



Annual Report 2010

Supplement

IVO

ADDICTION RESEARCH INSTITUTE

ANNUAL REPORT 2010

Supplement

IVO
June 2011

Heemraadssingel 194
3021 DM Rotterdam
The Netherlands
tel: +31 (0) 10 425 33 66
fax: +31 (0) 10 276 39 88
Email: secretariaat@ivo.nl
Website: www.ivo.nl

Content

1.	LIST OF PROJECTS	2
2.	PROJECT DESCRIPTIONS	5
	Alcohol	6
	Hard drugs, cannabis and new drugs	26
	Smoking	37
	Obesity	47
	Social Relief and Social Care	57
	Internet	63
	Other research	69
3.	ORGANIZATION	78
4.	PUBLICATIONS	81

1. LIST OF PROJECTS

Alcohol

New in 2010:

- 1 AMPHORA: Alcohol measures for Public Health Alliance (p. 6)
- 2 Targeting young drinkers online: The effectiveness of a web-based brief alcohol intervention in preventing excessive drinking patterns among adolescents (p. 7)
- 3 Consulting on Alcohol and Drug policy in the city of Arnhem (p. 8)

Running in 2010:

- 4 Effectiveness of the treatment of the addiction care clinic SolutionS (p. 8)
- 5 Peer influence revisited: an experimental study on the association between peer influence susceptibility and adolescent alcohol use (p. 9)
- 6 Predictive value of young people's drinker prototypes: Tests using innovative designs (p. 10)
- 7 Experimental observational studies on peer influence processes and alcohol consumption (p. 11)
- 8 Genes, family environment, and gene-family environment interactions as predictors of adolescent alcohol use (p. 13)
- 9 Development of automatic and controlled processes with regard to substance use in adolescence (p. 15)
- 10 Effect evaluation of intensified enforcement of the age ban on adolescent drinking and the additional effect of a community intervention (p. 17)
- 11 Take it or leave it: prevention of early substance use in adolescence (p. 18)
- 12 The Truman Show: effects of alcohol portrayal in the media on actual alcohol consumption (p. 19)

Finished in 2010:

- 13 Development of a protocol for early detection and brief interventions of alcohol abuse in young people (p. 21)
- 14 Evaluation of a pilot study on early detection and treatment of problem drinking in Rotterdam primary care (p. 22)
- 15 Coronary heart disease and the interaction of alcohol consumption, causal attribution and stress (p. 23)
- 16 Social roles and alcohol consumption: an European study (p. 24)

Hard drugs, cannabis and new drugs

New in 2010:

- 17 National Prevalence Study on Licit and Illicit Substance use 2009 (p. 26)
- 18 Novadic-Kentron: providing advice for the Region Monitor (p. 26)
- 19 Indicated prevention of substance use and addiction for vulnerable young people (p. 27)
- 20 Prevention of harmful alcohol use and drug use among adults: a knowledge synthesis (p. 28)

Running in 2010:

- 21 Cannabis branch speaking: backgrounds and motivations of (ex-) exploitants in grass cultivation and developments in the Dutch cannabis branch (p. 29)
- 22 Public opinion on substance use and policy measures (p. 29)
- 23 Anxiety disorders and substance abuse: development of a treatment guideline (p. 30)
- 24 Stay a way: an Intervention on drug abuse in juvenile offenders: development and theoretical rationale of ambulant care in a judicial setting (p. 31)

Finished in 2010:

- 25 Multicentre study: development of a monitor for youth addiction care (p. 32)
- 26 Early detection on substance misuse and dependency by youth: development of a guideline (p. 32)

- 27 A complex problem: fitting care for addicted persons subject to judicial measures who have comorbid psychiatric problems and minor learning disabilities (p. 33)
- 28 An empirical pilot study on integrated policy on psychoactive substance in Europe (p. 34)
- 29 Introduction of the national guideline methadone maintenance treatment: establishing national support and benchmark (p. 35)

Smoking

New in 2010:

- 30 Developing and testing strategies to effectively reach and involve resistant hard-core smokers in tobacco control (p. 37)
- 31 Family characteristics in paediatric asthma outcomes: Test of a biopsychosocial model (p. 38)

Running in 2010:

- 32 Evaluation of a smoking cessation intervention for parents (p. 38)
- 33 Effects of new laws in the Netherlands aimed at reducing tobacco consumption (p. 39)
- 34 Smoking in movies: impact on European youth and policy options (p. 40)
- 35 Media influences on smoking behaviour of youth (p. 41)
- 36 Shared and non-shared familial influences on smoking behaviour in adolescence (p. 42)
- 37 "Smoke-free-kids": test of a smoking prevention program for parents of primary school children (p. 44)
- 38 "Smoke-free-kids": evaluation of a smoking prevention program for parents of asthmatic children (p. 45)

Obesity

New in 2010:

- 39 Environmental determinants of dietary behaviours of children, the IVO Nutrition and Physical Activity Child cohort (INPACT) (p. 47)

Running in 2010:

- 40 Relationship between parental behaviour and overweight in primary school children in the Netherlands, the IVO Nutrition and Physical Activity Child cohort (INPACT) (p. 48)
- 41 Ethnic differences in overweight and obesity among primary school children in the Netherlands, the IVO Nutrition and Physical Activity Child cohort (INPACT) (p. 49)
- 42 Social Influence on Food Intake (p. 50)
- 43 Imitation of food intake and choices in children (p. 52)
- 44 How beauty ideals influence our self-appraisal: effects of media on body image (p. 52)

Finished in 2010:

- 45 Sex and the City: effects of thin media images on body image and food intake (p. 53)
- 46 Mental health and health habits in adolescence (p. 55)

Social Relief and Social Care

New in 2010:

- 47 Cohort study amongst homeless people in Amsterdam, The Hague, Rotterdam and Utrecht (the G4) – Coda-G4 (p. 57)
- 48 Detection of alcohol abuse and psychiatric problems among homeless people (p. 58)

Running in 2010:

- 49 Care for young homeless people with severe mental health problems (p. 59)
- 50 Effectiveness of intensive community-based care for persons with complex addiction problems: contribution of specific program components (p. 59)

Finished in 2010:

- 51 Client flow within the social relief system: perspective and practice (p. 60)
52 Evaluation of pilot project: Family group conference (Eigen Kracht) for former homeless (p. 61)

Internet**New in 2010:**

- 53 Internet use within schools (p. 63)

Running in 2010:

- 54 Monitor Internet and youth: video game addiction (p. 63)
55 Neurocognitive aspects of online game addiction; the role of cognitive control (p. 65)

Finished in 2010:

- 56 Treatment of internet addiction: evaluation of a pilot treatment for internet addiction (p. 66)
57 Games: brief overview of research on the effects of playing digital games (p. 67)
58 Media attention for the social responsibility of the game industry (p. 67)

Other**New in 2010:**

- 59 Implementation pilot VSV: an integrat treatment program for physical maltreatment of children.
Evaluation of success and failure factors, and recommendations for future research (p. 69)
60 Victimization in patients with severe mental illness, a nationwide multi-site study (p. 69)
61 Behind the excitement. A study on the use and abuse of online pornography in the
Netherlands (p. 70)
62 Non prescribed use of ADHD medication; reasons for use, consequences and addiction
(p. 71)

Finished in 2010:

- 63 Role of Holland Casino in the development and maintenance of gambling addiction in the
Netherlands (p. 71)
64 Research into the nature, severity and extent of poker addiction in the Netherlands (p. 72)
65 Satisfaction level of practitioners who refer patients to Altrecht Mental Health Care Agency
(p. 73)
66 Master Class Addiction 2010: Nanos gigantum humeris insidentes (p. 74)
67 Acceptance of help among perpetrators of domestic violence. A qualitative study on factors
influencing the acceptance of help among perpetrators of domestic violence. (p. 74)

2. PROJECT DESCRIPTIONS

Alcohol

1 AMPHORA: Alcohol measures for Public Health Alliance

Aim and research questions

Alcohol measures restricting the availability of alcohol and reducing exposure to alcohol-related cues are seen as the strongest evidence-based interventions to reduce excessive drinking and drinking-related harm. However, analysis of per capita consumption in European countries since 1960 shows a very strong increase in those countries most active in implementing alcohol policy measures (e.g. Scandinavian countries), while countries with no or only minimum alcohol policy measures (e.g. most Mediterranean countries) show a steady decrease in per capita consumption. Our basic assumption is that, besides measures aimed at decreasing consumption (e.g. alcohol control measures), many more developments influencing alcohol consumption in European countries have taken place. This project aims to identify such developments (e.g. urbanization, emancipation, secularization) and to estimate for groups of countries whether these developments had a stronger impact on changes in per capita consumption than changes in alcohol control measures.

Methods

Ten countries from north, west, south and east Europe participate. All countries gather data on developments in per capita consumption (total and separately for beer, wine and strong drinks) since 1960, as well as developments in the implementation of alcohol control measures and developments in economic (e.g. prices, average income, Gini coefficient), social (e.g. changes in level of education, participation of women in workforce, urbanization) and cultural (e.g. secularization, rates of divorce) parameters. Statistical analysis is done both per country and over groups of countries to identify which factors best model the developments in per capita consumption.

Results

Expected end 2011.

Output

-

Researchers

Prof RA Knibbe PhD (researcher), A Allemani (supervisor, Florence, Italy), M Derickx (research assistant)

In collaboration with: Agenzia Regionale di Sanità della Toscana (ARS, Italy), University of the West of England (UWE, United Kingdom), Anderson Consultant in Public Health (PANCPH, Spain), Anton Proksch Institut (API, Austria), Azienda Sanitaria Locale della Città di Milano (ASL, Italy), Budapesti Corvinus Egyetem (BCE, Hungary), Central Institute of Mental Health (CIMH, Germany), Centre for Applied Psychology (ZEUS, Germany), Chemisches und Veterinäruntersuchungsamt Karlsruhe (CVUAKA, Germany), Dutch Institute for Alcohol Policy (STAP, Netherlands), Eclectica snc di Amici Silvia Ines (ELECTICA, Italy), European Centre for Social Welfare Policy and Research (ECV, Austria), Generalitat de Catalunya (GENCAT, Spain), Institut za raziskave in razvoj (UTRIP, Slovenia), King's College London (KCL, United Kingdom), Institute of Psychiatry and Neurology (IPiN, Poland), Istituto Superiore di Sanità (ISS, Italy), Asociación Instituto y Red Europea para el Estudio de Factores de Riesgo en la Infancia y Adolescencia (IREFREA, Spain), Liverpool John Moores University (LJMU, United Kingdom), National Institute for Health and Welfare (THL, Finland), Nordiskt välfärdscenter (NVC, Finland), Norwegian Institute for Alcohol and Drug Research (SIRUS, Norway), State Agency for Prevention of Alcohol-Related Problems (PARPA, Poland), Stockholms Universitet (SU, Sweden), Swiss Institute for the Prevention of Alcohol and Drug Problems (SIPA, Switzerland),

Technische Universität Dresden (TUD, Germany), Trimbos Institute (TRIMBOS, Netherlands), University of Bergen (UiB, Norway), University of Maastricht (UniMaas, Netherlands), University of York (UoY, United Kingdom), Universiteit Twente (UT, Netherlands)

Term: June 2010 - October 2012
Financing: European Union

2 Targeting young drinkers online: The effectiveness of a web-based brief alcohol intervention in preventing excessive drinking patterns among adolescents

Aim and research questions

The primary aim of the project is to test the effectiveness of a web-based brief alcohol intervention – What Do You Drink (WDYD) – that is specifically aimed at reducing heavy alcohol use among heavy drinkers (aged 18-24 years) in a Dutch sample.

The project addresses three research questions:

1. Does exposure to a web-based brief alcohol intervention reduce heavy drinking, i.e. binge drinking and/or heavy alcohol use among 18-24-year olds, compared to a control group?
2. Are the effects of this web-based brief alcohol intervention moderated by adolescents' sex, age, education level, and drinking status?
3. Do alcohol-related cognitions, such as attitudes, self-efficacy, social norms, and alcohol expectancies mediate the expected intervention effects?

Methods

A two-arm parallel group randomized controlled trial is conducted to test the effectiveness of the web-based brief alcohol intervention among 908 heavy drinking adolescents. Participants are recruited at higher vocational education (HBO) and universities by flyers and social media. Participants are allocated at random to either the experimental (web-based brief alcohol intervention) or control condition (no intervention).

