP components ERN and Pe are reduced in individuals with externalizing problems when compared to healthy controls. We searched PsycInfo, PubMed and Scopus for studies examining error processing through the Eriksen Flanker, the Go-NoGo or the Stop-Signal task, in adults or children with clearly described externalizing behavioral problems (e.g. ADHD, addiction) or a clinical diagnosis for an externalizing disorder, and healthy controls. Random effect models for both ERP's (KERN = 23 studies; 1739 subjects; KPe = 27 studies, 1456 subjects), reveal a decreased ERN (Hedges's $g = 0.43$) and decreased Pe (Hedges's $g = -0.27$) amplitude. Clinical disorder, gender, medication use, and presence of comorbidity did not moderate the results for both ERP's. Cognitive task was a moderator of Pe but not for ERN, where the Go-NoGo task generates a greater standardized mean difference in Pe amplitude than the Eriksen Flanker. Publication bias was present for both ERP samples. The results confirm compromised error processing in externalizing samples, indicating diminished brain activity during performance monitoring. Implications of the results and considerations for future research will be discussed.

Paper session 1B: How to tackle peer victimization at school - contextual challenges and solutions

Room Hulstkamp

P1B.1 Speak up or stay silent: Teacher-related factors predicting victims' disclosure of victimization

Presenting author: Isabel ten Bokkel
KU Leuven

Victims of school bullying can experience many negative consequences in the short and long run. Therefore, it is problematic that many victims do not tell others about it. Teachers are available for victims to talk to every day, but bullying often takes place behind their back and victims are hesitant to disclose their victimization to their teacher. Following from an attachment perspective on teacher-student relationships, teachers can function as a safe haven for their students and a secure base to explore their environment from (Verschuere & Koomen, 2012). Accordingly, teachers' responses towards bullying can provide signals for victims about whether they are suitable to turn to for comfort and help in times of stress. These responses are likely to be informed by teachers' beliefs about whether bullying is acceptable behavior.

This study investigated the role teachers can play to promote victims' disclosure of victimization. Specifically, we examined whether teachers' responses towards bullying with more active (e.g., reprimanding bullies) or passive (e.g., suggesting avoidance) teacher involvement could predict victims' disclosure of victimization to their teacher. The sample included 5,961 Dutch students in grades 4-6 that answered questionnaires twice in one school year as part of a larger intervention study. Their teachers (N=421) also filled in a questionnaire at Time 1, investigating their responses and beliefs towards bullying. Our analyses focused on students who reported being victimized at least two or three times in the months prior to Time 2 (n=874). Longitudinal SEM was used to predict the likelihood of Time 2 disclosure from teacher responses towards bullying. Contrary to our expectations, preliminary results demonstrate that teacher responses with passive teacher involvement predicted victims' disclosure ($\beta = .29, p = .03$) whereas those with active teacher involvement did not ($\beta = -.20, p > .05$). Implications for anti-bullying interventions will be discussed.

P1B.2 Trainingteachers4victims: An intervention study to prepare pre-service teachers for preventing and reducing their students' bullying

Presenting author: Fleur van Gils
KU Leuven

Bullying is a widespread phenomenon and a major problem in schools (Olweus, 1994). Bullying is associated with serious short- and long-term consequences, including internalizing problems and problematic peer relationships (Moore et al., 2017; Zych, Farrington, Llorent, & Ttofi, 2017). Given this dramatic impact, it is

crucial to get more insight in bullying processes and their antecedents to effectively reduce and prevent bullying at school. Currently, the role of the teacher in student bullying, and more specifically the strategies that teachers adopt to intervene in bullying, are understudied. Since teachers' reactions to bullying vary extensively, we want to explain this variation by investigating characteristics predicting these reactions using the theory of planned behavior of Ajzen (1991) as a framework. According to Ajzen's theory, behavior is determined by behavioral intentions; hence teachers' responses to bullying can be predicted by their intention to intervene. Further, based on this theory, we hypothesize that intentions towards intervening in bullying, can be predicted by teachers' beliefs, attitudes and perceived behavior control. In other words, beliefs about bullying, attitudes about (responses to) bullying and self-efficacy in tackling bullying should be tackled to promote teachers' intervening in bullying incidents.

To test these hypotheses, we will carry out an intervention study in spring 2020. In this study, called TrainingTeachers4Victims, we will investigate a teacher training program aimed at preparing pre-service teachers to prevent and reduce their students' bullying. We will examine the effects of pre-service teachers' attitudes, beliefs, and self-efficacy on their intended responses to bullying. A sample of approximately 200 second year pre-service teachers will be recruited via the collaborating teacher training institute UCLL. Self-report measures of teachers' beliefs, attitudes, self-efficacy, and intentions to intervene in bullying will be administered at baseline and post-test. During the presentation, I will give an overview of the project and relevant concepts.

