



Yield Newsletter - February 2014

Dear Yield members,

In this Newsletter, we would like to inform you about the Yield-day held on January 30th and about upcoming Yield activities.

Yield-day

We are very pleased that the first Yield-day was a success! The main goals of the day were to (1) get to know other Yield members, (2) generate knowledge and ideas for new research, and (3) lay the foundation for joint research and grant application.

The set-up of three rounds of thematic brainstorm sessions in small groups of five people, worked to create a positive and constructive atmosphere. After each round, interdisciplinary research ideas that resulted from the brainstorm sessions were presented in plenary meetings (for an overview of the ideas, including appropriate HORIZON2020 calls, see Appendix I). During the final plenary session, attendants were able to indicate which proposals they 'liked', as well as which proposal they would like to participate in. One lab-meeting concerning the call 'Making science careers attractive to young people' (SEAC-01-2014) has been held (Friday the 14th) and on Tuesday the 18th a lab meeting regarding the call 'Understanding health, ageing and disease: determinants, risk factors and pathways' (PHC-01-2014-2-stage) will be held (see Lab meetings below).

The Yield Post-docs will now do their best to facilitate turning some of these inventive projects that received most interest into for instance grant proposals or other research projects. To this end, the upcoming lab meetings are organized around ideas discussed at the Yield-day.

Lab meetings

- Friday 14th February: 'Making science careers attractive to young people' (SEAC-01-2014, e.g., 'The curious mind: risk or benefit').
- Tuesday 18th February: 'Understanding health, ageing and disease: determinants, risk factors and pathways' (PHC-01-2014-2-stage, 'Person-environment interactions as predictors of externalizing behaviour').
- Thursday 27th February: 'Understanding health, ageing and disease: determinants, risk factors and pathways' (PHC-01-2014-2-stage, 'Person-environment interactions as predictors of externalizing behaviour') in GS.28A.

Yield News

We are delighted to give notice to three important news items:

- Reinout Wiers is appointed as Faculty Professor (FMG) per 1st of February 2014 with the special assignment to further Yield research.
- Marieke de Vries has been selected as postdoctoral researcher in paediatric neuropsychology. She will be appointed by Yield, and stationed in the research group of Martha A. Grootenhuys (AMC/EKZ).
- Frans Oort submitted a Graduate Programme proposal to NWO. If the proposal is granted, Yield will be able to appoint four PhD students (AiO's) under the supervision of Yield's principal investigators.

Other News:

- The second International Congress of Pediatric Psychology will be held in Amsterdam, 25-26 september, 2014 a.s. in Amsterdam.
Keynote speakers are prof. Anne Kazak, University of Pennsylvania, and Prof. Alexandra Quittner, University of Miami, USA. (info@ppn2014.com; website www.ppn2014.com)

Yield day January 30, 2014

Summaries of research projects

Note; 'Likes' = number of red stickers, 'Participate' = names of researchers who are prepared to invest time in the project. If applicable, fit within Horizon 2020 call is indicated.

TOPIC 1: FAMILY RISK

Family and Peers: A World Apart?

With the transition from primary to secondary school, young adolescents attach an increasing importance to being accepted by their peers and become prone to adapt to their norms. However, parents remain important socializing agents in adolescence, transmitting their set of norms as well. In this research project, we aim to study the effect of conflicting norms and values of parents versus those of their peers. Innovative features are 1) the combined study of standards of both parents and peers, rather than those of peers only; 2) taking the positive influence of peers into account (rather than focusing solely on risk behavior); 3) exploring if there is a uniform process underlying dissemination of norms in a variety of domains (e.g., gender conformity, school engagement, risk behavior) or whether these processes are domain specific; 4) combining longitudinal/correlational data with experimental data. Understanding the dissemination of norms through peer groups and families may help us improve individual liberties, further integration, and decrease risk behavior in society.

Likes: 15

Participate: Helle Larsen, Bonne Zijlstra, Hilde Huizenga, Mathilde Verdam, Astrid Poorthuis, Thea Peetsma

The Curious Mind: Risk or Benefit

Curiosity is an often referred-to term in science education settings, policy reports on scientific literacy and curricula. Recently, Jirout and Klahr (2012) wrote a review on children's curiosity and the different ways the concept is assessed over the years. However, many questions regarding children's curiosity remain. First, there are questions concerning the definition and measurement of curiosity. Jirout & Klahr proposed a definition based on Loewenstein's "information gap" theory (1994): "Curiosity is the threshold of desired uncertainty in the environment which leads to exploratory behavior", and propose a new measure for assessing this type of curiosity.