The primary outcome measure is formulated as the percentage of participants who drink within the normative limits of the Dutch National Health Council for low-risk drinking and thereby not exceeding a mean consumption rate of more than 14 (females) or 21 (men) glasses of standard units alcohol per week and/or drink 5 or more glasses of standard units alcohol on one drinking occasion at least once per week at 1 month and 6 months after the intervention. Reductions in mean weekly alcohol consumption and frequency of binge drinking are also formulated as primary outcome measures. The secondary outcome measures are based on weekly Ecological Momentary Assessments (EMA), which are regarded as highly valid measures to assess alcohol use and alcohol-related cognitions, and allow a more detailed study of how the intervention effects develop over time.

Results

In progress.

Output

-

Researchers

C Voogt MSc (PhD student), Prof RCME Engels PhD (promotor), EAP Poelen PhD (copromotor), B Boon PhD (advisor, Trimbos Institute)

In collaboration with: Trimbos Institute

Term: January 2010 - January 2014

Financing: Netherlands Organisation for Health Research and Development (ZonMw)

3 Consulting on Alcohol and Drug policy in the city of Arnhem

Aim

As part of the local policy cycle, the city of Arnhem drafted an Executive Program Alcohol and Drug policy. The document was based on a policy framework agreed upon by both political and professional stakeholders. Due to underlying political developments and developments in the domain of social relief, a review of this document was necessary.

Methods

The review of the Executive Program Alcohol and Drugs was carried out in phases. The first phase included a critical reading and comparison of the major policy documents concerned. In the second phase, open interviews were held with stakeholders in the field of substance use and social relief. The third phase comprised editing of the Executive program in close consultation with the principal.

Results

Major outcome of this process is the alignment of two policies with overlapping issues in the same domain. The process reflects the ongoing integration of substance use policy, notably when it concerns problematic drug users, and social relief policy on the local level.

Output

Barendregt C, Wits EW (2010) *Uitvoeringsplan alcohol- en drugsbeleid Arnhem 2010 – 2014 Bijgestelde versie, mei 2010*. Rotterdam, IVO. (Internal report)

Researchers

C Barendregt MSc (researcher), EG Wits MSc (project leader)

Term: April 2010 – June 2010

Financing: Municipality of Arnhem

4 Effectiveness of the treatment of the addiction care clinic SolutionS

Aim and research questions

The treatment method of the addiction care clinic SolutionS Centre in Voorthuizen, which is a combination of the Twelve Step Minnesota Model and cognitive behavioral therapy, has a number of specific features, including the possibility of immediate admittance, the assignment of a personal counselor, and an extended after care program. This study aims at evaluating the effectiveness of the treatment for alcohol addiction.

The program's effectiveness will be determined by measuring alcohol use versus abstinence in former patients of SolutionS. Apart from measuring alcohol use, we will also study factors that might influence treatment success. Such factors include spiritual wellbeing of patients, since this is one of the central factors in the SolutionS treatment program. Additionally, alcohol and drug use within the patient's social network will be studied as an important predictor of recovery and abstinence.

Methods

The study focuses on clients with an alcohol problem (possibly in combination with a cocaine problem). The prospective study includes all clients entering therapy during a period of two years. Clients are interviewed and fill out questionnaires at entrance and 1 month later at discharge. Follow-up questionnaires are sent out 3 and 12 months after discharge from treatment. Major outcome variable is the success rate which is defined as the proportion of clients who reached and maintained abstinence at the final measurement 12 months after discharge from treatment. This rate will be compared to success rates from other Dutch clinics.

Results

The first patients were included in January 2010. Final results will be available in 2012.

Output

-

Researchers

GJ Meerkerk PhD (researcher), TM Schoenmakers PhD (project leader)

Term: May 2009 – July 2013

Financing: SolutionS Centre Voorthuizen

5 Peer influence revisited: an experimental study on the association between peer influence susceptibility and adolescent alcohol use

Aim and research questions

Although peer influence is considered to be one of the most important predictors of alcohol use in adolescence, it has not been rigorously tested and theoretical explanations are needed that focus on influence processes when adolescents are exposed to peers in drinking situations. Research on adolescent development suggests that the social status of peers may play a key role in these types of social influence processes.

The present study experimentally examines whether adolescents modify their willingness to drink, an important predictor of drinking initiation, when confronted with the drinking norms of peers in a chat-room session and whether these effects are moderated by the social status of peers.

Methods

In a screening, we collected survey data on drinking behavior, social status and willingness to drink in hypothetical situations among 533 14-15 year olds. Of this sample, 80 boys with average social status participated in a simulated Internet chat-room study a few weeks later. The use of chat-rooms is a common way of peer online communication among adolescents. During the chat-room session, participants believed they were interacting with grade mates, but these were in fact e-confederates. Participants were confronted with pre-programmed pro-alcohol or anti-alcohol norms of 'grade mates'. Accordingly, we tested whether participants adapted their willingness to drink to the norms of the 'grade mates', and controlled for participants' willingness to drink in the screening questionnaire. To test whether adaptations in willingness to drink would depend on peers' social status, we manipulated the level of popularity of the 'grade mates'.

Results

Adolescents adapted their willingness to drink substantially to the pro-alcohol (i.e., more willing to drink) as well as anti-alcohol (i.e., less willing to drink) norms of these peers. Adolescents were more influenced by popular than unpopular peers. Interestingly, the anti-alcohol norms of the popular peers seemed most influential in that adolescents were less willing to drink when they were confronted with the anti-alcohol norms of popular peers. Additionally, the adolescents internalized these anti-alcohol norms.

This study gives more insight into peer influence processes that encourage and discourage alcohol use. These results could be valuable for the development of prevention and intervention programs to reduce alcohol use among adolescents.

Output

Teunissen HA, R Spijkerman, TM Schoenmakers, KD Vohs, RCME Engels (In press) The Effect of Self-Control on Attentional Bias for Alcohol Cues in Male Heavy Drinkers. *Journal of Applied Social Psychology*.

Teunissen HA, CB Adelman, MJ Prinstein, R Spijkerman, EAP Poelen, RCME Engels, RHJ Scholte (2010) The interaction between pubertal timing and peer popularity for boys and girls: An integration of biological and interpersonal perspectives on adolescent depression. *Journal of Abnormal Child Psychology*, DOI 10.1007/s10802-010-9467-1

Researchers

HA Teunissen MSc (PhD student), R Spijkerman PhD (copromotor), MJ Prinstein PhD (copromoter, University of Chapel Hill), Prof RCME Engels PhD (promotor), RHJ Scholte PhD (copromotor)

In collaboration with: University of Chapel Hill, Dept. of Psychology, North Carolina, USA

Term project: October 2008 – June 2013

Financing: Netherlands Organization for Scientific Research (NWO)

6 Predictive value of young people's drinker prototypes: Tests using innovative designs

Aim and research questions

A promising concept for the explanation of young people's alcohol use is the role of young people's social images associated with alcohol use. Youngsters have salient social images of the type of people of their age who engage in alcohol use. Their perceptions of the typical drinker are also referred to as 'prototypes'. The relationship between drinker prototypes and young people's alcohol intake is well established. However, the existing research stems from correlational studies that are based on adolescents' self-reports. No definite conclusions can be drawn about the predictive value of drinker prototypes on youngsters' actual drinking behaviour and the direction of the relationship between these two variables. The aim of the present project is to critically examine the true value of prototypes in predicting actual alcohol use among young adults.

The study addresses the following questions:

- 1) Are young people's drinker prototypes related to their actual drinking behaviour in a social drinking context?
- 2) Are drinker prototypes affected by other people's image and drinking behaviour in a social drinking context?
- 3) Can (un)favourable information about drinkers affect college students' drinker prototypes and subsequently their alcohol intake in a naturalistic drinking setting?
- 4) What is the relative contribution of implicit en explicit measures of drinker prototypes to the explanation of young people's drinking behaviour?

Methods

The research questions are answered by observational studies among weekly drinking students conducted in a bar lab. Drinker prototypes are manipulated by using confederates (assistants collaborating in the study) or providing positive/negative information about drinkers. In addition, we developed implicit measures to assess drinker prototypes in a less obtrusive way.

Results

The first study was carried out among 200 college students who participated with their group of friends in evaluation research on alcohol prevention campaigns (cover story). In a pre-test, participants filled out questions about drinker prototypes and drinking behaviour. Participants' actual drinking behaviour was observed during a break in the bar lab. Findings showed that students' drinker prototypes were related to their observed drinking behaviour, over and above the impact of their group of friends.

The second study aimed to test whether young people's drinker prototypes would be affected by social interaction with another person who showed a specific drinking pattern (not drinking versus heavy drinking) and appearance (desirable versus undesirable). To manipulate the other person's image and drinking behaviour, we used confederates who were instructed to dress either in a desirable or an undesirable way and to engage in non-drinking or heavy drinking.

Preliminary findings among 68 college students showed that participants held more favourable abstainer prototypes after social interaction with a heavy drinking model with an undesirable appearance.

In a third study we manipulated college students' drinker prototypes by providing positive or negative information about drinkers and, subsequently assessed whether the changes in drinker prototypes resulted in increased alcohol intake in a social drinking setting.

Preliminary findings suggest that college students who received positive information about drinkers, reported more favourable drinker prototypes and subsequently consumed more alcohol, than college students who received negative information about drinkers.

A fourth study addressed the predictive value of implicit measures of drinker prototypes. Data analyses and reports of both the third and fourth study are in preparation.

Output

Spijkerman R, H Larsen, FX Gibbons, RCME Engels (2010) Students' Drinker Prototypes and Alcohol Use in a Naturalistic Setting. *Alcohol Clin Exp Res*, 34, 64-71.

Researchers

R Spijkerman PhD (researcher), Prof RCME Engels PhD (project leader), Prof FX Gibbons PhD (advisor, Iowa State University)

In collaboration with: Iowa State University

Term: June 2007 – June 2011

Financing: Netherlands Organization for Scientific Research (NWO)

7 Experimental observational studies on peer influence processes and alcohol consumption

Aim and research questions

Reviews of theories on adolescents' substance use state that peer influences are the most consistent and strongest factor in the initiation and maintenance of substance use. When young people are in the company of drinking peers, they tend to *imitate* their peers' drinking behaviours.

However, recent longitudinal survey research does not provide convincing evidence that adolescents are highly susceptible to peer influences on alcohol use, as predictions are relatively weak. This does not necessarily imply that young people do not imitate each other in drinking behaviour. In this project, the basic assumption is that observational methods that capture the dynamics of peer interactions may be more suitable to test the effect of peers on individual drinking than other methods.

More specifically, this project examines the conditions under which people imitate peer behaviour by employing an experimental observational paradigm in which youngsters are confronted with peer drinking in a naturalistic context (a bar lab).

The aim is to test the effects of exposure to a drinking peer on individual drinking levels in an *ad lib* (free) drinking context. We also examine whether imitation effects differ in same-sex and opposite-sex dyads, and whether effects depend on the development of dyadic interaction both in real-time and over two consecutive sessions. Also, to investigate whether some people are more susceptible to alcohol cues than others, we study gene-environment interactions.

To understand individual variability in sensitivity to alcohol cues and subsequent drinking, we argue that it is crucial to take individual genetic variance into account. Activity at dopamine receptors is an acknowledged biological mechanism for the initiation of craving (incentive salience). We test whether the *DRD4* VNTR polymorphism affects whether people model other people's alcohol use. Finally, we are interested in the role stress play in the sensitivity to other people's alcohol consumption. This means that we expect that people who receive a social stress stimuli are more prone to imitate alcohol consumption than participants who do not.

Methods

To study respondents' drinking in a naturalistic setting, this project consists of at least five experimental observational studies in a bar lab and in a real bar, both located at Radboud University Nijmegen. The advantage of conducting observational experiments in a naturalistic setting is that people generally display more typical, real-life behaviours than in a clinical lab setting. With an experimental design, we can more reliably test causal relations between predictor and outcome variables. To study gene-environment interactions saliva of the participants is collected and analyzed in collaboration with the Department of Human Genetics, Radboud University Nijmegen Medical Centre.

Results

Imitation of Alcohol Consumption in a Semi-naturalistic Drinking Contexts

The first experimental study showed that youths who were exposed to heavy drinking models consumed more alcohol compared to those exposed to light-drinking and non-drinking models. As expected, after controlling for craving, the mean differences in the amount of alcohol consumed between the three conditions were substantial. Also, as anticipated, in general men consumed more alcohol than women in the 30-minute observational sessions. Moreover, no gender differences were found in the levels of imitation. This first study extends previous results by demonstrating that imitation of alcohol consumption also occurs in an *ad lib* naturalistic drinking context. Although women generally drank less than men, the extent of imitation was similar in both groups.