P1B.3 The contributions of implicit attitudes and interpersonal proximity to a safe social climate in schools

Presenting authors: Nathalie Hoekstra & Hannah Peetz
Radboud University Nijmegen

The current NRO-PROO interlinked research project concerns social dynamics in the classroom. This is a highly relevant topic, as teachers indicate they increasingly experience social dynamics as challenging, whereas students spend a large amount of time at school and are affected by the interactions they have in the classroom. Socially excluded and victimized students pose a specific challenge for teachers, because for those students it is specifically important that there is a safe social climate in the classroom. Therefore, the current project specifically focuses on socially excluded and victimized students.

Whereas most studies on social dynamics in schools concern deliberate processes, this project addresses non-deliberate processes that may affect excluded and victimized students' functioning. Specifically, the project consists of two part-projects which focus on implicit attitudes and interpersonal proximity, respectively. The first part-project will investigate how implicit and explicit attitudes of classmates about victimized students affect their behavior towards these students and in turn, how this affects victimized students' functioning. The second part-project will examine how excluded and victimized students' proximity towards their peers and teacher affects their functioning at school.

Furthermore, two interventions (i.e., one for each part-project) will be tested in primary school classrooms. The intervention of part-project 1 concerns an evaluative conditioning videogame which aims to improve peers' implicit attitudes towards victimized students. The intervention of part-project 2 entails a careful classroom rearrangement in which socially excluded and victimized students' proximity toward the teacher, a supportive peer, and a harassing peer will be changed. In the presentation, we will provide an overview of the overarching project and then discuss our plans for the part-projects.

Paper session 1C: Textual processing, social information search

Room Sonneveld

P1C.1 Prospective Associations between Social Status and Social Anxiety in Early Adolescence

Presenting author: Lisan Henricks
Radboud University Nijmegen

This study examined the bidirectional longitudinal association between social status (likeability, popularity) and social anxiety (cognitive symptoms, behavioral symptoms) and explored gender differences in this association. Participants included 251 adolescents (126 boys, Mage = 12.53). Data were collected at two waves with a six-month interval. Likeability and popularity were measured with peer nominations; cognitive and behavioral social anxiety symptoms with self-reports. Autoregressive cross-lagged path models showed relative stability of social status and social anxiety. For girls, but not boys, low popularity predicted an increase in behavioral social anxiety symptoms six months later. Girls who were seen as unpopular by their classmates indicated that they avoided social situations more frequently over time. These results highlight the importance of distinguishing between different social status components, and between cognitive and behavioral social anxiety symptoms. To understand changes in social anxiety and social status, it seems necessary to also take gender into account.

P1C.2 Abandoning assumptions: effects of working memory load on the processing of refutation texts

Presenting author: Amy de Bruïne
Leiden University

Successful reading comprehension is not just about encoding information into memory, it also involves updating and revising what is already known. Narratives often deliberately mislead readers. In J.K. Rowling's *Harry Potter*, for example, Sirius Black is introduced as a dangerous villain, later in the novel, however, Sirius is revealed as Harry's compassionate benefactor and his earlier "evil" behaviors are explained as critical to Harry's survival. To successfully comprehend all events readers must revise the mental representation they have constructed from earlier text. Unfortunately, research has shown that readers often fail to do this. One of the reasons why readers fail to update their mental representation is because outdated information becomes reactivated and influences comprehension. Refutation texts with causal explanations have been proven to diminish this influence because they draw away attention and thus activation from the outdated information. In this dual-task study, we examined to what extent this competition for activation is influenced by working memory capacity. In short, participants read stories implying that a character possessed a specific trait. Later in the story the presence of the trait was either confirmed or casually refuted. The final sentence described a trait-consistent action of the character, making this sentence either consistent or inconsistent with earlier text depending on the previous text (confirmation or refutation) and whether participants have actually updated their mental representation. In the load condition participants also had to monitor specific tones. The results show that participants

update their mental representation regardless of load and that the load continues to influence reading even after it was no longer present. It seems that working memory load does not influence the availability of information and is not that important for diminishing the influence of outdated information, although these are only speculations at this point.

P1C.3 Adolescents' search for social information, when facing decisions under uncertainty

Presenting author: Scarlett Slagter
University of Amsterdam

Adolescents find themselves in a crucial age range for the development of social cognition and risky behaviour. Peer influence has been established as an important factor in adolescents risk taking. Previous studies have investigated peer effects on risky decision making, with the adolescent as passive perceiver of social information. However, from a social learning perspective, adolescents play an active role in gaining social information. However, very little is known about people's social search strategies, including when and whom to learn from. This pilot study investigated when, how much, and from whom social information is gathered before making a decision under uncertainty. These questions were investigated in the context of adolescents' social networks at school, and by use of a novel social search paradigm.