However, research on the relation between this type of curiosity and child variables rendered mixed results. For example, how is a child's curiosity related to its inhibition, impulsivity, and anxiety? Second, these questions concern the development of children's curiosity. For example, how do early parent-child interactions influence a child's curiosity? Third, these questions concern the circumstances under which a high degree of curiosity poses a benefit or a risk for a child's development. In educational settings high-level curiosity is considered desirable, but is high-level curiosity still beneficial in adolescence when a child is exposed to risky behavior of peers? By answering these questions we will gain insight in the relations between child-variables, early parent-child interactions, the development of (different types of) curiosity, and circumstances under which high levels of curiosity pose a benefit or a risk for a child's development. A longitudinal study will be performed (1-18 years) by using questionnaires and observational methods, and possibly psycho-physiological methods.

Likes: 16

Participate: Maartje Raijmakers, Tessa van Schijndel, Brenda Jansen, Astrid Poorthuis, Marieke de Vries, Thea Peetsma

Horizon: PHC-01-2014-2-stage: Understanding health, ageing and disease: determinants, risk factors and pathways or SEAC-01-2014: Innovative ways to make science education and scientific careers attractive to young people

Fishing

In general, interventions for high risk families differ between 'family based' and 'institution based' and between 'broad/multifaceted' and 'highly specific'. A current problem seems to be that family dynamics are so complex, that it is difficult to pinpoint the focus of an intervention and at the same time oversee the impact across the family. The network approach as currently applied to model, for example, depression, anxiety and most specific comorbidity, might be promising in this respect. It would be valuable to examine whether such a network model could also be used to model family risk factors and/or family relations, such that the effect of specific interventions could potentially be traced through the network.

On a side note, it is important to realize that knowing the cause of a problem is often unnecessary or even uninformative in finding effective interventions. A good example of this is the 'fish anecdote'. Researchers tried to find a way to restore the disrupted ecosystem of a lake. The cause of the problem was pollution. The solution, however, was discovered by chance by fishermen who found out that the ecosystem could be restored by taking all the fish out of the lake. Hence, the title is 'fishing'.

Likes: 7

Participate: 0

Family Risk Interventions: Tailoring?

The goal is to explore whether we should have universal intervention components for most families or differential intervention components depending on genetic vulnerabilities. We know (1) that GxE is clustered within families and (2) that interventions are usually considered to be 'one size fits all'. However, a crucial question is whether the effectiveness of intervention components depends on genetic vulnerabilities?

We propose to investigate this by: (1) selecting evidence-based intervention components; (2) genotyping differential susceptibility genes and assess vulnerability by personality questionnaires, and (3) evaluating the effectiveness of intervention components depending on genetic vulnerabilities. If it is found that the effectiveness of intervention components depends on genetic vulnerabilities, then it point towards the need of tailored intervention components. If the effectiveness of intervention components does not depend on genetic vulnerabilities, it point towards the use of universal intervention components.

Likes: 7

Participate: Helle Larsen, Geertjan Overbeek

Horizon: PHC-06-2014-2 stage: Evaluating existing screening and prevention programmes.

The General Risk Assessment Tool

In this proposal the aim is to create a general risk assessment tool for the measurement of family risk factors such as family problems, alcohol/drug abuse, attachment problems, child problems (both physical and mental) and socio-demographic risk factors. Outcome measurement is the psychosocial cognitive functioning of the child. This is important in order to ensure that researchers measure the same family risk factors in studies from different disciplines and in different cultures. The general risk assessment tool will be examined by: (1) the use of existing literature and data/studies and (2) pooling items from existing scales to create a worldwide cohort

Likes: 21

Participate: Geert Jan Stams, Peter de Jong, Martha Grootenhuis, Thea Peetsma, Claudia van der Put

Horizon: PHC-01-2014-2 stage: Understanding health, ageing and disease: determinants, risk factors and pathways.

The 'Off Button' of Epigenetic Transmission of Trauma

The main aim of this idea is to improve quality of life, vitality, and stress resistance of future generations. This is important to generate new perspectives on the transmission of trauma (i.e., that does not go through parenting). This will be investigated by the use of trauma screening for all pregnant European couples and their parents. The measurements will be done in children up to 30 years of age. Another possibility is to offer treatment, use naturalistic experiments, and investigate specific subgroups in countries with large-scale trauma.

Number of likes: 15

Participante: 0

Horizon: PHC-01-2014-2 stage: Understanding health, ageing and disease: determinants, risk factors and pathways.

High-risk – High-Potential

In this proposal high-potential youth from high-risk backgrounds (e.g., low SES, ethnic minority) are offered extracurricular activities to develop their competencies. Children could enter after school care programs where they receive extra science education.