Imitation of Alcohol Consumption in a Real Bar

Two experimental observation studies were conducted in a real bar at a university campus in order to validate the ecological validity of the bar lab. Both studies had results similar to those of the bar lab study. The participants consumed significantly and substantially more alcohol when they were exposed to a heavy drinking confederate compared to when they were with a non-drinking confederate. These results show that a bar lab is an excellent context to conduct research on influence processes in relation to alcohol consumption.

Imitation of Alcoholic and Non-alcoholic Beverages

In another study, we investigated whether imitation is more evident when peers drink alcohol compared to other beverages. We observed sipping behavior during a 30-minute interaction between same-sex confederates and participants in an *ad lib* semi-naturalistic drinking context (bar lab). Results show that participants imitated the sips of the confederates, but that the likelihood of participants imitating a sip was lower when confederates were drinking alcoholic beverages and participants non-alcoholic beverages compared to when both were consuming alcohol.

Imitation of Alcohol Consumption in Same-sex versus Opposite-Sex Dyads

To test whether imitation of alcohol consumption differs when being in the company of a same-sex versus opposite-sex drinking partner, a 2 (drinking condition: alcohol vs. no alcohol) by 2 (sex constellation of dyad: same-sex vs. opposite-sex) mixed between-within subjects design was used. Results showed that imitation of alcohol consumption did not differ when participants were drinking with same-sex partners compared to opposite-sex partners. Men and women seem to imitate regardless of their drinking partner's sex.

Gene by Environment Interaction

With a 2 (drinking condition: alcohol vs. no alcohol) by 2 (genotype: risk allele vs. no risk allele) experimental design, we tested whether higher susceptibility to alcohol-related cues (i.e. seeing someone drink) was related to the *DRD4* VNTR 7-repeat polymorphism. A strong gene-environment interaction showed that participants carrying at least one copy of the 7-repeat allele consumed substantially more alcohol in the presence of heavy-drinking others than those without the risk allele. This study highlights that individual variability in sensitivity to other people's drinking behaviour may be attributed to genetic differences. Carrying the 7-repeat allele may increase the risk for heavy alcohol use and/or abuse when in the company of heavy-drinking peers

The Role of Stress in Imitation of Alcohol Consumption

We tested the role of stress in social adaptation of alcohol consumption with a 2 (Drinking condition: 3 alcoholic beverages vs. 3 non-alcoholic beverages) by 2 (stress priming vs. neutral puzzle) design. Half of the participants was randomly assigned to an alcohol-drinking condition or a non-alcohol-drinking condition (drinking behaviour of the confederate) and social stress task or control condition before entering the laboratory bar. The experiment has been conducted, the data are being coded, and the data are still being analysed.

Output

Larsen H, RCME Engels, I Granic, G Overbeek (2009) An Experimental Study on Imitation of Alcohol Consumption in Same-sex Dyads. *Alcohol and Alcoholism*, 44, 250-255.

Larsen H, RCME Engels, PM Souren, I Granic, G Overbeek (2010) Peer Influence in a Micro-Perspective: Imitation of Alcoholic and Non-Alcoholic Beverages. *Addictive Behaviors*, 35, 49-52.

Larsen H, G Overbeek, AAG Vermulst, I Granic, RCME Engels (2010) Initiation and continuation of best friends and adolescents' alcohol consumption: Do self-esteem and self-control function as moderators? *International Journal of Behavioral Development*, 34, 406-416.

Larsen H, G Overbeek, I Granic, RCME Engels (2010) Imitation of Alcohol Consumption in Same-Sex and Other-Sex Dyads. *Alcohol & Alcoholism*, 45, 557-562.

Larsen, H, C van der Zwaluw, G Overbeek, I Granic, B Franke, RCME Engels (2010) A Variable-Number-of-Tandem-Repeats Polymorphism in the Dopamine D4 Receptor Gene Affects Social Adaptation of Alcohol Use: Investigation of a Gene-Environment Interaction. *Psychological Science*, 21, 1064-1068.

Larsen H, G Overbeek, I Granic, RCME Engels. The Strong Effect of other People's Drinking: Two Experimental Observational Studies in a Real Bar. (In press). *American Journal on Addictions*.

Larsen H, C van der Zwaluw, G Overbeek, I Granic, B Franke, RCME Engels (2011) De invloed van het *DRD4* VNTR polymorfisme op adaptatie aan andermans alcoholconsumptie. Een onderzoek naar een genomgevinginteractie. *Psychologie en Gezondheid* 39/1, 5-11.

Researchers

H Larsen MSc (PhD student), Prof RCME Engels PhD (promotor), I Granic PhD (copromotor, Hospital for Sick Children, Toronto)

In collaboration with: The Hospital for Sick Children Toronto, Canada

Term: 2006 - 2011

Financing: Netherlands Organization for Scientific Research (NWO), Radboud University Nijmegen

8 Genes, family environment, and gene-family environment interactions as predictors of adolescent alcohol use

Aim and research questions

We examine how family-environmental factors interact with candidate genes in predicting alcohol use in early, middle, and late adolescence. The main starting point is that adolescents who possess a certain genetic liability (because of genetic mutations: polymorphisms) and who experience specific environmental conditions, may be at a greater risk to use alcohol, or develop alcohol-related problems, than adolescents who do not have this genetic vulnerability or the environmental stressors.

Research questions are:

- Which genes interact with environmental factors in relation to alcohol use in adolescents? And which environmental factors exert the largest influence in determining alcohol consumption while interacting with specific genetic polymorphisms?
- Do genotype and parenting (e.g., rules, control) interact in predicting alcohol-related behavior?
- Is there a specific role for alcohol-specific parenting practices in the relation between genes and alcohol use?
- To what extent are polymorphisms in selected genes related to different stages of alcohol use?

Methods

Research questions are answered by means of a longitudinal study with six annual waves.

At wave 1 a total of 428 families, consisting of two parents and two adolescent children (aged 13 and 15 years at wave 1) were participating.

Six assessments have been conducted, and saliva samples from all family members were collected at wave 4. At each wave, all family members individually filled in an extensive battery of instruments on child and parenting behavior.

In addition, a small cross-sectional study among approximately 100 13-year-olds will be initiated to examine relationships between genetic polymorphisms, impulsivity and alcohol use in an endophenotypic approach. Data will be collected at secondary schools.

Results

The first study of this project demonstrated that shared environmental factors (parental rule-setting and control, and modeling effects) influence the development of alcohol use in young adolescents. When adolescents grow older and move out of the initiation phase, their drinking behavior may be more influenced by other factors, such as genetic susceptibility and peer drinking.

The second study of this project comprised a descriptive review of the relation between the m-opioid receptor gene (*OPRM1*) and alcohol dependence. Little evidence was found for a direct association between polymorphisms in *OPRM1* and alcohol dependence. Explanations for the lack of positive findings were discussed.

The third study showed that adolescents and their intimate partners were relatively similar in alcohol use. This resemblance was best explained by adolescents' selection of a future partner on the basis of alcohol consumption. Less indication was found for influence effects, perhaps due to the transient nature of most adolescent romantic relationships.

The fourth study is a review of empirical studies that test gene-environment interactions on alcohol use and dependence. Despite the fact that the importance of this type of research is well acknowledged, we identified only nine empirical studies. In these studies the interactions between a plethora of candidate genes and several environmental factors were associated with alcohol use or dependence.

The fifth study tested for interaction effects between the dopamine D2 receptor gene (*DRD2*) taq1 genotype and parental rule-setting on the initiation of alcohol consumption.

We selected adolescents who did not drink at Time 1 or Time 2 and examined whether they consumed alcohol one year later. Indeed adolescents with the *DRD2* A1 allele, whose parents were highly permissive towards alcohol use, consumed significantly more alcohol one year later than did adolescents without these characteristics.

The sixth study was a review on associations between the dopamine transporter gene (*DAT1*) and alcohol use and dependence. Little evidence was found for a direct association between polymorphisms in *DAT1* and alcohol dependence. Explanations for the lack of positive findings were discussed.

In study seven we examined the development of adolescent alcohol use over 5 waves (from 13 to 17 years old). Both the starting point and the growth of alcohol use differed significantly from zero. In addition, a polymorphism (5-HTTLPR) of the serotonin transporter gene (*SLC6A4*) significantly predicted adolescent alcohol use; those adolescents with the risk (short) allele showed a steeper increase in alcohol use over time than adolescents without the risk allele.

In our eighth study we showed that adolescents who drink to cope with stress and negative mood (i.e. coping drinkers) reported more alcohol-related problems and binge drinking. This relationship was particularly strong among those with the *DRD2* risk allele.

In study nine it was reported that alcohol use of best friends was longitudinally and reciprocally related to adolescents' drinking over time. These relationships were not moderated by a polymorphism in the dopamine D4 receptor (*DRD4*) gene.

Study ten is a replication study of the fifth study, in which we again found that the association between parental alcohol-specific rule-setting and adolescent alcohol use was stronger for *DRD2* A1 allele carriers.

Output

Zwaluw CS van der, RHJ Scholte, AA Vermulst, JK Buitelaar, R Verkes, RCME Engels (2008) Parental problem drinking, parenting, and adolescent alcohol use. *Journal of Behavioral Medicine* 31:189–200.

Zwaluw CS van der, E van den Wildenberg, RW Wiers, B Franke, J Buitelaar, RHJ Scholte, RCME Engels (2007) Polymorphisms in the mu-opioid receptor gene (OPRM1) and the implications for alcohol dependence in humans. *Pharmacogenomics* 8:1427-1436.

Zwaluw CS van der, RCME Engels, J Buitelaar, RJ Verkes, B Franke, RHJ Scholte (2009) Polymorphisms in the dopamine transporter gene (SLC6A3/DAT1) and alcohol dependence in humans: a systematic review. *Pharmacogenomics* 10:853-866.

Zwaluw CS van der, RCME Engels (2009) Gene-environment interactions and alcohol use and dependence: Current status and future challenges. *Addiction* 104:907-914.

Zwaluw CS van der, RCME Engels, AA Vermulst, B Franke, J Buitelaar, RJ Verkes, RHJ Scholte (2010) Interaction between dopamine D2 receptor genotype and parental rule-setting in adolescent alcohol use: evidence for a gene-parenting interaction. *Molecular Psychiatry* 15:727-735.

Zwaluw CS van der, B Franke, RCME Engels (2009) Research highlights. *Pharmacogenomics* 10:1385-1388.

Zwaluw CS van der, RCME Engels, AA Vermulst, RJ Rose, J Buitelaar, B Franke, RJ Verkes, RHJ Scholte (2010) Polymorphism in the serotonin transporter gene (5-HTTLPR) predicts the development of adolescent alcohol use. *Drug and Alcohol Dependence* 112:134-139.

Zwaluw CS van der, E Kuntsche, RCME Engels (2011) Risky Alcohol Use in Adolescence: The role of genes and coping motives. *Alcoholism: Clinical and Experimental Research* 35:1-9.

Zwaluw CS van der, H Larsen, RCME Engels (in press) Best Friends and alcohol use in adolescence: The role of the dopamine D4 receptor gene. *Addiction Biology*, in press.

Zwaluw CS van der, RCME Engels (2010) Gen-omgevingsinteracties in alcoholgebruik. *Kind en Adolescent*, 31(4), 188-203.

Researchers

CS van der Zwaluw MSc (PhD student), RHJ Scholte PhD (advisor), Prof RCME Engels PhD (promotor), Prof JK Buitelaar PhD (copromotor, Radboud University Nijmegen Medical Centre), RJ Verkes PhD (copromotor, Radboud University Nijmegen Medical Centre).

In collaboration with: Radboud University Nijmegen Medical Centre

Term: April 2006 – March 2011

Financing: Netherlands Organization for Scientific Research (NWO)

9 Development of automatic and controlled processes with regard to substance use in adolescence

Aim and research questions

This study tests a recent model on the development of addictive behaviors in adolescence. The central hypothesis is that these problematic behaviors are the result of a disturbance in the balance between two classes of neurocognitive processes with regard to alcohol and drug use. The first class of processes are appetitive responses to drug cues, including attentional bias, automatic arousal associations and automatic approach action tendencies.

These appetitive processes become stronger as a result of alcohol and drug use through sensitization. The second class of processes are executive control processes including working memory, inhibitory control and error monitoring. The development of these processes is negatively affected by alcohol and drug use during adolescence. Furthermore, brain regions associated with these processes are not fully developed in adolescence.

Some scattered research findings have provided preliminary support for the model, but an integrated, longitudinal project investigating the development of these processes is lacking.

Methods

A total of 400 adolescents participated in this longitudinal study (three waves, with six-month intervals). Subjects performed computer tasks which assess both appetitive and control processes at wave one and wave three. Examples are, for instance, the implicit association test and the self-ordered pointing task (working memory).