Symposia

Timeslot: 13:15-14:15

Symposium 1A: The importance of mothers' and fathers' mentalizing about their child - research and practice

Room Waterliniebar

S1A.1 Does mothers' and fathers' mentalizing during early childhood predict preschoolers' self-regulation?

Presenting author: Moniek Zeegers

University of Amsterdam

Background: Mind-mindedness, a construct of parents' capacity to mentalize about their child, involves the extent to which caregivers infer emotions, thoughts, and desires from child behavior. Communicating accurate interpretations of mental states is believed to indicate to the child that his affective states are recognized, appreciated, and contained by the parent. This in turn may promote secure child-parent attachment and healthy emotion regulation in the child. In a previous study, mothers' and fathers' mind-mindedness during the first 12 months of life related to physiological regulation of infants at the end of the first year. The present study followed up on this previous study by examining whether the positive effects of both parents' early mentalizing capacity extend to the self-regulatory capacity in preschoolers.

Method: 116 families (mother, father, child) participated in a series of lab-visits when children were 12 months, 30 months and 4.5 years old. Appropriate and nonattuned mind-related comments were assessed from parent-child free-play interactions when children were 12 and 30 months old. Self-regulation of 4.5-year-old preschoolers was measured by heart rate variability during rest, a behavioral self-regulation task, and mothers' and fathers' reports on children's effortful control.

Results: Higher levels of nonattuned mind-mindedness of mothers and fathers predicted lower heart rate variability and lower effortful control in preschoolers. Higher levels of fathers' appropriate mind-related comments predicted better performance on the behavioral self-regulation task.

Conclusions: The results suggest that parents' ability and proclivity to communicate accurate interpretations of the child's mental world promotes self-regulation in children. Fathers' mind-mindedness seemed the strongest predictor of self-regulation at 4.5 years, relating to all three indices of self-regulation. Especially because paternal play is thought to be more challenging and may induce high arousal, fathers' interpretations of children's behavioral expressions may be relevant in understanding how children internalize strategies to deal constructively with emotionally charged situations.

S1A.2 Parental mentalization and warmth as predictors of children's self-conscious emotions and prosocial behaviors

Presenting author: Milica Nikolic
University of Amsterdam

Background: Self-conscious emotions, such as guilt and shame, occur after misbehaviors and help people navigate their social interactions (e.g., by motivating repairing and apologizing after the wrongdoing). They also motivate prosocial behaviors, such as helping others. These emotions are thought to start to develop in toddlerhood. Little is known about parental socializations of these emotions at this early age. Here, we investigated whether parental mental state language (i.e., talking about their own, child's, and others' mental states to their child) and parental warmth is related to the occurrence of children's expressions of self-conscious emotions after a mishap, and whether this, in turn, influences children's prosocial behaviors.

Method: Ninety-eight 2-5-year-old children and their parent visited the Family lab. Parental mental state language (referring to wishes, cognitions, and emotions) was measured during the Picture-book reading task. Warmth was observed during a task in which parents were helping their children solve a solvable and a nonsolvable puzzle. Children's self-conscious emotions (shame and guilt expressions) were observed during the Broken toy mishap in which children were led to believe that they broke a favorite toy of the experimenter. Children's helping was observed in two situations: helping with hanging a poster (instrumental helping) and providing a blanket (emphatic helping).

Results: Higher parental warmth predicted a lower number of shame expressions in children, which, in turn, predicted more prosocial behaviors. The interactions between parental mental state language and warmth predicted (1) guilt and (2) helping behaviors in children. Specifically, high mental state language in combination with high warmth predicted more expressions of guilt and more helping behaviors in children. However, no relation between children's guilt expressions and helping was found.

Conclusions: In early childhood, parents play an important role in socializing their children's prosocial behaviors both directly and indirectly through socializing their self-conscious emotions.