Likes: 10

Participate: Madelon van den Boer, Elise de Bree, Hanneke Creemers

Person-Environment Interactions in Psychosocial and Cognitive Development

Until now, research into psychosocial and cognitive development during childhood and adolescence is largely independent of one another. Yet, it could be expected that development of these distinct domains is highly intertwined. Therefore, it seems important to examine the longitudinal transactions between psychosocial development (internalizing and externalizing problems) and cognitive development (IQ, academic achievement) from early childhood to adolescence.

Furthermore, it would be important to understand risk as well as protective factors of these transactional associations. Therefore, the role of interactions between the person (e.g., parenting, family structure) and their environment (e.g., temperament, genes) will be studied, in predicting developmental associations between psychosocial and cognitive development. Focus will be on children and adolescents' positive as well as problematic development and their environment.

Finally, exploration of cultural commonalities and differences in these processes are also taken into account. As such, we need to collaborate with different universities from across Europe (North, South, East and West) to set up new data collections as well as to investigate these research aims with existing longitudinal studies.

Likes: 7

Participate: Jessica Asscher, Patty Leijten, Helle Larsen

Horizon: PHC-01-2014-2 stage: Understanding health, ageing and disease: determinants, risk factors and pathways.

TOPIC 2: E-RESEARCH

Developing and testing a Friend –finder app for hospitalized children (and their parents and siblings)

Long-term outcomes for hospitalized children are mainly predicted by psychosocial factors, even more so than by the seriousness of the illness or frequency of hospital admissions. One important precondition for children's wellbeing is having opportunities to interact with peers. However, when children are admitted to hospital, their contacts with friends and peers are often disrupted (temporarily). This may increase children's feelings of loneliness.

Therefore, the development of a Smartphone application is proposed, which helps hospitalized children to connect to other children of a similar age and with similar interests who are currently in the same hospital—a Friends-Finder App. This app will give means to chat with other children in a protected environment and encourage children to meet each other in person. A parent version will also be developed to connect parents of children with similar diseases to each other, aiming to increase peer support and exchange (illness-related) information. A version for siblings may be developed as well.

This will be investigated by first having a pilot phase developing and testing the app, followed by a RCT (randomized on the hospital level) with a multi-wave design to evaluate the effect of the Friend-finder app. A combination of intensive short-term assessments (build into the Friend-finder app) with more extensive assessments will be made every few months.

The focus will be on outcomes like self-esteem, wellbeing (e.g., loneliness), knowledge, but also on data collection of illness-related outcomes. The app enables us to monitor the degree to which participants used the app (dose) by assessing the time they used the app and the number of connections they made with other children.

Likes: 13

Participate: Martha Grootenhuis, Astrid Poorthuis, Jessica Asscher, Marieke de Vries, Annette van Maanen, Mathilde Verdam

Life Style App

The idea is to build an app around the general theme 'life style'. Through this app the goal would be: to gain knowledge, by giving knowledge. The knowledge to gain, would be focused on social, mental, and physical wellbeing in different cultural/age groups, with a focus on how different life style aspects are related and, more importantly, can be influenced (for example through the kind and the style of an offered tip/advise). The knowledge given would serve the purpose of motivating people to use the app. Therefore, a distinction should be made between tips given to 'lure' people, and tips from which people can 'learn'. Tips could be general and/or targeted to a certain population, based on interests or health profiles. The tips could concern food, sleep, and both cognitive and physical exercise. Through the app people could map their life style through answering questionnaires and receive feedback. The app could be made more attractive by incorporating a profile including pictures (for example of both present and future self) or coaching options.

Likes: 3

Participate: 0

Tailored ICT in Health & Education

The idea is to build an app to obtain a (cognitive) profile of a person, which shows what specific skill a person could train and how this skill could be trained. The profile could focus on a person's strengths and deficits in comparison to a large database, possibly structured or based on the DSM. In order to examine whether 'a human touch' is necessary, the training conditions to be included would be: (1) ICT with feedback, (2) ICT with feedback and an explanation (non-human), (3) ICT with feedback, explanations and human contact. Societal benefits would be: cost-effective treatment, inclusion of groups which are difficult to reach through current institutions, and an expected overall increase in well-being. Scientific benefits could concern studying the effectiveness of ICT based interventions in general, and more specifically, moderators of effectiveness.

Likes: 6

Participate: Elise de Bree, Bram van Bockstaele, Helle Larsen, Hilde Huizenga

Horizon: PHC-01-2014-2 stage: Understanding health, ageing and disease: determinants, risk factors and pathways and/or PHC-20-2014-1 stage: Advancing active and healthy ageing with ICT: ICT solutions for independent living with cognitive impairment.