Furthermore, subjects filled in questionnaires regarding, for example, attitudes towards alcohol and alcohol expectancies. Saliva samples are collected to identify genetic polymorphism associated with alcohol.

Results

Associations between alcohol cognitions and alcohol use were tested in two studies with 10 year olds (Study 1; N=99) and 11–12 year olds (Study 2; N=35). Furthermore, the role of parental alcohol use was examined. Implicit alcohol cognitions were assessed in an Implicit Association Test (IAT) using pictures of alcohol and soft drinks as target stimuli and happy versus angry faces as attribute stimuli (children's faces in Study 1, adults' faces in Study 2). Explicit expectancies and parental alcohol use were assessed with questionnaires. Children demonstrated a relatively stronger association between alcohol and negative facial expressions, and in Study 2, this association was negatively related to alcohol use. In Study 2, paternal drinking was related to implicit negative associations and explicit arousal associations. These studies show that young children have both implicit and explicit alcohol-related cognitions and both appear to play a role in explaining emerging alcohol use of elementary schoolchildren.

Research has shown a bi-directional relation between alcohol use and sleep regulation in adults. Much less is known about this association in early adolescents, while profound puberty-dependent transitions regarding sleep patterns take place in early adolescence. Moreover, puberty has been associated with an increase in alcohol use of adolescents. In this study, we investigated the associations between pubertal development, sleep preference, sleep problems, and alcohol use in 431 early adolescents (mean age: 13.66). Second, it was studied whether the associations changed when controlling for adolescent internalizing and externalizing problems. Furthermore, we included gender as a moderator on all the associations. Results showed that pubertal development was positively associated with sleep problems and more evening-type tendencies (e.g., favoring later bedtimes), which in turn were positively related to alcohol use. Underlying psychopathology, gender and educational level did not change these relationships. From this study, it can be concluded that both puberty and sleep regulation are important factors in explaining alcohol use in early adolescence.

Output

Pieters S, H van der Vorst, RCME Engels, RWHJ Wiers (2010) Implicit and explicit cognitions related to alcohol use in children. *Addictive Behaviors*, 35, 471-478.

Pieters S, H van der Vorst, WJ Burk, RWHJ Wiers, RCME Engels (2010) Puberty dependent sleep regulation and alcohol use in early adolescents. *Alcoholism: Clinical and Experimental Research*, 34, 1512-1518.

Researchers

S Pieters MSc (PhD student), H van der Vorst PhD (advisor), Prof RCME Engels PhD (promotor), Prof RWHJ Wiers PhD (promotor, University of Amsterdam, IVO/Radboud University Nijmegen, until 01-08-2008)

Term: February 2007 - February 2012
Financing: Radboud University Nijmegen

10 Effect evaluation of intensified enforcement of the age ban on adolescent drinking and the additional effect of a community intervention

Aim and research question

The intervention that is evaluated aims to decrease the alcohol consumption of under-age adolescents by: (a) intensified control of sellers' compliance with the law forbidding to sell alcohol to adolescents younger than 16 years, and (b) by a community intervention aimed at mobilizing support among relevant civil servants, professionals and parents of adolescents for measures restricting opportunities for adolescents to drink and to get drunk.

The intensified control of compliance of sellers with relevant alcohol laws will be carried out by the national organization responsible for inspecting the compliance with these laws: the Food and Consumers Safety Authority (FCSA). This organization issues warnings and a seller is fined if compliance is insufficient. There will be a two-year period in which relevant sellers in a region will be visited about 8 times by inspectors of the FCSA. In a control region there will be only one exploratory inspection (not followed up by warnings and fines) in this period to identify the relevant sellers in the control region.

The community intervention is done by the Dutch Institute for Alcohol Policy (STAP). In this context media advocacy aimed at the local media are used, a training course to increase expertise of relevant civil servants and professionals is given, and a support group of parents who develop initiatives both at home and in the public sphere is instituted. The increased enforcement and the concrete additional measures in the context of the community intervention are planned for a period of 2 years.

Methods

The interventions are evaluated by following a cohort of adolescents, one of their parents, and sellers of alcohol. The cohorts of adolescents, the parents and sellers of alcohol are recruited from three regions: one with no intervention, one with (only) intensified control of sellers, and one region with both intensified control and a community intervention. At baseline the adolescents are aged 13-15 years. They are interviewed before the start of the intervention, and at 1 and 2 years after the intervention(s) have started. Parents and sellers of alcohol are interviewed before the intervention and again 2 years later.

Results

In October and November 2011 the third and last measurement of the adolescents took place. At the same time the second and last measurement among parents of these adolescents took place. The results of the last measurements will be used to evaluate the effect of intensified enforcement (one of the 3 communities) and intensified enforcement + community intervention (another of the 3 communities). First reports to each of the three communities are planned for April 2011. It is expected that a more elaborate effect evaluation is available by September 2011 and a process evaluation by October 2011.

On the basis of the first 2 measurements among the adolescents 2 articles have been accepted for publication. One article concerns the predictive power of motives for drinking. The article shows for the first time) that motives do (longitudinally) predict adolescent drinking, even when controlling for initial consumption, initial motives and other relevant variables.

A remarkable outcome is that social motives for drinking (rather than enhancement or coping motives) most strongly predict increases in alcohol consumption of Dutch adolescents. It indicates that environmental social influences are most important for understanding the increase in adolescent alcohol consumption. The article will be published in 2011 in *Addiction*.

Another article concerns the combined effect of pubertal and psychosocial timing and alcohol specific rules of parents on adolescent alcohol consumption. It appears that alcohol specific rules of parents are mostly adjusted to pubertal and psycho social timing rather than that parental rules modify the effect of pubertal and psychosocial timing on drinking. The article will be published in 2011 in *Journal of Youth and Adolescence*.

Output

Offermans K, RA Knibbe, M Derickx (2009) Drankgebruik en wat ouders ervan vinden: jongeren van 13-15 jaar in Arnhem. Rapport Universiteit Maastricht

Schelleman-Offermans K, E Kuntsche, RA Knibbe (2011) Associations between drinking motives and changes in adolescents' alcohol consumption: A full cross-lagged panel study. *Addiction*
DOI: 10.1111/j.1360-0443.2011.03423.x epub ahead

Schelleman-Offermans K, RA Knibbe, RC Engels, WJ Burk (2011) The Effect of Pubertal and Psychosocial Timing on Adolescents' Alcohol Use: What Role Does Alcohol-Specific Parenting Play? *J Youth Adolesc.* Mar 23. epub ahead

Researchers

K Offermans MSc (PhD student), M Derickx (research assistant), Prof RA Knibbe PhD (promotor), Prof H van de Mheen PhD (copromotor), Prof RCME Engels PhD (copromotor)

In collaboration with: Dutch Institute for Alcohol Policy (STAP), Food and Consumers Safety Authority

Term: January 2008 – January 2012

Financing: Netherlands Organization for Health Research and Development (ZonMW)

11 Take it or leave it: prevention of early substance use in adolescence

Aim and research questions

The Healthy School and Drugs (HSD) project is a widely implemented, universal school-based prevention program in the Netherlands. HSD targets youngsters in primary and secondary schools and aims to reduce or limit alcohol, tobacco and marijuana use in adolescence. This four-wave longitudinal project will examine the effectiveness of HSD in a randomized clustered trial. The primary goal is to test whether HSD is effective.

That is, does the HSD program lead to postponing or diminishing substance use among Dutch adolescents? A second goal is to examine what the actual active components of HSD are? Are behavioral changes mainly due to the integral working method of HSD or do youngsters also benefit from one specific component, namely the electronic learning modules? The final goal is to investigate how possible behavioral changes come about. Are increased knowledge, better refusal skills, or changed attitudes towards substance (ab)use (partly) accountable for these effects? Answers will be given based on these mediating analyses.

Methods

The objective of the study is to test the e-learning modules and the integral package of the HSD program. The e-learning modules of HSD concern three modules: alcohol (4 lessons), tobacco (3 lessons), and marijuana (3 lessons). Students can work through the lessons independently and in their own pace. The lessons work on knowledge, attitude and behavior.

The integral package of HSD consists of four major pillars, these are: the e-learning modules, parental participation, a school regulation which addresses substance use, and skill training in signaling and guiding problem users. The parental participation refers to a parental meeting at the school and written information about substance use sent to all parents. The third pillar asks schools to incorporate school regulation on substance use among adolescents and employees. The final pillar concerns a protocol on how to deal with problem users. In addition, employees receive professional development on this subject. The project starts in the first year of secondary education. Schools will be randomly assigned to one of the following conditions: (1) e-learning (2) integral, or (3) regular curriculum.

In order to test the program all students fill out a questionnaire on four occasions (January/March 2009, September/November 2009, September/November 2010, and September/November 2011). Youngsters will be questioned about actual use of alcohol, tobacco and marijuana, and about their attitudes, self-efficacy, social influences, etc.

Results

The first three waves have been conducted and the following papers published in 2010. One paper is currently being submitted (topic: Longitudinal associations between positive and negative expectancies, self-efficacy, intention and marijuana use). Two additional papers are in progress; one examines the longitudinal relationships between the SURPS personality profiles and substance use, and the other evaluates the (20-months follow-up) effects of the interventions on alcohol use.

In the first paper we examined whether anxiety sensitivity, hopelessness, sensation seeking, and impulsivity (i.e., revised version of the Substance Use Risk Profile Scale) would be related to the lifetime prevalence and age of onset of alcohol, tobacco, and cannabis use, and to polydrug use in early adolescence. Baseline data of a broader effectiveness study were used from 3,783 early adolescents aged 11-15 years. Structural equation models showed that hopelessness and sensation seeking were indicative of ever-used alcohol, tobacco or cannabis and for the use of more than one substance. Furthermore, individuals with higher levels of hopelessness had a higher chance of starting to use alcohol or cannabis at an earlier age, but highly anxiety sensitive individuals were less likely to start using alcohol use at a younger age. Early adolescents who report higher levels of hopelessness and sensation seeking seem to be at higher risk for an early onset of substance use and poly substance use.

The second paper describes the design of a randomized clustered trial that evaluates the effectiveness of a school-based prevention program: "The healthy school and Drugs program".

Output

Malmberg M, GJ Overbeek, K Monshouwer, J Lammers, WAM Vollebergh, RCME Engels (2010) Substance use risk profiles and associations with early substance use in adolescence. *Journal of Behavioral Medicine*, 33, 474-485.

Malmberg M, GJ Overbeek, M Kleinjan, AA Vermulst, K Monshouwer, J Lammers, WAM Vollebergh, RCME Engels (2010) Effectiveness of the universal prevention program 'Healthy School and Drugs': Study protocol of a randomized clustered trial. *BMC Public Health*, 10, 541.

Researchers

M Malmberg MSc (PhD student), J Lammers MSc (project leader, Trimbos Institute), M Kleinjan PhD (copromotor), GJ Overbeek PhD (advisor, Utrecht University), K Monshouwer PhD (advisor, Trimbos Institute), Prof RCME Engels PhD (promotor), Prof WAM Vollebergh PhD (promotor, Utrecht University)

In collaboration with: Netherlands Institute for Mental Health and Addiction (Trimbos Institute), Utrecht University

Term: June 2008 – October 2012

Financing: Ministry of Health, Welfare and Sport (VWS)

12 The Truman Show: effects of alcohol portrayal in the media on actual alcohol consumption

Aim and research questions

To test the effects of alcohol portrayal in films, soaps and advertisements on actual drinking behaviour of young people. Specifically, we investigate whether individuals imitate drinking of characters on screen and whether they are inspired to drink when confronted with alcohol cues. Further, we examine whether identification with characters and genetic susceptibility for alcohol cues affect the magnitude of imitation.

Methods

Experimental observational methods in naturalistic settings are used to test our hypotheses. Most experiments are conducted in a bar lab or living room lab at the Radboud University Nijmegen. This bar lab is situated in a room furnished as an ordinary small pub, with a bar and stools, tables and chairs, indoor games, and comfortable couches. Respondents know that they are observed.

Results

The first experiment examines the direct effects of television commercials advertising soda on actual sugar-sweetened soda consumption among young women. Results indicated that participants assigned to the condition with soda commercials consumed 1.3 ounces more soda than participants in the water commercial condition. Exposure to soda commercials while watching a movie can have a strong influence on increasing sugar-sweetened soda consumption in young women.

The second experiment assesses the effects of movie alcohol portrayal on alcohol consumption of young adults while watching. Assignment to movie alcohol increased alcohol consumption during the movie for men but not women.