S1A.3 New and expectant fathers' mind-related comments on their baby - The father trials study

Presenting author: Kim van Dijk
VU Amsterdam

In a series of RCTs, the Fathers Trials project studies the effect of contact with the (unborn) child on brain, hormones and behaviour of men in the transition to fatherhood. In order to assess mind-mindedness, five-minute speech samples (FMSS) are collected from fathers before and after the birth of their first child. In order to collect the speech samples, participants are asked to talk about their

thoughts and feelings regarding their (unborn) child. A coding system was developed for the assessment of mind-related comments in the transcribed recordings, based on the Meins & Fernyhough (2015) coding system. Scores are computed for mind-mindedness, child-centeredness and paternal self-centeredness. Furthermore, mind-related comments are also coded based on videos made during the prenatal Video Feedback Intervention to Promote Positive Parenting (VIPP-PRE) intervention. As part of the prenatal VIPP intervention, expectant fathers are invited to interact with their unborn infant (for example by reading a book or touching the mother's belly) using ultrasound scans. Transcribed comments are then coded for mind-related comments, taking into account whether or not the comments are directed towards the baby and testify of insight into the unborn infant's thoughts and feelings. Since the data collection for these studies is still ongoing, no final results can be presented at this point.

Symposium 1B: Cross-national perspectives on adolescent well-being: Time trends, social inequality, and social media use

Room Hulstkamp

S1B.1 Cross-national time trends in adolescent mental health from 2002 to 2018 and the explanatory role of schoolwork pressure

Presenting author: Alina Cosma
Utrecht University

There is widespread societal concern about reported declines in adolescent mental health during the last two decades. Several studies have concluded that adolescent mental health has deteriorated significantly since the beginning of the 21st century, especially in countries such as the US, UK, Finland, Norway and Sweden. Yet, research in this field relies heavily on data from only a few mainly Western countries and are conducted in different time periods. Therefore, the extent to which the observed declines in adolescent mental health are consistent across countries is largely unknown. Moreover, little is known about the processes that could explain these declines in adolescent mental health. The current study aims to address these gaps in knowledge. It presents trends in adolescent mental health over a 16-year period between 2002–2018, across 36 European and North American countries and regions. In addition, based on indications that perceived pressure from school has steeply increased among adolescents in the last decades, it examines whether the observed trends in mental health can be explained by changes in schoolwork pressure over the same time period. Using data from Health Behaviour in School-aged Children (HBSC) study, hierarchical multi-level models will be used to estimate cross-national trends in adolescent mental health and schoolwork pressure and test whether schoolwork pressure could explain these trends in mental health. Analysis is currently being conducted and results will be ready for discussion by the CAS-VNOP research days.

S1B.2 Cross-country variation in the social gradient in adolescent mental health: Can it be explained by meritocratic ideology?

Presenting author: Dom Weinberg
Utrecht University

In almost all countries adolescent socioeconomic status (SES) is associated with adolescent well-being: adolescents with higher SES have higher well-being. However, the strength of the association between adolescent SES and adolescent well-being (the ‘social gradient in adolescent well-being’) varies across countries. Existing research indicates that the social gradient in adolescent well-being is stronger in countries with more income inequality, but most of the cross-country variation remains unexplained. We explore whether country-level variation in the strength of meritocratic ideology (i.e., a shared belief that people have the SES they deserve, based on their talents and efforts, and therefore that SES inequalities are justified)

also contributes to explaining cross-country variation in the social gradient in adolescent well-being. With data from the Health Behaviour in School-aged Children (HBSC) study, we use nationally representative samples of adolescents from 30 countries in order to examine cross-country variation in the social gradient in adolescent well-being and associations with country-level variables. We also consider whether the relative importance of different SES indicators (i.e., objective SES and subjective SES) for adolescent well-being varies across countries and whether this variation is associated with country-level variables. Analysis is currently being conducted, and results will be ready for discussion by the CAS-VNOP research days.

S1B.3 Social media use and wellbeing among adolescents across 29 countries

Presenting author: Maartje Boer
Utrecht University

Social media use (SMU) such as the use of Instagram and Snapchat has increased over the last few years, especially among adolescents, leading to concerns about its potential impact. Research suggests that intense SMU, indicated by the time spent using social media, is associated with lower mental, school, and social adolescent wellbeing. In addition, problematic SMU, indicated by symptoms of addiction to social media, also is related to lower adolescent wellbeing. Despite the growing number of studies, important gaps in knowledge remain. First, it remains unclear whether intense and problematic SMU are as strongly associated with lower adolescent wellbeing. Second, it has not been investigated whether associations between SMU behaviours and wellbeing apply cross-nationally. Third, little is known about the extent to which the prevalence of intense and problematic SMU differs across countries. This study addressed these gaps by examining (1) whether intense and problematic SMU were independently associated with different domains of adolescent wellbeing. In doing so, we (2) investigated whether these associations varied by the country-level prevalence of intense and problematic SMU. We also examined (3) whether differences in the country-level prevalence of intense and problematic SMU were related to differences in mobile internet access. Individual-level data came from over 150,000 adolescents aged 11 to 15 from 29 countries that participated in the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey. Country-level data came from aggregated individual-level data on intense and problematic SMU, and OECD data on internet access. Data was analysed using multilevel regression analysis. Results will be discussed.

