



Yield Newsletter – February 2017

Dear Yield members,

In this Newsletter, we would like to update you on Yield news and activities.

News

Yield-day 2017 - The Future of Yield: A Joint Project

On this year's Yield-day, we brainstormed about topics for an overarching Yield research project for the coming years. Within this overarching project, the aim was to cover all Yield disciplines with participation from all research groups, while trying to collaborate with and make use of the infrastructure and cohort data offered by Sarphati Amsterdam. Across the seven brainstorm groups, the most recurring topics included self-regulation, interventions, motivation, parental stress, biomarkers, and early family-related and child-related risk factors. At the end of March, we will have a meeting with researchers representing all research groups and PI's to develop the project more concretely. After this meeting, the project will be presented to everyone and you will be invited to give feedback on the proposal.

Overview of the ideas

Group 1, Frans Oort – Regulation seems to be a necessary requirement for the effectiveness of many (health) interventions in children. Regulation is not limited to the child, but it also includes self-regulation in parents and regulation in social contexts (i.e., in the interaction between parents and children). The general outline of studies could be to identify risk factors for maladaptive development, to manipulate these risk factors as early as possible in sub-cohorts of children, and to longitudinally follow the development of these children. One example of a risk factor is parental over- or under-regulation (linked to parenting styles: authoritarian vs. permissive). This group proposed to identify groups of over- and under-regulating parents, and try to influence their regulation through the home-nurse in the first weeks after child birth using tailored interventions (try to decrease regulation in over-regulating parents and vice versa in under-regulating parents), and assess family chaos, parental stress, child development over the course of 4 years. Lab studies are also possible, in which for instance child frustration is induced and parental reactions are manipulated through instruction.

Group 2, Geertjan Overbeek – This proposal consists of two lines: (1) Fundamental studies on the development of self-regulation: Is it one concept and how do specific components link to specific outcomes, such as behaviour, language, and addiction; How do these components relate to each other?; How can we best measure different components of self-regulation (e.g. ecological momentary assessments to investigate behavioural flexibility, eye tracking to investigate attention processes, inhibition tasks to investigate inhibition. (2) Intervention studies to improve regulation directly in children (e.g., attention, executive functioning), parents (e.g., language use/stimulation, sensitivity, reward use), and parents own self-regulation. For both lines, biological markers (genes, methylation, stress reactivity (cortisol, HRV)) and temperament differences will be included.

Group 3, Hilde Geurts – Educational quality and quality of life. Education quality is central to improve people's quality of life. In a first step, crucial factors defining or contributing to quality of life in adults will be derived from the HELIUS database. In a second step, the interplay between child, school, and family factors in education development will be explored using the ABCD cohort data. In

a third and final step, specific interventions on those factors that have proven to be crucial in steps 1 and 2 will be included in the education program to maximize children's quality of life.

Group 4, Hilde Huizenga – Resilience: Coping with difficulties. Resilience is central to both mental and physical health. The development of resilience is driven by genetic factors, parents, peers, and school factors. In four subprojects, PhD students will address the development of resilience in four different age groups (0-4, 5-8, 9-12, and 13-18 years). For each subproject, both mechanisms (e.g. introduce stress, either alone or with parent, peer, or teacher present, and measure resilience/stress pre-post as well as long-term health outcomes) and interventions (improve coping strategies, emotion regulation, and parenting strategies) will be studied, which should result in (at least one) high quality RCT for each age group in which the most promising intervention is tested.

Group 5, Maartje Raijmakers – Development of early family and educational factors into personal identity and motivators outside of the school (e.g., sport clubs where large differences in cultural and SES groups play a role in future time perspective, healthy behaviours, citizenship and personal expertise). This is investigated from a developmental time perspective with focus on early family factors such as emotional relationships, delay gratification, parenting styles, and parental stress along with cultural distance (the role of religion) and perceived discrimination.

Group 6, Monique Volman – This project aims at investigating the skills that children and youth need to learn to navigate the challenges of the 21st century. Three key skills are identified: (1) Self-regulation, (2) critical thinking, and (3) social responsibility. For each of these three skills, the key questions are: (A) How do these skills develop (and what are their precursors)? (B) How can we teach these skills to children and youth? (C) How can we support parents to stimulate the development of the three skills? (D) How can we support teachers to teach the three skills? (E) How are the three skills related to (mental) health?

Group 7, Reinout Wiers – Self-regulation and motivation. The role of self-regulation in problematic phases in the development such as periods of excessive crying in babies and sleeping problems in adolescence. Because motivation is the key to change, the project aims at developing parent and child interventions to target these specific self-regulation problems in children and youth with a focus on positive motivation (e.g. by stimulating goals in life).