Identification and weekly alcohol consumption did not moderate the relation between movie condition and alcohol consumption. We concluded that exposure to alcohol portrayals in a movie can directly influence alcohol consumption in young men.

The third experiment examined the effects of alcohol commercials in movie theatres on alcohol consumption of young adults while watching.

Alcohol consumption of high weekly alcohol drinkers was higher in the alcohol commercial condition than in the non-alcohol commercial condition, whereas no differences were found in alcohol consumption between commercial conditions for low weekly alcohol drinkers. No sex differences were found in the association between exposure to alcohol commercials, weekly drinking and alcohol use. We conclude that exposure to alcohol commercials prior to a movie in the movie theatre can directly influence alcohol consumption in high weekly alcohol consumers.

The fourth study examined whether young people imitate actors sipping alcohol on screen. In addition, we investigated cue-specific and individual-specific factors related to responding to alcohol cues.

The findings showed that participants were more likely to sip in accordance with the actors' sipping than without such a cue. This indicates the existence of an imitation process. Further, we found that men were more likely to imitate actors' sips than females, and that participants tended to respond to actors' sips in the beginning of the movie rather than at the end of the movie.

The fifth experiment assessed the effects of TV alcohol advertising on alcohol consumption of young adults while watching a movie. Assignment to the alcohol advertisement condition did not increase alcohol consumption. In addition, no moderating effects between advertisement condition and the individual factors on alcohol consumption were found. Viewing alcohol advertising did not lead to higher alcohol consumption in young men while watching a movie. However, more research is necessary before strong conclusions can be drawn.

Output

Koordeman R, DJ Anschütz, RB van Baaren, RCME Engels (2010) Exposure to soda commercials affects sugar-sweetened soda consumption in young women: An observational experimental study. *Appetite*, 54: 619-22.

Koordeman R, DJ Anschütz, RB van Baaren, RCME Engels (2011) Effects of alcohol portrayals in movies on actual alcohol consumption: an observational experimental study. *Addiction*; 106: 547-54.

Koordeman R, DJ Anschütz, RCME Engels (2011) Exposure to alcohol commercials in movie theaters affects actual alcohol consumption in young adult high weekly drinkers: an experimental study. *American Journal on Addictions* 20; 285-91.

Koordeman R, EN Kuntsche, DJ Anschütz, RB van Baaren, RCME Engels (in press). Do we act upon what we see? Direct effects of alcohol cues in movies on young adults' alcohol drinking. *Alcohol & Alcoholism*.

Engels RCME, R Koordeman (2011) Commentary on Meier: Do alcohol portrayals in movies and commercials directly affect consumption? *Addiction*, 106: 472-473.

Researchers

R Koordeman MSc (PhD student), DJ Anschütz MSc (advisor), R van Baaren PhD (copromotor, Radboud University Nijmegen), Prof RCME Engels PhD (promotor), Prof RWHJ Wiers PhD (advisor, University of Amsterdam), Prof J Sargent PhD (advisor, Dartmouth-Hitchcock Medical Centre), Prof A Stacy PhD (University of Southern California), T Hollenstein PhD (advisor, Queen's University)

In collaboration with: Radboud University Nijmegen, University of Amsterdam, Dartmouth-Hitchcock Medical Centre, University of Southern California, Queen's University

Term: March 2008 – March 2013

Financing: Netherlands Organization for Scientific Research (NWO)

13 Development of a protocol for early detection and brief interventions of alcohol abuse in young people

Aim and research questions

To develop a protocol for early detection and brief interventions of alcohol problems in youth (12-24 years) at increased risk for alcohol problems. The protocol is applicable to adolescents in school and recreational settings.

Methods

An expert meeting was organized to identify successfully applied interventions for recognition of adolescent alcohol consumption, such as screening instruments, best practices, guidelines, and promoting and impeding factors in current interventions. Based on these best practices and the literature on interventions and screening instruments, IVO wrote the protocol. Several institutions for mental health and addiction were involved in the developmental process as co-authors of the protocol. These institutions represent the settings the protocol focuses on (school and recreation). Finally, a focus group discussion was organized with peer educators to include the perspective of adolescents in the protocol.

Results

The protocol focuses on increasing young people's motivation to recognize and acknowledge their problematic drinking behaviour. Guidelines are provided for staff in schools and intermediates on the street or other places where young people spend their free time (community centres, youth centres, night clubs) regarding early detection of alcohol abuse among young people, discussing the signals with the adolescent, and adequate referral to specialised care when needed. Through the interactive process that was used to develop the protocol, the expertise of both clients and end users (professionals) was optimally used.

Output

Risselada A, TM Schoenmakers (2010) *Protocol voor Signalering, Screening en Kortdurende Interventie van Risicovol Alcoholgebruik bij Jongeren*. Utrecht/Rotterdam: Partnership Vroegsignalering Alcohol/IVO.

Researchers

A Risselada MSc (researcher), TM Schoenmakers PhD (project leader)

In collaboration with: Project group 'Youth' of the Partnership Early Detection of Alcohol Problems (PVA), Mental Health Care Noord- en Midden Limburg, JellinekMentrum, Bouman Mental Health Care, Tactus Addiction Care

Term: June 2009 – January 2010

Financing: Partnership Early Detection of Alcohol Problems

14 Evaluation of a pilot study on early detection and treatment of problem drinking in Rotterdam primary care

Aim and research questions

The municipality of Rotterdam aims to reduce the number of problematic alcohol users in the municipality. To achieve this goal, the Municipal Health Authority (GGD) Rotterdam-Rijnmond developed a pilot study in which early detection and treatment of problem drinking in primary care is stimulated. IVO was asked to evaluate this pilot study.

The aim of the pilot which IVO evaluated was threefold: 1) the pilot provides a method for the detection and treatment of problematic alcohol use that is relatively easy to implement, 2) the pilot contributes to an improvement in the identification of problem drinkers in general practice, and 3) the pilot contributes to an increase in the number of problematic alcohol users who are treated with a brief intervention or referred to specialised addiction care.

Methods

Fourteen general practitioners (GPs) participate in the project. Several interventions were implemented:

- a factsheet for all GPs in Rotterdam on early recognition, treatment and referral of problematic alcohol use;
- a training on early identification of alcohol problems for GPs and other health professionals in general practice;
- the possibility to receive support in the form of an addiction counsellor. This counsellor is on call for consultation and short-term treatment of patients from the general practice.

The pilot was evaluated by monitoring the change in patient care and by evaluating the interventions applied by participating GPs. Change in patient care is measured by the number of (suspected) problematic alcohol users who were registered by the participating health professionals during the pilot period. Assessment of applied interventions is evaluated using questionnaires and face-to-face interviews with participating GPs.

Results

The training was evaluated with an average score of 8/10 on a 1-10 scale. It provided the participants with new knowledge, improved skills in dealing with problematic drinking patients, and a realistic view on problem drinking.

Signs of incipient problems proved difficult to detect in practice and therefore early detection did not occur in most practices. The detection of minor but obvious problem drinkers went well, and treatment was performed by the GPs themselves. For complex problems GPs referred to online help, an addiction counsellor in the clinic, or regular care institutes. Motivating patients for referral was not easy.

The monitoring was successful, but the number of detected problem drinkers was lower than expected and statistical analyses could not be carried out. An important reason for the low number was the Mexican influenza outbreak, which received priority over other problems during the project period.

Output

Risselada A, TM Schoenmakers (2010) *Vroegsignalering, behandeling en verwijzing van problematische drinkers in de Rotterdamse huisartsenpraktijk Evaluatie van een pilot project*. Rotterdam: IVO.

Researchers

A Risselada MSc (researcher), TM Schoenmakers PhD (project leader)

In collaboration with: Municipal Health Authority Rotterdam-Rijnmond, Regional Support Structure ZorgImpuls, Netherlands Organization for Health Research and Development Bouman Mental Health Care, Brijder Lifestyle Rotterdam, Context: Centre for Mental Health Care Prevention

Term: May 2009 - June 2010

Financing: Municipal Health Authority Rotterdam-Rijnmond

15 Coronary heart disease and the interaction of alcohol consumption, causal attribution and stress

Aim and research questions

This project aims to establish whether moderate alcohol intake has a positive effect on the development of coronary heart disease. Special reference is given to possible alternative explanations of the observed J-shaped curve, centring on questions of selection and causation. Alternative hypotheses concern the effects of the methodology in epidemiological studies, and psychological aspects of drinking behavior and health.

Methods

A cohort of about 32,000 persons has been recruited via general practitioners; 34 general practices located in the southern and western part of the Netherlands participated.

Approximately 16,000 men and women aged 45-70 years responded to the baseline questionnaire and were followed over a five-year period. Data collection consisted of three parts. First, the respondents received a follow-up questionnaire annually.

Second, all health problems during life were registered by the general practitioners. Finally, the general practitioners reported all persons diagnosed with myocardial infarction or who died during follow-up.

Results

The Lifetime Drinking History questionnaire (LDH-q) is a new self-administered questionnaire used in the present study; previously only interview data were available on this topic.

Therefore, the reliability and validity of the LDH-q were examined. It was concluded that the LDH-q was reliable and valid, and comparable to interview formats asking about lifetime drinking.

It was investigated if there were differences between respondents and non-respondents regarding health variables (at baseline), and (prospective) mortality risk. Results showed that among respondents coronary heart disease was more prevalent. Compared with respondents, non-contacts had a higher mortality risk during follow-up. Refusals more often had hypercholesterolaemia, and less often coronary heart disease, or diabetes mellitus, compared to non-contacts. The paradoxical results that respondents are less healthy at baseline, but prospectively have a lower mortality risk may suggest a selection effect indicating that the 'worried ill' are more inclined to participate. This effect could imply that observed relationships between risk factors or behaviors and outcomes in cohort studies may be attenuated.

The relationship between life events and alcohol consumption, and the possible effect of coping and social support on this relationship, and gender differences were examined prospectively. It was found that, independent of stressful life events, coping styles and social support were associated with drinking level. Scoring high on cognitive coping, and having a higher frequency of social contact was associated with a lower alcohol use, whereas scoring high on action coping and receiving more actual social support was associated with a higher alcohol use.

Alcohol consumption was measured using different methods. First the LDH-q, but also a Quantity-Frequency questionnaire about alcohol intake over the past year and a Weekly Recall about actual consumption in the past week.

These three methods were analyzed for association with incidence of cardiovascular diseases and all-cause mortality.

Alcohol consumption in the past week was found to be associated with morbidity and mortality in the follow-up period of 5 years. Less effect was found for alcohol consumption over the last year, and for lifetime intake and consumption in the distant past no association was found.

With data from the LEGO study, it was determined whether diabetics and non-diabetics differ in alcohol intake. Secondly, the association of alcohol intake with risk of cardiovascular events, and all-cause mortality was assessed in diabetics. Diabetics at baseline and those diagnosed with diabetes during the 5 years of follow-up showed similar drinking patterns. Diabetics less often drank alcohol at baseline compared to non-diabetics.

Diabetic men who did not drink or drank occasionally appeared to have a higher risk for cardiovascular events and all-cause mortality compared to those drinking moderately.

For diabetic women, never and occasionally drinking seemed to be associated with higher risks for cardiovascular events compared to moderate drinking.

Although the study shows interesting effects, it cannot be concluded that a stress buffering effect of alcohol use offers an additional explanation for the J-shaped risk relationship between alcohol use and cardiovascular disease.

Output

Friesema IHM (2006) Alcohol and cardiovascular disease; A longitudinal study on the impact of intake measurement and health status. Maastricht University. Thesis.

Veenstra M (2010) *Alcohol and Cardiovascular disease: impact of life events and social support. A primary care-based longitudinal study.* Erasmus Universiteit Rotterdam. Thesis

Researchers

MY Veenstra MSc (PhD student till 8/2006), IHM Friesema PhD (PhD student till 1/2006), PHHM Lemmens PhD (copromotor), Prof MJ Drop PhD (†) (promotor), Prof HFL Garretsen PhD (promotor), Prof JA Knottnerus PhD (promotor, Maastricht University), PJ Zwietering PhD (copromotor, Maastricht University)

In collaboration with: Maastricht University

Term: June 1996 – June 2010

Financing: Netherlands Heart Foundation, Foundation for Responsible Alcohol Consumption (STIVA), IVO, Erasmus University Rotterdam, Maastricht University

16 Social roles and alcohol consumption: an European study

Aim and research questions

That alcohol consumption is also connected with the societal and social position of a person is rarely doubted. However, few theories make explicit which relations one can expect between the social position and alcohol consumption.