Paper sessions 2

Timeslot: 14:30-15:30

Paper session 2A: Stress and anxiety across childhood

Room Waterliniebar

P2A.1 Can schools reduce adolescent stress? A multilevel meta-analysis of the effectiveness of school-based intervention programs

Presenting author: Amanda van Loon
Utrecht University

Background: Increased levels of stress during adolescence have been associated with a decline in academic performance, school dropout, increased risk of mental health problems and reduced well-being. Intervening during this developmental period may prevent these problems. The school environment seems particularly suitable for interventions and over the past decade, various school-based stress reduction programs have been developed. The present study aims to evaluate the results of (quasi-)experimental studies on the effectiveness of school-based intervention programs targeting stress in adolescents and to investigate moderators of effectiveness.

Methods: Relevant publications up until June 2019 were identified using the search engines CINAHL, PubMed, ERIC, PsychINFO and Cochrane. Only (quasi-)experimental studies examining the effectiveness of school-based interventions in reducing adolescent stress were included. A three-level random effects meta-analytic model was conducted to determine the overall effect on psychological stress and secondary mental health outcomes and test the influence of study, sample and intervention characteristics.

Results: The search resulted in the inclusion of $k = 53$ studies, reporting on analyses in 60 independent samples, yielding 122 effect sizes ($N = 16,448$ individuals) for psychological stress. Results indicated a moderate overall effect on psychological stress ($d = 0.555$, $SE = 0.134$, $p < .001$), in addition to a large overall effect on depression, a moderate effect on anxiety and a small effect on coping skills. Yet, significant effects were only found in selected student samples. Intervention programs had no significant effect on well-being, externalizing problems and self-esteem.

Conclusions: School-based intervention programs targeting selected adolescents have the potential to reduce psychological stress, in addition to improvements in depression, anxiety and coping skills. Recommendations for future research are discussed.

P2A.2 Exploring changes in motor activity: The relationship between mother-infant attachment relationship, infant fear and infant motor activity observed during the strange situation

Presenting author: Lianne van Setten
VU Amsterdam

Introduction: The frequency of infant exploratory behavior during the Strange Situation Procedure (SSP) has been studied extensively by Ainsworth, Blehar, Waters, and Wall (1978). Frazier-Wood and Saudino (2017) showed that motor activity levels in lab situations are lower for infants with high rates of social fear. It is unclear to what extent changes in infants' motor activity during the SSP are related to infant fear or attachment classification. The aim of this study was to explore the relationship between attachment classification, fear and infant motor activity during separation-reunion.

Method: Infant motor activity of 130 mother-infant dyads who participated in the SSP (Ainsworth et al., 1978), was coded for duration of locomotion and engagement with toys using a newly designed real-time coding procedure in Noldus The Observer XT. Repeated measures ANOVA's were conducted to analyze differences in infant motor activity across episodes of the SSP, between attachment classifications, and in relationship with infant fear.

Results: Infant Fear was related to the total duration of engagement with toys, and significantly differed between attachment classifications. Mothers reported significantly less fear in insecure-avoidant infants, compared to insecure-resistant and securely attached infants. The duration of engagement with toys changed significantly across episodes when controlling for fear. Insecure-resistant infants showed less engagement with toys, and a stronger decrease during the task. Insecure-avoidant infants showed significant longer duration of locomotion than secure and insecure-resistant infants. Fear was not related to the duration of locomotion, and no significant changes across episodes of the SSP were found, when controlling for fear.

Discussion: Duration of engagement with toys reflects changes in exploratory behavior, similarly to Ainsworth et al. (1978), with a drop during separation and clear differences between attachment classifications. This result remained robust after controlling for fear. Duration of locomotion might not reflect exploratory behavior, but proximity seeking/avoidance.

P2A.3 Recognition of anxiety disorders in children: a cross-sectional vignette-based survey among general practitioners.

Presenting author: Semiha Aydin
Leiden University

Anxiety disorders are the most common mental health problem and show the largest mismatch between need and treatment. With a median age of onset of 11, caregivers' ability to recognize problematic anxiety is pivotal to the avoidance of worsening problems. Nevertheless, research suggests that as help seekers, parents underdetect or even misattribute the many symptoms of anxiety and may therefore misrepresent them during consultations. The questions remains in how far general practitioners (GPs) even consider anxiety as a probable factor underlying psychosocial problems.

Using a cross-sectional vignette-based survey design, we investigated GPs'

sensitivity to anxiety disorders (ADs) when confronted with the range of symptoms common to children with ADs. We also compared GPs' conscious preferences and implicit tendencies regarding the referral of children with ADs to mental healthcare.