The Human Touch?

In this research idea, it is examined whether a human therapist is needed or whether computerized intervention suffices as 'stand-alone' therapies. We know that (1) computerized interventions can increase clinical therapy effects, but also that (2) as a stand-alone intervention, they have relatively high drop-out rates, lack of motivation etc. Is a real therapist or avatar needed to increase motivation?

To examine this, a 2X2 design is needed.

		Participants are told to have:	
		Human	Avatar
Participants actually have:	Human	Real therapist effect	Anti-placebo effect
	Avatar	Placebo effect	Avatar effect

Likes: 17

Participate: Patty Leijten, Henny Bos, Bonne Zijlstra, Helle Larsen, Elske Salemink, Bram van Bockstaele, Marieke de Vries, Annette van Maanen, Hilde Geurts, Reinout Wiers

Horizon: PHC-20-2014-1 stage: Advancing active and healthy ageing with ICT: ICT solutions for independent living with cognitive impairment.

The Effects of Implementation of Tablets Use in Schools

In this idea to study positive and negative effects of implementation tablets-based learning (TBL) methods is central. This is crucial because there is a current fast implementation of TBL methods, and as yet we do not know much about the effects. It is important to know the benefits/pitfalls of the TBL Methods. This can be done by (1) Descriptive: students, parents, teachers, large principals. Development of cognitive functioning, effective learning time, student satisfaction, role of teacher (teacher satisfaction), meta-cognitive level (planning etc.), group functioning, engagement, I-pad based measurements, longitudinal and (2) best practices → evidence based RCT, pre/post, control group also tablets (Tablets as usual). Moderators: teacher motivation, reason implementation school.

Likes: 13

Participate: Elise de Bree, Monique Volman, Helma Koomen, Han van der Maas
Madelon van den Boer

Horizon: PHC-26-2014-1 stage: Self-management of health and disease: citizen engagement and Health

Proximal Risk Factors for Aggressive Behavior

This proposal aims to increase the understanding of micro-processes leading to aggressive behavior in adolescents. An app will be developed to assess (multiple times a day) emotions, cognitions, behavior and contextual factors (setting + interpretation of events). Additionally, adolescents will daily report whether they exhibited aggressive behavior and if so at what time. Linking the latter information to the emotion/cognition/behavioral data, personalized information can be gathered concerning an individual's risk for aggressive behavior. This information can be used in therapy, as well as by the app to warn an individual against risky situations. The app will be developed, implemented and investigated for effectiveness in reducing aggressive behavior.

Likes: 8

Participate: 0

Horizon: PHC-26-2014-1 stage: Self-management of health and disease: citizen engagement and Health

Big Brother Guides You

The goal is to enhance adolescents' self-regulation through the use of their Smartphone. Adolescents with mental disorders generally experience problems when facing the challenges of daily life. For example, adolescents with social phobia can experience difficulties with going to the supermarket. The app provides adolescents fast and easy access to mental help with a smart-phone application in such hot situations: times when adolescents need it the most. This would be more cost-effective than calling a psychologist for example. It is expected that adolescents with internalizing disorders would more easily consult their Smartphone in times of distress compared to adolescents with externalizing disorders. Therefore, an arm wrist which registers the heart rate can be used to signal adolescents with externalizing disorders, such as aggression, that their heart rate is getting to high and that they need to consult the app on their Smartphone. It would be great to set up an experiment that compares whether 'self-regulation' with a Smartphone app is equal to or better than 'care as usual'. Applications to the parenting context can for example be that we (1) provide parents with parenting advice on a Smartphone app when they experience difficulties with their child or (2) provide parents with a parenting advice specific to their needs five times a day. For this kind of research Yield members need to collaborate with technological researchers/developers at technical universities (TU Delft) as well as with psycho-physiological researchers.

Likes: 6

Participate: Thea Peetsma, Daniëlle van der Giessen, Elske Salemink

Horizon: PHC-26-2014-1 stage: Self-management of health and disease: citizen engagement and Health

TOPIC 3: YIELD-INSTITUTIONS

We discussed whether it would be possible to formally associate Yield with institutes such as day care, primary schools, secondary schools, other educational institutes, health care institutes, child and youth care institutes, judicial institutes. This could be very beneficial, not just for our research endeavours, but also for our education programmes and our students.

We concluded that in order to succeed it must be clear what the associated institutes get in return. It also became clear that we have to invest time and money first. Frans Oort will discuss the next steps with graduate school directors and dean.