One of these theories is the social role theory; its central assumption is that the more social relevant roles a person has, the less opportunities he/she has to drink to excess; conversely, the fewer social roles a person has, the more likely that person may use situations in which alcohol is consumed to structure his/her daily life.

This study focuses on three main problems:

- How do the three main position roles (living with a partner, paid employment and care for children) interact with gender and social class to explain alcohol consumption?
- To what extent do European countries differ in how position roles are related to alcohol consumption?
- To what extent is there a systematic difference between men and women in how position roles are related to consumption?

Methods

Two datasets are used. One is a set of surveys from European countries in which alcohol consumption (level of consumption and drinking six or more glasses per occasions) and the explanatory variables are measured in a comparable way. The other dataset is a large Swiss study among the adult population; this study will be used to analyze the extent to which the relation between social roles and consumption is mediated or moderated by psychological variables.

Results

A cross-national study in 10 (industrialized) European countries shows that in all countries multiple roles tend to protect against excessive consumption. However, in some countries the additional role of employment over having a partner and/or care for children did not correlate with a lower consumption.

The protective effect of multiple roles appears to be hardly mediated or moderated by psychological variables like mastery or depressed mood.

A first multi-level analysis including country indicators for gender equity, indicates that the protective effect of multiple roles may depend on the extent mothers are enabled to have (also) a paid job.

Output

Kuntsche S, RA Knibbe, EN Kuntsche, G Gmel (2010) Are housewives really desperate? The relevance of societal factors in the association between social roles and alcohol use among mothers. *Alcoholism-Clinical and Experimental Research*, 34(8 Suppl), 45A.

Kuntsche S, RA Knibbe, G Gmel (2009) Social roles and alcohol consumption: a study of 10 industrialized countries. *Social Science and Medicine*, 68, 1263-1270

Kuntsche S, G Gmel, RA Knibbe, H Kuendig, K Bloomfield, S Kramer, U Grittner (2006). Gender and cultural differences in the association between family roles, social stratification, and alcohol use: A European cross-cultural analysis *Alcohol and alcoholism*, 41,i37-i46

Researchers

S Kuntsche MSc (PhD student, SIPA), Prof RA Knibbe PhD (promotor)

In collaboration with: Swiss Foundation of Alcohol Research (SIPA)

Term: January 2005 - October 2011

Financing: Swiss Foundation of Alcohol Research (SIPA)

Hard drugs, cannabis and new drugs

17 National Prevalence Study on Licit and Illicit Substance use 2009

Aim and research questions

The National Prevalence Study on Licit and Illicit Substance Use 2009 is the fourth National Prevalence study carried out in the Netherlands. Earlier National Prevalence studies were carried out in 1997, 2001 and 2005. The 2005 study was also carried out by the IVO.

The main research questions for the 2009 project are:

1. What is the prevalence, incidence and continuation rate of the substances cannabis, ecstasy, cocaine, amphetamines, LSD, heroin, alcohol, tobacco, hypnotics and/or sedatives, and performance-enhancing drugs among the general Dutch population, aged 15 to 64 years?
2. What is the prevalence, incidence and continuation rate of these substances among the general Dutch population, divided by gender, age and population density?
3. What trends in substance use can be detected since the first measurement in 1997?

Methods

The study will use the 2009 National Health Sample, as collected by Statistics Netherlands (CBS), to supplement the earlier data on licit and illicit substance use in the Netherlands. Trend analyses will combine data from the four datasets which were obtained in the years 1997, 2001, 2005, and 2009 to answer the three research questions for a variety of substances.

Results

Results show a steady decrease in the number of smokers from 1997 to 2009. The number of people using alcohol has also decreased since 1997, as well as the number of binge drinkers. In contrast, the number of people reporting the use illicit drugs has increased in the last decade. This may (partly) be explained by a different way of measuring illicit drug use: before 2009, people were interviewed face-to-face about illicit drug use, whereas since April 2009 people answer questions on illicit drugs themselves without the interviewer watching. This may have increased the number of people willing to report their illicit drug use.

Output

Rooij, AJ van, TM Schoemakers, D van de Mheen (2011). *Nationaal Prevalentie Onderzoek Middelengebruik 2009: De kerncijfers* [National Prevalence Study on Substance Use 2009: Core Statistics]. NPO. Rotterdam: IVO.

Researchers

Rooij AJ van MSc (researcher), TM Schoemakers PhD (project leader), Prof H van de Mheen PhD (project leader)

In collaboration with: CBS, Statistics Netherlands

Term: August 2010 – February 2011

Financing: Ministry of Health, Welfare and Sport (VWS)

18 Novadic-Kentron: providing advice for the Region Monitor

Aim and research questions

Novadic-Kentron is the addiction treatment and prevention centre in the region of Brabant. Prevention workers of Novadic-Kentron also conduct various types of monitoring research (applied, practice-based). IVO is involved in one of the types of monitoring research that Novadic-Kentron performs: i.e. the Region Monitor.

Method and results

IVO provides advice on how to conduct the research (methodology, expertise), and is a critical reader of the products that emerge from the monitors.

Researchers

EG Wits MSc (researcher), Prof H van de Mheen PhD (project leader)

Term: January 2010 – December 2010

Financing: Novadic-Kentron Addiction Care

19 Indicated prevention of substance use and addiction for vulnerable young people

Aim and research questions

Prevention of substance abuse in young people requires a broad, comprehensive approach.

Vulnerable young people are characterized by an accumulation of problems. These problems are often caused by common risk factors.

"Scoring Results" aims to develop guidelines, protocols and interventions for selective and indicated prevention, treatment and care for vulnerable young people with substance abuse and addiction. To this end, the IVO and advisor Jaap van der Stel made an overview of existing knowledge in this field. 'Scoring Results' is a Nation wide program in which Addiction Care Organisations and Scientists work together in order to increase evidence-based working in addiction care.

Methods

The method was according to the first steps of the Master Protocol of the 'Scoring Results' program.

This first steps consisted of: preparation phase, literature-review, field-analysis, design phase and comments by experts.

Results

Prevention of substance abuse among young people requires a broad, comprehensive approach.

Vulnerable young people are characterized by an accumulation of problems, starting at young age.

These problems are often caused by common risk factors. An accumulation of risk factors increases the chances of problems.e.g. four combined risk characteristics increase tenfold the risk of disorders.

An explanation for this phenomenon is that an excess of stressors leads to a disruption of the self-regulation. In the development of preventive strategies it is important to recognize and understand common risk factors for substance abuse, psychosocial problems, delinquency and homelessness.

The authors state that, at an early stage, considerable attention must be paid to the underlying causes of problems in youth.

In the report, several target groups for selective and indicated prevention were defined. The following groups need extra attention: young people with low socio-economic status, young people who have deviant friends, homeless children, school dropouts and truants, young people with mental or behavioural problems and young people who started using alcohol or drugs at an early age. For each target group a review of effective interventions was made.

Output

Snoek A, EG Wits, JC van der Stel, H van de Mheen (2010) *Kwetsbare groepen. Kwetsbare groepen jeugdigen en (problematisch) middelengebruik: visie en interventiematrix*. Amersfoort: Resultaten Scoren.

Researchers

A Snoek MSc (researcher), EG Wits MSc (project leader), JC van der Stel (advisor), Prof H van de Mheen (advisor)

In collaboration with: JC van der Stel (Independent consultant)

Term: February 2010 – December 2010

Financing: Scoring Results, a program of the Netherlands Society of Mental Health Authorities (GGZ NL)

Aim and research questions

To implement effective policies regarding the prevention of harmful alcohol use and drug use, knowledge is needed on the effectiveness of existing policy measures and interventions. Furthermore, it is important to identify what knowledge is still missing regarding: 1) the effectiveness of interventions and policy measures, and 2) the implementation of effective interventions and policy measures. Commissioned by the Netherlands Organization for Health Research and Development (ZonMw), a knowledge synthesis on the prevention of harmful alcohol use and drug use was performed. This knowledge synthesis consists of two parts: one part on the use of alcohol and drugs among youth (performed by the Trimbos Institute) and one part on the use of alcohol and drugs among adults (performed by IVO Addiction Research Institute).

Objectives of this knowledge synthesis are:

1. To outline the problems related to alcohol consumption and drug use: prevalence, risk factors, consequences for the individual, the immediate social environment and society;
2. Provide an overview of effective interventions and policies aimed at preventing harmful alcohol use and drug use, based on results of national and international studies (reviews and meta-analysis);
3. Describe the main parties involved in 1) the policy around the prevention of harmful alcohol use and drug use, and 2) the development and implementation of interventions and policy measures to prevent harmful alcohol use and drug use;
4. Identify gaps in effective interventions and policy measures, and identify which implementation questions are still unanswered in relation to preventing harmful alcohol use and drug use.
5. Prioritization of research and implementation capabilities of interventions and policy measures to prevent harmful alcohol use and drug use.

Methods

Methods used to achieve the aims of this knowledge synthesis include: an extensive review of the literature, consultations with experts, and a separate expert meeting to discuss the results and implications of the knowledge synthesis.

Results

The final report contains a synthesis of the knowledge about:

- the nature and extent of harmful alcohol use and drug use among adults, including the consequences, risk factors and high-risk groups of harmful alcohol use and drug use;
- the parties involved in the prevention of harmful alcohol use and drug use;
- the most relevant (effective) policy measures and interventions aimed at the prevention of harmful alcohol use and drug use.

Based on a review of the literature and an expert meeting, recommendations are made for prevention strategies and policy concerning harmful alcohol use and drug use among adults.

Output

Schrijvers CTM, A Snoek, DVM van den Ende (2010) *Preventie van schadelijk alcoholgebruik en drugsgebruik onder volwassenen*. Rotterdam: IVO.

Researchers

A Snoek MSc (researcher), DVM van den Ende MSc (researcher), CTM Schrijvers PhD (project leader)

In collaboration with: Trimbos Institute

Term: January 2010 – Augustus 2010

Financing: The Netherlands Organization for Health Research and Development (ZonMw), Ministry of the Interior and Kingdom Relations

21 Cannabis branch speaking: backgrounds and motivations of (ex-) exploitants in grass cultivation and developments in the Dutch cannabis branch

Aim and research questions

This study investigates the backgrounds and characteristics of (ex-)exploitants in grass cultivation. An important issue will be to what extent the deviant character plays a role in the motivation of (not) being active in this branch, producers and retailers. Moreover, developments in the Dutch cannabis branch since the 1990s will be mapped.

Methods

After a review of literature and establishment of a theoretical framework, three types of qualitative data are collected: semi-structured interviews with experts (insiders in the branch and others who are related to the cannabis branch), face-to-face in-depth interviews with (ex-)exploitants in local grass cultivation, and expert meetings with policymakers who are acquainted with the branch and its insiders.

Results

Will be reported in a PhD thesis that is expected in 2012.

Output

-

Researchers

NJM Maalsté MSc (PhD student, till 04/2007), Prof H van Mheen PhD (promotor), Prof S Zouridis PhD (promotor, University of Tilburg)

In collaboration with: University of Amsterdam (till 2008), University of Tilburg (since 2010)

Term: January 2003 – August 2012

Financing: IVO

22 Public opinion on substance use and policy measures

Aim and research questions

International differences exist on alcohol and drug-related policy measures. However, knowledge on public opinion with respect to alcohol and drug policy is limited. This study explores Dutch public opinion on alcohol and drug policy, and also examines the influence of culture and legislation on opinion. For the latter study, data are compared with Norwegian data, which has a more restrictive policy to alcohol and drug use.

The research questions are:

1. What is the public opinion on alcohol and drug policy in the Netherlands and in Norway?
2. Does public opinion on alcohol and drug policy correspond with the political climate?
3. To what extent is substance use accepted in the Netherlands and in Norway?
4. What is the public opinion regarding the responsibility of government versus the responsibility of parents to take measures against alcohol and drug use among young people, and is that dependent on the status of the illegality of the drug?

Methods

In 2008 data were collected via an internet survey using a Dutch panel (Longitudinal Internet Studies for Social Sciences, LISS). The LISS panel is based on a true probability sample of 5000 households and includes 8280 panel members aged 16 years and older. In total, 5616 (67.8%) respondents filled out the questionnaire. In Norway 2150 respondents filled out the questionnaire.

Results

In 2010, two studies were published based on these data. First, we examined the opinion of the Dutch population on cannabis policy measures.

Two types of measures were distinguished: measures to reduce the availability of cannabis, and educational measures to prevent the use of cannabis. Opinions on the availability measures are mixed, depending on whether the respondents were recent cannabis users, lifetime cannabis users, or non-users.

Own cannabis use was the strongest predictor of the opinion on these availability measures. For the educational measures, almost all respondents agreed with these; being a cannabis user or not had little effect on the opinions regarding educational measures.