Attendees of a medical education conference were presented with subtitled audio fragments of five vignettes constructed to mimic the often ill-defined symptom presentation in general practice, and were asked to select, per vignette, the most plausible diagnoses and most adequate referral option. We also asked about their general referral preferences when they suspect the most common mental health disorders in children.

Overall, the GPs (n=2229) recognized anxiety in 14.8% of the vignettes, compared to 40.0% of MHPs (95% CI of the difference= 12.1% to 38.3%), whereas GPs and MHPs had similar recognition rates for other disorder groups. When asked explicitly, 63.9% of the GPs reported that they would refer a child to mental healthcare when they suspect a probable AD. By contrast, only 12.0% of the GPs who recognized anxiety in the vignettes actually selected that referral option.

A significant fraction of all GPs did not notice ADs as the probable cause of the depicted symptoms. Despite the widespread prevalence of ADs, GPs seem to overlook anxiety in their early diagnostic opinion. Better familiarity with initial symptom presentation is essential to improving the timely recognition of ADs.

Paper session 2B: Peer relations and social interactions

Room Hulstkamp

P2b.1 Situational peer influence and risky decision-making in adolescence

Presenting author: Evelien Hoeben
Utrecht University

Most deviant acts committed by adolescents are carried out with peers. Despite abundant evidence that peer influence is a driving force in adolescent risk-taking, it remains unclear *how* adolescents influence each other's behavior. **What do peers do or say to encourage or discourage risky decision-making? Who are most inclined to stimulate risky decision-making of their friends? Are adolescent more inclined to listen to popular peers than to their best friends?** To answer these and related questions, we need information about adolescents' decision-making and adolescents' interactions with peers *as they unfold*. Gaining this information requires a microsocial experimental research design and in-depth conversation analysis.

In this burgeoning research project, for which I was recently awarded a Veni grant from NWO, I will break down 'peer influence' into specific verbal and nonverbal cues. I will assess these cues by observing adolescents' real-time group interactions while they play a videogame. In this game, participants make decisions under time pressure facing risk. Participants play the game in groups of two to three peers, who can give advice on what to do. These interactions are recorded and coded for conversational cues, distinguishing content, direction ('what is said'), style of the message ('how it is said'), and the source ('who says it'). Participants (aged 11 to 22) were recruited from middle schools, high schools and a public university in New York State (USA).

The findings will show what type of cues from what type of peers are most likely to lead to risky decision-making. These insights will constitute a significant step forward for our understanding of peer influence and will inform policies targeting adolescent rule-breaking behavior.

2B.2 The longitudinal interplay between social network characteristics and psychopathology in multi-problem emerging adult men; Separating within- and between-person effects

Presenting author: Loïs Schenk
Erasmus University Rotterdam

Introduction: Psychopathology during emerging adulthood increases, and for multi-problem young man this period may entail obstacles. Relations with parents and peers change, and isolation or deviant peer affiliation might trigger psychopathology. The associations between psychopathology and social networks in childhood and adolescence have been studied thoroughly, but how these constructs are linked over

time during emerging adulthood and at between- and within-person level, remains unclear. The present study examines the longitudinal interplay between psychopathology and social network characteristics over the course of one year in multi-problem emerging adults at both between-person and within-person level.

Method: A sample of 696 multi-problem emerging adult men (age 18-27) participated in this 3 wave study. We used traditional cross-lagged panel models (CLPM) to examine how social network characteristics and psychopathology are related at the between-level and random-intercept cross-lagged panel models (RI-CLPM) to examine within-person links.

Results: Links between psychopathology and social networks were only present at the between-person level. That is, compared to peers, youths with higher levels of psychopathology, had more problematic social networks than their peers and vice versa. At the within-person level, no cross-lagged paths were significant.

Conclusion: Overall, results indicated that in multi-problem emerging adults, social network characteristics and psychopathology are related, but not causally linked.

P2b.3 Moving forward and feeling connected: Downward temporal comparisons relate to adolescents' desire for growth and interpersonal relatedness

Presenting author: Cisem Gurel
University of Amsterdam

Adolescents often compare themselves to others. Although informative, social comparisons may focus adolescents on outperforming others rather than on improving themselves. This daily diary study (N = 389, ages 11-15; M = 12.69) tested the hypothesis that downward temporal comparisons—comparing one's present self favorably to one's past self—trigger pride while encouraging adolescents to strive for self-improvement rather than superiority. Results show that daily downward and upward comparisons co-occurred with pride and shame, respectively, regardless of whether those comparisons were social or temporal. Importantly, daily downward temporal comparisons (unlike daily downward social comparisons) co-occurred with a desire for self-improvement over superiority and with feelings of relatedness. Temporal comparisons may thus help adolescents' personal growth and satisfying relationships.