Kind regards, on behalf of the Yield team
Frans Oort, Mariëlle de Reuver and Helle Larsen

Yield activities

Rita Vuyk Lectures

Speaker: Sabine Hunnius (Donders Institute, Radboud University Nijmegen)

Date: 28 February 2017, 16:00

Location: REC E0.15

Becoming a Social Partner.

The Early Development of Action Understanding and Action Coordination

From early in life, infants pay attention to the people around them and the actions they perform. They enjoy interacting with others and – as they grow older – take pleasure in cooperating with adults in a playful manner. But how do infants acquire knowledge about their social environment? How do they develop the ability to understand actions they observe in others? And which

mechanisms play a role in toddlers' developing ability to act jointly with others? In this talk, I will present a series of behavioral and neurophysiological experiments which examine the emergence of social understanding and cooperation in early childhood.

Although the actions we observe in others form a continuous, intricate stream of complex information, even young infants show indications of understanding other people's actions. However, how exactly infants come to make sense of actions they observe is still a topic of investigation. I will discuss different mechanisms that are thought to play a role in infants' emerging understanding of others. In particular, I will present evidence for the importance of infants' own active action experience for their action understanding. Also, infants come to an understanding of others' actions through the repeated observation of actions and the effects associated with them. In their daily lives, infants have plenty of opportunities to form associations between observed events and learn about statistical regularities of others' behaviors. I will then describe how – based on active action experience and observational experience – infants gradually develop more complex social-cognitive capabilities.

Speaker: Jorien Treur (Radboud University Nijmegen)

Date: 28 March 2017, 16:00

Location: REC E0.03

Addictive behaviour: Genetic underpinnings and associations with mental health

From decades of research we know that addictive behaviour is moderately to highly heritable. The relative influence of genes and environment on addictive behaviour has traditionally been assessed with twin-family studies. More recently, genome wide association studies (GWAS) became popular, whereby hundreds of thousands of genetic variants are tested for their association with a certain trait, such as addictive behaviour. GWAS allow us to better assess the genetic underpinnings of addictive behaviour, but have also introduced new methods to study genetic overlap between different traits, test gene-environment interactions and determine the causal nature of observational associations (Mendelian randomization).

Such methods may especially be useful to disentangle associations between addictive behaviour and mental health, which are highly co-morbid. During this lecture I will present some recent studies utilizing these methods, with a focus on smoking behaviour and its association with mental health.

Speaker: Nienke van Atteveldt (Free University)

Date: 4 April 2017, 16:00

Location: REC E0.22

Title and Abstract will follow.

Overview of Yield meetings

Childhood education and family support

Biweekly colloquia are held. Ongoing research is presented and discussed. Contact: Alithe van den Akker (A.L.vandenAkker@uva.nl)

Brain & Cognition

Biweekly colloquia are held (see <http://www.dutcharc.nl/links/labmeetings/>). Contact: Marie Deserno (m.k.deserno@uva.nl)

Education and Instruction, learning processes and child development

Education organises 'Educational Science Colloquia' approximately bimonthly. These meetings consist of presentations of research and occasionally external speakers are invited. Contact: Remmert Daas (R.J.M.Daas@uva.nl)

Education and Instruction, learning processes and child development also have combined colloquia which are held monthly. In these meetings, ongoing research is presented and research proposals are discussed. Contact: Madelon van den Boer (M.vandenBoer@uva.nl)

Developmental psychology and Developmental and parenting problems

Combined OOP (Susan Bögels' lab)/ADAPT (Reinout Wiers' lab) colloquia are held once a month. Here ongoing research is presented and discussed. Contact: Bram van Bockstaele (B.D.vanBockstaele@uva.nl)

Code – P colloquia are held biweekly (Hilde Huizenga's lab and Maartje Raijmakers' lab). In these meetings, research is presented and discussed. Contact: Daan van Renswoude (D.R.vanRenswoude@uva.nl)

AMC Pediatrische Psychologie Kennisoverdracht Bijeenkomst

These are monthly research meetings, often with (external) presentations. The meetings are held on the third Tuesday of the month from 12:00-13:00. Contact: Marieke de Vries (marieke.devries@amc.uva.nl)

Tinbergen Institute

The Tinbergen Institute is the research institute and graduate school of the economist from the UvA, VU and EUR. These are open seminars where Yield researchers are welcome. The topics are rather broad. Contact: Nienke Ruis (N.M.Ruijs@uva.nl)

Psychometrics: Methods & Statistics (POWL) and Psychological Methods (Psychology)

Combined M&S (POWL) and PM (Psychology) monthly meetings on Psychometrics. Fridays 16:00-17:00. Contact: Andries van der Ark (L.A.vanderArk@uva.nl)