Second, we examined the opinion of Dutch youth (aged 16-22 years) on alcohol policy measures and compared their opinion with that of a Dutch group older than 22 years. Again, a distinction was made between availability measures and educational measures. Regarding availability of alcohol, the younger groups (aged 16-18 and 19-22 years) were significantly more negative about these policy measures than the older respondents (22 years and older).

Educational measures were more popular than availability measures among all three groups; the opinions of the groups showed significant differences between the groups. Own alcohol use was the main predictor for the opinion on the availability measures, and age was the main predictor for the opinion on educational measures.

At present, we have focused mainly on 'Opinion on policy measures' among the Dutch population. The next step is to explore 'Acceptability of illicit drug use in the Dutch and Norwegian society' and to compare opinion of Dutch and Norwegian adults on alcohol policy measures.

Output

Van der Sar R, EPM Brouwers, LAM van de Goor, HFL Garretsen (2010) The opinion on Dutch cannabis policy measures: A cross-sectional survey. *Drugs: Education, Prevention, and Policy*. Posted online on November 30, 2010 (doi:10.3109/09687637.2010.519361).

Researchers

R van der Sar MSc (PhD student), K van Beijsterveldt (PhD student until 15-03-2009), Prof HFL Garretsen PhD (promotor), Prof LAM van de Goor PhD (promotor), EPM Brouwers PhD (copromotor)

In collaboration with: SIRUS (Statens institutt for rusmiddelforskning) Norway

Term: February 2008 – February 2012

Financing: Tilburg University

23 Anxiety disorders and substance abuse: development of a treatment guideline

Aim and research questions

Many people with substance abuse or dependency suffer from anxiety disorders, and vice versa. Appropriate guidelines for the treatment of co-morbid anxiety disorders and substance abuse disorders are lacking. In 2003 (revised 2009) a guideline for the treatment of anxiety disorders was developed. We developed an addendum to this guideline for people with a co-morbid substance abuse disorder.

Methods

The method was according to the Master Protocol of the 'Scoring Results' program. 'Scoring Results' is a Nation wide program in which Addiction Care Organisations and Scientists work together in order to increase evidence-based working in addiction care. This protocol consists of combining evidence-based, practice-based and preference-based (what clients want) evidence. The Master Protocol contains the following steps: preparation phase, literature review, field analysis, design phase, comment by experts, internal pilot, external pilot and an implementation and maintenance phase.

Results

The treatment resulted in a guideline for the treatment of patients with anxiety disorder and co- morbid substance abuse or misuse.

Output

Snoek A, E Wits, W Meulders (in press) *Richtlijn Middelenmisbruik of -afhankelijkheid en angststoornissen*. Addendum bij de MDR Angststoornissen. Versie 1.0. Amersfoort: Resultaten Scoren.

Snoek A, E Wits, W Meulders (in press) Patiëntenfolder Angststoornissen en problemen met verslavende middelen. Amersfoort: Resultaten Scoren.

Researchers

A Snoek MSc (researcher), EG Wits MSc (project leader), W Meulders MSc (project leader, Mondriaan Addiction Care), L de Vooght MSc (advisor, Mondriaan Addiction Care), K Schruers MSc (advisor, Mondriaan Addiction Care), M Wellmer PhD (advisor, Mondriaan Addiction Care), N Gielen MSc (advisor, Mondriaan Addiction Care).

In collaboration with: Mondriaan Addiction Care

Term: October 2008 – April 2011

Financing: Scoring Results (a program of the Netherlands Society of Mental Health Authorities (GGZ NL))

24 Stay a way: an Intervention on drug abuse in juvenile offenders: development and theoretical rationale of ambulant care in a judicial setting

Aim and research questions

In the framework of the project 'Development of Accepted Behavioral Interventions', the Child Protection Board (*Raad voor de Kinderbescherming*) appointed IVO and Tactus Addiction Care Centre to develop an effective behavioral intervention to reduce drug and alcohol abuse in juvenile offenders.

The aim of this intervention is to prevent criminal recidivism among juvenile offenders. IVO is focused on the theoretical rationale for the intervention, and the development of a study design to evaluate the effects of the intervention.

Methods

The theoretical rationale is based on a literature search, focused on risk factors and protective factors for risky substance use and criminal behaviour, and effective behavioural therapies to reduce risky substance use.

Results

The intervention, called Stay-a-way, is based on Motivational Interviewing and Cognitive Behavioral Therapy. In principle, treatment of the youth will take place on an individual basis. Parents or caregivers will be involved in the therapy.

This intervention was evaluated in March 2010 by the Accreditation Panel for Behavioral Programs of the Ministry of Justice. A partial acknowledgment is obtained, and the intervention will be nationally implemented in 2011.

Output

Wits EG, S Ganpat, TM Schoenmakers, A Snoek, J Boonstra, R den Ouden (2010) *Theoretische handleiding Stay-a-Way. Een gedragsinterventie voor middelenproblematiek bij delinquente jongeren*. Deventer/Rotterdam: Tactus/IVO.

Researchers

S Ganpat MSc (researcher, till 30/9/2009), EG Wits MSc (project leader), R den Ouden MSc (senior prevention worker, Tactus), J Boonstra MSc (project leader, Tactus)

In collaboration with: Tactus Addiction Care Centre (Tactus)

Term: April 2009 – April 2011

Financing: Child Protection Board

25 Multicentre study: development of a monitor for youth addiction care

Aim and research questions

Many addiction care institutions are starting, or will start, treatment facilities for youth. The Ministry of Welfare, Health and Sports has financed 300 extra beds for youth.

In this project a monitor will be developed to evaluate the outcome of youth addiction care, and to learn from each other's treatment programs and experiences.

Methods

The method will be according to the Master Protocol developed by the 'Scoring Results' program. 'Scoring Results' is a Nation wide program in which Addiction Care Organizations and Scientists work together in order to increase evidence-based working in addiction care. This protocol consists of combining evidence-based, practice-based and preference-based (what clients want) evidence. The Master Protocol contains the following steps: preparation phase, literature-review, field-analysis, design phase, comment by experts, internal pilot, external pilot and an implementation and maintenance phase.

The monitor was developed in close collaboration with the field of addiction care. Conferences were organized for the various professionals in youth addiction care.

Results

The research resulted in a concept for a monitor for use in youth addiction care and a social map of the youth addiction care.

Output

Snoek A, GH de Weert, CAJ de Jong, H van de Mheen (2010) De complexiteit van de jeugdverslavingszorg: dilemma's en kansen. *Kind en Adolescent*, 31, 266-279.

Weert GH de, A Snoek, CAJ de Jong, H van de Mheen (2010) *Monitor jeugdverslavingszorg. Pilotrapport en advies*. Amersfoort/Nijmegen, Resultaten Scoren.

Researchers

A Snoek MSc (researcher), Prof H van de Mheen PhD (advisor), GH de Weert PhD (project leader, NISPA/Julius Centrum), Prof CAJ de Jong Psychiatrist (advisor, NISPA)

In collaboration with: Nijmegen Institute for Scientist-Practitioners in Addiction (NISPA), Julius Centre UMC Utrecht

Term: November 2008 – May 2010

Financing: Scoring Results, a program of the Netherlands Society of Mental Health Authorities (GGZ NL)

26 Early detection on substance misuse and dependency by youth: development of a guideline

Aim and research questions

Despite the severity of substance misuse and dependency among youth, little attention is paid to early detection. In this project a guideline was developed to improve early detection on substance misuse and dependency by youth. Different screening instruments were examined for their usefulness in the Dutch context. Problem groups were located, as well as the context in which the screening could take place.

Methods

The method was developed according to the Master Protocol of the 'Scoring Results' program. 'Scoring Results' is a Nation wide program in which Addiction Care Organizations and Scientists work together in order to increase evidence-based working in addiction care. This protocol consist of combining evidence-based, practice-based and preference-based (what clients want) evidence.

The Master Protocol contains the following steps: preparation phase, literature-review, field-analysis, design phase, comment by experts, internal pilot, external pilot and an implementation and maintenance phase. There was close collaboration with the field of addiction care.

Results

The research resulted in a guideline for the early detection of substance misuse and dependency by youth. Central in this guideline is the collaboration between different organizations concerned with risky behavior of and healthcare for youth.

Output

Snoek A, EG Wits, H van de Mheen, G Wilbers (2010) *Vroegsignalering. Richtlijn vroegsignalering middelengebruik of – afhankelijkheid bij jongeren*. Amersfoort: Resultaten Scoren.

Researchers

A Snoek MSc (researcher), M Kleinjan PhD (researcher, till 12/2008), EG Wits MSc (project leader), Prof H van de Mheen PhD (advisor), G Wilbers (Mondriaan Addiction Care)

In collaboration with: Mondriaan Addiction Care

Term: October 2008 – September 2010

Financing: Scoring Results, a program of the Netherlands Society of Mental Health Authorities (GGZ NL)

27 A complex problem: fitting care for addicted persons subject to judicial measures who have comorbid psychiatric problems and minor learning disabilities

Aim and research questions

To improve the relationship between punishment and care, the Ministry of Justice has the resources to procure care for addicts who are subject to judicial measures. Procurement is initially aimed at the complex group of persons subject to judicial measures with triple problems: problematic drug use, psychiatric problems and minor learning disabilities. Little is known about this specific group: there is uncertainty about its size and whether the current care offer is adequate. This investigation aims to provide insight into this group.

Methods

A quick scan was made of available information to assess the size of this target group, its characteristics, its care requirements and the desired offer of care. The Dutch literature was studied first. Subsequently, statistical analyses were made of data from previous studies and of the scores of persons subject to judicial measures (Risk Assessment Scales). A telephone survey established what care is currently offered to the target group (including the study of documents about the offer of care). A meeting was held in which involved experts considered the content that care should have.

Results

Analysis of the data shows that about 250-1150 detainees are faced with triple problems. A person with triple problems will enter the Prison System 920 to 4,300 times annually. This could be an underestimate, especially in the case of persons with minor learning disabilities. Drug use, particularly among clients with minor learning disabilities, can lead to additional problems.

The target group often combines problems with housing, work, relationships and finance. The criminal history is often extensive and motivation to accept care and supervision is generally low. The clients often require practical support in, e.g. housing and finance; care providers see this as an important way to motivate clients and create a meaningful context for treatment.

Care objectives depend on the individual problems, but should include/cover the following:

- 1) diagnostics should take place at an early stage. The instruments should be adjusted to the level of the clients and complexity of the problems. Diagnostic tests should be repeated regularly to deal with possible changes;
- 2) a support structure is needed because most of the problems are chronic ones;
- 3) continuous supervision is needed from professionals and (perhaps) from persons in the client's network;

- 4) an attempt should be made to meet/match the motivation and possibilities of the clients by e.g. making care attractive and offering day programs, sports and relaxation (preferably for 24/7). Cognitive behavioural therapies focusing on skills training should be offered. Client with minor learning disabilities requires an adjusted approach, whereby repetition, visualisation, exercises, rewards for positive behaviour and (judging by initial signals) nonverbal methods are implemented;
- 5) integrated care or treatment should be offered, whereby the various problems are dealt with simultaneously. Finally, a crisis facility should be available.

The current offer of care is not sufficient in this respect. Knowledge of the approach is fragmented and there is little documentation. Some programs are promising, but most are not fully developed and/or are not geared to the target group with minor learning disabilities. There are waiting lists. The financing structure and the way in which the need is assessed are not in line with a sustained, broad and cross-sectional approach.

Output

Kaal HL, MMJ van Ooyen-Houben, S Ganpat, EG Wits (2009). *Een complex probleem. Passende zorg voor verslaafde justitiabelen met co-morbide psychiatrische problematiek en een lichte verstandelijke handicap*. Den Haag: Ministerie van Justitie.

Kaal H, E Wits, MMJ van Ooyen-Houben (2010). Zorg als bijzondere voorwaarde voor justitiabelen met triple-problematiek. *PROCES* (89) 2;96 – 107.

Wits EG, Kaal HL, MMJ van Ooyen-Houben (in press). Zorg voor justitiabelen met triple-problematiek. *Verslaving*.

Researchers

S Ganpat MSc (researcher, till 30/9/2009), EG Wits MSc (project leader), M van Ooyen-Houben PhD (researcher, WODC), H Kaal PhD (project leader, WODC)

In collaboration with: Research and Documentation Centre (WODC) of the Ministry of Justice

Term: March 2009 – March 2010

Financing: Ministry of Justice

28 An empirical pilot study on integrated policy on psychoactive substance in Europe

Aim and research questions

Within the Pompidou group (the council of Europe section on research into psychoactive substances) a discussion on drug policy took place.

