



Yield Newsletter –June 2014

Dear Yield members,

In this Newsletter, we would like to inform you about the latest Yield activities and upcoming Yield lab meetings.

Yield News

As mentioned in the previous Newsletter, Frans Oort submitted a Graduate Programme proposal to NWO. This proposal has now been selected for the final round. June 30, a Yield delegation will be interviewed about the goals and the organisation of Yield's Graduate Programme. If the proposal is granted, Yield will get NWO funding to appoint four PhD students (AiO's) under supervision of Yield's principal investigators.

Also, following up on an initiative from the Yield day, Tessa van Schijndel, Maartje Raijmakers, Monique Volman, Astrid Poorthuis, and Brenda Jansen submitted a proposal to The Spencer Foundation (private American foundation with a [research awards program](#)), to get funding for two PhD students: "Adapting teaching to children's curiosity: Improving science education by accounting for individual differences in inquiry learning". We hope for positive reviews!

Lab meetings and lectures

In the lab meeting of Thursday 22nd May, we discussed the topic "The effects of implementation of tablets use in schools". This topic was one of the ideas from the Yield day, where we discussed the introduction of tablets in schools, although there is no idea about the effects of tablet use in schools. At this time, the project is still in brainstorm phase; there is no concrete idea or research proposal yet. A subgroup will work on developing research questions and design.

Instead of the lab meeting on Thursday 19th of June, we organize three lectures in cooperation with the Rita Vuyk lecture series, in June and July. Abstracts of these lectures can be found below.

Tuesday 24th of June: Prof. Jaap Denissen (Professor of Developmental Psychology, Tilburg University) will give a lecture entitled "Dynamic person-environment transactions: Towards a model of self-regulated individual differences". Time: 13:00; Location: REC-JK 1.83.

Tuesday 1st of July: Prof. Henning Tiemeier (Professor of Psychiatric Epidemiology Department of Epidemiology & Child- and Adolescent Psychiatry Erasmus Medical Center, Rotterdam) will give a lecture entitled "The Generation R Study: Intrauterine and early childhood influences on developmental psychopathology". Time: 16:00. Location: Diamantbeurs, 5.01.

Thursday 3rd of July: Dr. Judith Rispens (Taalwetenschap, UvA). She just received a NWO VIDI grant and will give a lecture entitled "Expressing the Dutch past tense: Evidence from children with SLI, bilingual children and adults". Time: 11:00. Location: JK 1.18.

With kind regards, on behalf of the Yield Team,
Helle Larsen, Marielle de Reuver, Frans Oort

Abstracts

Prof. Jaap Denissen

Time: 24 June, 13:00

Location: REC-JK 1.83

Dynamic person-environment transactions: Towards a model of self-regulated individual differences

The talk will contrast static models of traits with more dynamic-interactionist models. A selection of research findings will be presented to demonstrate that traits are affected by various situational influences, such as social relationships and social norms. These findings have inspired a novel self-regulation perspective that assumes that individuals emerge in interactions between environmental characteristics and a combination of primary and secondary regulation processes. At the end of the talk, possibilities for collaboration with other disciplines will be discussed.

Prof. Henning Tiemeier MD PHD

Time: 1 July, 16:00

Location: Diamantbeurs 5.01

The Generation R Study: Intrauterine and early childhood influences on developmental psychopathology.

Background: Numerous studies of maternal exposures during pregnancy have documented effects on child developmental outcomes. Most often, maternal smoking or maternal psychological problems have been related to child behaviour. Other important maternal exposures include maternal medication use, drug abuse, maternal hormones and or autoimmune factors. An overview of recent research in Generation R addressing these and less well known intrauterine exposures and their association with child mental health is presented. Emphasis will be placed on outcome assessment using observational methods, brain imaging, and multi-informant approaches.

Method: The initial Generation R cohort comprised 9,778 pregnant women. Repeated fetal ultrasounds combined with detailed questionnaires and observational assessments now offer opportunities to study fetal and child development to age 6 years.

Results: Maternal depression, smoking, low folate concentrations, SSRI and cannabis use during pregnancy exposure all negatively affected fetal head growth. Yet, effects of these exposures on child developmental psychopathology were often absent, explained by confounding, reporting bias, or were not very consistent. Some intrauterine influences were associated with child mental health only if maternal and not if other informant's reports were used. Also, we found indirect and direct evidence for genetic confounding using paternal exposure data (e.g. paternal and maternal prenatal exposure were equally related to child mental health). In contrast, subclinical maternal hypothyroxinemia early in pregnancy was more consistently associated with poor cognitive functioning and emotional problems. Likewise, maternal folate deficiency and SSRI use in pregnancy were risk factors for behavioral problems in 6-year old children.

Conclusion: The Generation R studies on prenatal maternal exposures will be summarized and discussed critically. Emphasis will be on methodological approaches taken to reduce bias. I will also give examples how brain imaging, child self-report, and experimental observations can be used in a large cohort to further our understanding of developmental psychopathology.

Dr. Judith Rispen

Time: 3 July, 11:00.

Location: REC-JK 1.18

Expressing the Dutch past tense: Evidence from children with SLI, bilingual children and adults

Successful language acquisition is dependent on child-internal and external variables that allow children to learn from the language spoken around them. Children with specific language impairment (SLI) show severe and persistent difficulties in language learning from the input, despite sufficient child-external language opportunities. Severe problems with past-tense morphology have been reported cross-linguistically (see Leonard, 1998) in children with SLI. Bilingual children typically receive less input in either language than monolingual children learning just one language, and slowed acquisition in the domain of the past tense has been reported for this group (Thordardottir et al., 2006; Nicoladis et al., 2007; Schelleter, 2007). Thus, in both groups difficulties with past tense acquisition are observed, but the causes differ. In this presentation, the ability to produce the past tense in children with SLI and in bilingual children will be discussed. In Dutch, the regular past tense is a morphophonological phenomenon as it is realized using one of the two morphemes /də/ ('de') and /tə/ ('te'), depending on whether the final phoneme of the verb is voiced (*kam-de* 'combed') or voiceless (*bak-te* 'baked'). The distribution of these two morphemes is not equal in the Dutch language input:

the combination of the verb stem + *'te'* occurs more frequently than verb stem + *'de'*. As it has been suggested that morphosyntactic acquisition is sensitive to input properties (Blom et al. 2012; Gathercole, 2007; Nicoladis et al., 2007; Paradis et al., 2010), the current study examined the effect of the differences in frequency of the distribution of the two past tense forms in Dutch in children with SLI and bilingual children relative to monolingual children. Additionally, results of an ERP experiment will be presented in which the sensitivity to the morphophonological properties of the past tense was tested in adults. These results will demonstrate the independence and interaction of morphosyntactic and phonological processing involved in past tense marking. The implications for acquisition and production of the past tense in children will be discussed.