Paper session 2C: Adjustment of different ethnicities

Room Sonneveld

P2C.1 Acculturation trajectories and school adjustment of Turkish/Moroccan and other European minorities

Presenting author: Jessie Hillekens
KU Leuven

As society is becoming increasingly culturally diverse, adolescents from different cultural backgrounds come into sustained intergroup contact. Acculturation refers to subsequent changes in their cultural orientations. Following a well-established bi-dimensional model of acculturation, minority adolescents have orientations towards mainstream culture adoption and heritage cultural maintenance, which are seen as two independent dimensions. In line with a contextual and dynamic approach of entwined acculturation and developmental processes in adolescence, the acculturation orientations of minority adolescents change over time as a function of peer norms of acculturation in culturally diverse schools. The present study takes a more fine-grained person-centered approach of differential trajectories of acculturation (using multivariate latent growth mixture modelling). Furthermore, we used them to predict school adjustment over time.

Drawing on large-scale school-based panel data (i.e., an accelerated longitudinal design with 3 waves and 3 cohorts, Mages 12, 13 and 14 at wave 1), we compared two minority subsamples in Belgian secondary schools: most devalued Moroccan and Turkish minorities (N=1269) and less devalued European minorities (N=592). We asked minority adolescents about their mainstream and heritage culture orientations and tested how these acculturation orientations changed over this three-year time period, distinguishing differential acculturation trajectories between and within minority groups.

Our findings showed differential trajectories for acculturation orientations across both samples. We differentiated three latent trajectories in the Turkish- and Moroccan-origin sample, and two latent trajectories in the European-origin sample. Follow-up analyses predicted school adjustment (i.e., emotional and behavioral engagement, school belonging) as a function of these acculturation trajectories. To conclude, our findings document the dynamic nature of acculturation in minority adolescents, and highlight the importance of acculturation for minority adolescents' school adjustment over time.

P2C.2 Positive personality change following adversity in Syrian origin young adults who seek or have refugee status in The Netherlands

Presenting author: Laurien Meijer
Utrecht University

With as of yet unprecedented numbers of people displaced around the world

(UNHCR, 2019), it is important to better understand people with refugee backgrounds in psychological research. Many people who seek or have refugee status in the Netherlands come from Syria, and are young adults, standing at a critical point in their lives in terms of their intercultural adjustment, personal development, education, relationships and career. Young adults with refugee backgrounds commonly face potentially traumatic events before, during, and/or after migration. Acknowledging and understanding the negative consequences of these adverse experiences is important. However, these experiences may also foster positive personality change. Positive individual growth following traumatic experiences has been identified in people with refugee backgrounds from Syria (Kira, Shuwiekh, Al Ibraheem, & Aljakoub, 2019; Rizkalla & Segal, 2018) as well as other countries (e.g. Hussain & Bhushan, 2011). Because extant research relies on retrospective accounts of growth, we do not know about actual longitudinal changes in positive personality change in young adults with refugee backgrounds. We investigate this topic by examining the development of positive personality traits (e.g., resilience, empathy, relatedness, and gratitude) in Syrian origin young adults who have resettled in the Netherlands (N = 168; 70% male). We discuss the importance of examining positive personality change after adversity in people with refugee backgrounds, as well as the practical, methodological and ethical challenges that come with this type of longitudinal research and how we navigate them. Furthermore, we present preliminary, descriptive results from our research.

P2C.3 Parenting in times of refuge

Hend Eltanamly
University of Amsterdam

Introduction: While we know that children from refugee families who have resettled in high income countries are at an increased risk for child maltreatment, we know little about the pathways that lead to such outcomes. In other words, we do not know how or why parenting practices might change during war, flight, displacement and resettlement. We present two studies. First, we examined how and why war-induced stress impacted parenting practices for refugee parents resettled in the Netherlands. We aimed at identifying (1) what war-induced stressors parents experienced along the multiple phases of becoming a refugee; namely prewar, war, flight, displacement and resettlement; and (2) how and why those stressors shaped parenting practices for recently arrived Syrian refugee families in the Netherlands. Second, we discuss our current study examining the impact of moment-to-moment exposure to post-migration stress on refugees' parental self-efficacy.

Methods: We used a grounded theory approach to analyze semi-structured interviews with Syrian parents who were recently resettled in the Netherlands. Our final sample consisted of 16 families (16 mothers and 11 fathers; age: $M = 38.1$, $SD = 7.2$) with at least one child under the age of 12 ($M = 7.6$, $SD = 3.4$), who were exposed to the Syrian war along with their children.

Results: Our qualitative analyses show that while war-induced stressors impact parenting; different stressors had a different impact on parenting.

Families, in general, showed a certain degree of resilience despite the adverse experiences they went through. Recovery from emotional exhaustion seems to play a critical role in how stressors in resettlement impact parenting. Finally we discuss our experience sampling study, however, according to our preregistered protocol, data cannot be analyzed before data collection is finalized.

Venue

Thursday

Workshops

Martinus J. Langeveldgebouw
Heidelberglaan 1
3584 CS Utrecht, Netherlands
Tel: (+31) 030 253 4700 (reception desk)

By public transport

From Utrecht Centraal bus station, take bus 12 to 'Utrecht Science Park WKZ via Galgenwaard' or bus 28 to 'P+R Utrecht Science Park via Rijnsweerd'. Stop at bus stop 'Heidelberglaan' and the venue is a three-minute walk. Buses go every 5 minutes and take around 20 minutes from the station to the venue.

Parking facilities

The closest parking facilities are Car Park P9 Budapestlaan, and Car Park P6 Padualaan.

More information: <https://www.uu.nl/martinus-j-langeveldgebouw>

Social activity

Bar Josefien
Voorstraat 96
3512 AV Utrecht, Netherlands
Tel: (+31) 06 55581597

From the workshop location

After the workshops, we will go to Bar Josefien with organization committee members. You can join them.

By public transport

From Utrecht central station, you can take multiple buses (e.g., 7, 8, 51, 52, 53). Stop at bus stop 'Janskerkhof'. From there, it is a three-minute walk to Bar Josefien.

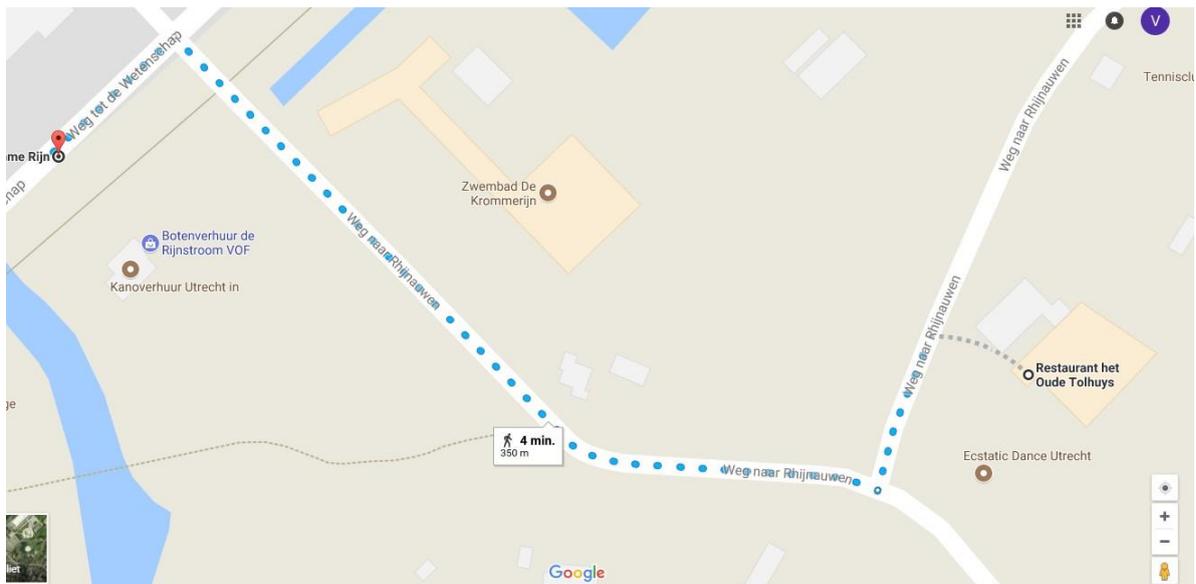
More information: <https://barjosefien.nl/>

Friday

Restaurant het Oude Tolhuys
Weg naar Rhijnauwen 13-15
3584 AD Utrecht, Netherlands
Tel: (+31) 030-2511215

By public transport

When you arrive by train at Utrecht Central Station go to bus station Jaarbeurszijde (Haltes C and D). Take bus 12 or 12s (bus stop C8) to bus stop Krommerijn (zwembad). The venue is a 5 minute walk from the busstop.



Parking facilities

Het Oude Tolhuys has its own (free) car park. In addition, cars can be parked in front of Zwembad Krommerijn.

More information: <https://www.hetoudetolhuys.nl/>