A lack of theoretical and empirical considerations was observed and led to the initiation of a pilot study. The study has a theoretical component, carried out by the delegate from Malta, Mr. R. Muscat, and an empirical component, carried out by IVO.

The research questions are: 1) What does integrated policy mean in different countries? and 2) How is an integrated policy (as defined in question 1) organized?

Methods

Seven European countries participate in this multiple case study: Germany, Great Britain, Ireland, Norway, the Netherlands, Portugal and Switzerland. Delegates of the respective countries in the Pompidou group identified two national experts on this topic. A brief questionnaire was sent to the experts and follow-up was via a telephonic interview on the subject.

Results

It appears that policy becomes integrated based on content and on organization. Regarding content, health (promotion) and addiction prevention are the major denominators. Regarding organization, the most important integration is seen in the form of inter-ministerial working groups, and the appearance of national action plans on substance use and addiction. In Germany and Norway the integration of content (alcohol, drugs, tobacco and gambling) and coordination (one coordinating body) are almost fully integrated.

Portugal and Switzerland show less integration, but are in the process of developing integrated approaches. The Netherlands, and the UK also have hybrid forms of integration but do not strive for integration. Ireland has no integrated policy, and integration of alcohol and drugs policy is subject to political debate.

Output

Mheen H van de (2010) *Example of the interaction between researchers and policy makers: The Netherlands, In: Council of Europe: Pompidou Group. Example of the interaction between researchers and policy makers from 16 countries.* Strasbourg: Council of Europe.

Muscat R, H van de Mheen, C Barendregt, and members of the Pompidou Group research platform (2010) *Towards an integrated policy on psychoactive substances: a theoretical and empirical analysis.* Strasbourg: Council of Europe.

Researchers

C Barendregt MSc (researcher), GJ Meerkerk PhD (researcher), Prof H van de Mheen PhD (project leader), L Kraus PhD (advisor, IFT)

In collaboration with: IFT Institut für Therapieforchung, Munich, Germany

Term: September 2009 – May 2010

Financing: Council of Europe

29 Introduction of the national guideline methadone maintenance treatment: establishing national support and benchmark

Aim and research questions

In 2004-2005, the national guideline 'Methadone maintenance treatment' (RIOB) was developed to improve treatment of chronic opium dependent patients in outpatient addiction care. Initiator of this guideline was (amongst others) the Netherlands Health Care Inspectorate, who concluded that methadone programs in the Netherlands did not reach satisfactory standards and used various methods of operation. With the guideline 'Methadone maintenance treatment' ready for use, it will be implemented on a national basis. In 2006, the program Scoring Results of the Netherlands Society of Mental Health Authorities has asked the scientific institute, NISPA and IVO to support this national implementation.

General objective of the project 'Supporting Implementation of the Guideline Methadone Maintenance Treatment' is to bring about national implementation of the guideline methadone maintenance treatment by means of central national support and quality monitoring. Within available timetables, the guideline will be introduced, implemented and evaluated.

Ten agencies for addiction care participated in the project.

The first visitation round took place in 2007, the second in 2010. In 2008 the first results were published, summarizing the progress of the project and the conclusions of the first round visitation (Wits et al., 2008). In January 2011 the final report was published.

Methods

Support during the implementation process of the guideline methadone maintenance treatment took place by offering visitation rounds and subsequent advice, and development and introduction of supporting materials (i.e. patient information and training modules).

Furthermore, the expertise of the workers has been increased by means of meetings in which experiences and knowledge were exchanged.

Results

The first phase of implementation showed that the introduction of the RIOB has resulted in an improvement in quality. Much attention has gone to the needed change of culture (introduction of the medical view), the necessary steps in the implementation and the large deficits in financial resources. In the second phase of implementation the various solutions to problems in daily practice were discussed, and the need for a number of fundamental processes in alignment (including protocols and capacity building of nursing or caring functions).

Output

Loth C, A Risselada, E Wits, C de Jong C, D van de Mheen (2011). RIOB. *Landelijke implementatie Richtlijn Opiatonderhoudsbehandeling. Eindrapport van de tweede fase van de ondersteuning bij het implementatieproces*. Amersfoort: Resultaten Scoren

Researchers

EG Wits MSc (researcher), C Loth MSc (researcher, NISPA), Prof H van de Mheen PhD (project leader), Prof C de Jong Psychiatrist (project leader, NISPA)

In collaboration with: Nijmegen Institute for Scientist-Practitioners in Addiction (NISPA)

Term: November 2006 – September 2010

Financing: Scoring Results, a program of the Netherlands Society of Mental Health Authorities (GGZ NL)

Smoking

30 Developing and testing strategies to effectively reach and involve resistant hard-core smokers in tobacco control

Aim and research questions

This project focuses on methods to constructively reach and involve hardcore smokers of low and high socioeconomic status (SES) to (re)evaluate their smoking cognitions and behaviours. The aim is to design a website on which hardcore smokers will evaluate their smoking behaviour in a non-coercive way. Several studies will be performed in order to develop this online intervention.

Methods

First, much effort is needed to establish how hardcore smokers can be reached and involved in a website on smoking behaviour. Therefore, focus group interviews with hardcore smokers and former hardcore smokers will be held (Study 1). The second goal of these interviews is to gather information about the ambivalence hardcore smokers have towards their own smoking behaviour. This information will be of use in the final part of the project in which Motivational Interviewing techniques are applied. The information on ambivalence will be validated in a subsequent online survey (Study 2). The data of the survey will allow us to identify subgroups of hardcore smokers based on the type of outcome expectancies that are relevant to them. Identification of these subgroups is needed to design a web system that is tailored to people's unique outcome expectancies.

A laboratory study (Study 3) will be conducted to test several conditions for effectively influencing dysfunctional cognitions among our target group. We expect that exposure to fear appeals combined with self-efficacy enhancing information will increase the motivation of hardcore smokers to quit smoking. Based on the outcomes of the focus groups, the online survey and experiment, a pro-active internet system will be developed and tested in an online randomized controlled experiment (Study 4). This system will contain the most optimal fear appeal manipulation. In addition, it will provide participants with individualized feedback on their perceived pro's and con's of smoking. Several combinations of these interventions will be tested on their effectiveness in changing smoking behaviour, the motivation to continue smoking, adherence to disengagement beliefs, perceived advantages of smoking, and self-efficacy not to smoke in difficult situations. The internet-system can easily be converted to be used in practice. Given the damaging health effects of smoking together with the vastness of the target population and the massive recruitment capacity through the internet, this intervention has the potential to have a significant effect on public health.

Results

Study 1 is in progress; no results are yet available.

Output

-

Researchers

J Bommelé MSc (PhD student), Prof H van de Mheen PhD (promotor), TM Schoenmakers PhD (copromotor), M Kleinjan PhD (copromotor)

In collaboration with: Free University Amsterdam, University of Groningen, Utrecht University, Dutch Foundation on Smoking and Health (STIVORO)

Term: November 2010 – May 2015

Financing: Netherlands Organization for Health Research and Development (ZonMW)

31 Family characteristics in paediatric asthma outcomes: Test of a biopsychosocial model

Aim and research questions

The first aim is to test the role of family characteristics (parental smoking, general parenting practices, asthma-specific parenting practices, physical activity specific parenting, and parent-child conflict) in predicting asthma outcomes (severity, health related quality of life, psychosocial well-being) of young adolescents with asthma.

Second aim is to test the mechanisms underlying the relations between family characteristics and asthma outcomes. More specifically, we will test whether health behaviours (physical activity, adolescent smoking), asthma management (coping and adherence), and physiological functioning (stress) mediate the relations between family characteristics and asthma outcomes.

Our project will provide information about how to develop intervention programs for families with a child with asthma.

Methods

This will be tested in a study using a three-wave longitudinal design. Participants will be recruited through schools, and there will be follow-ups after 12 and 24 months. Questionnaire data and spirometry data will be collected during home visits among 250 early adolescents with asthma (age 10-13 at assessment 1) and both parents.

Results

Currently we have recruited most of the families and we have started with the home visits.

Researchers:

D Tiggelman MSc (PhD student), M van de Ven PhD (copromotor), Prof RCME Engels PhD (promotor), Prof O van Schayck PhD (promotor, Maastricht University)

In collaboration with: Maastricht University, Netherlands Asthma Foundation

Term: September 2010 – September 2014

Financing: Netherlands Asthma Foundation

32 Evaluation of a smoking cessation intervention for parents

Aim and research questions

The present study aims to evaluate the impact of a smoking cessation intervention delivered through counselor-initiated telephone calls to smoking parents, who will be proactively identified and recruited through their children's schools. Telephone counseling will integrate a Motivational Interviewing's counseling style and cognitive-behavioral skill-building components. In addition to evaluation of the effectiveness of the intervention on parental smoking, we test the effects of the intervention on smoking-related cognitions (e.g., intention to smoke, self-efficacy, pros and cons of smoking, smoking norms) and smoking initiation in children of participating parents. Telephone counseling to aid smoking cessation is proven effective and is currently being implemented in many countries. We expect that telephone counseling can help not only to support parents in quitting, but also to establish stronger anti-smoking cognitions in their children and to eventually prevent them from starting to smoke.

Methods

The aim is to conduct a two-arm randomized controlled trial (telephone counseling versus control condition). Parental smoking will be assessed at baseline, and after 3 months and 12 months. Children will be assessed at baseline and after 12 months.

Results

Data collection and analysis are in progress.

Output

Schuck K, R Otten, RCME Engels, M Kleinjan (in press) The relative role of nicotine dependence and smoking-related cognitions in adolescents' process of smoking cessation. *Psychology and Health*

Researchers

K Schuck MSc (PhD student), R Otten PhD (copromotor), M Kleinjan PhD (copromotor), Prof RCME Engels PhD (promotor)

In collaboration with: Dutch Foundation on Smoking and Health (STIVORO), the Netherlands; Fred Hutchinson Cancer Research Centre, USA; Netherlands Institute of Mental Health and Addiction (Trimbos Institute)

Term: September 2009 – September 2013

Financing: Netherlands Organization for Health Research and Development (ZonMw)

33 Effects of new laws in the Netherlands aimed at reducing tobacco consumption

Aim and research questions

In 2002 the Dutch government started to formulate and plan implementation of new laws with respect to smoking. One major law stipulates that sellers of tobacco must ensure that they do not sell tobacco to adolescents younger than 16 years. Another concerns the obligation of employers to provide a smoke-free work environment. Finally, in June 2008 a law was implemented forbidding tobacco use in restaurants, pubs, discos, sport canteens, etc.

The main questions of this study are:

- What is the effect of the law forbidding sale of tobacco to those younger than 16 years on the prevalence of buying tobacco by young people and on the prevalence of smoking among young people?
- To which extent do sellers of tobacco comply with the law and what are the main determinants (including enforcement) of compliance?
- What is the effect of the introduction of the smoke-free work environment on the smoking behavior of smokers?
- What is the effect of the introduction of the smoke-free work environment in combination with two tax increases on tobacco products on the prevalence of smoking among those having paid work and those not having paid work?
- To which extent do employers comply with the law about a smoke-free working environment and what are the determinants (including enforcement) of compliance?
- Which factors influence compliance of catering businesses with the law forbidding smoking in restaurants, pubs, sport canteens, etc.

Methods

Survey questions on the effect of the minimum age for buying tobacco and the effect of the smoke-free working place, in combination with the increase in taxes on tobacco, are examined with time-trend studies investigating the differences before and after introduction of these laws.

To evaluate the law for smoke-free catering business, a cohort of catering businesses are followed from before the introduction of this law until one year after, with one pre-measurement and two post-measurements.

Results

The effect of the law requiring a minimum age before being allowed to sell tobacco has had the intended effect. The proportion of purchasers of tobacco decreased strongly after the introduction of the law. The decrease was strongest among those young adolescents who consider themselves to be a 'non-smoker'. Among those who smoke, the likelihood of buying tobacco even increased.

The effect of the introduction of the smoke-free work environment is that non-smokers are much less exposed to tobacco smoke during work hours. However, the less educated and younger non-smoking employees benefited less than other groups from this law.

There appeared to be a strong effect of the combination of a workplace smoking ban with tax increases on smoking behaviour of those with paid work. The results indicate that a combination of measures to reduce smoking may have more effect than each of these measures separately.

For those with no paid work no effects of the tax increases could be found. For the other research questions data collection and analysis is still in progress.

Output

Verdonk-Kleinjan WMI, RA Knibbe, B Bieleman, HN Groot, H de Vries (2008) The tobacco salesban and tobacco purchases by adolescents: a general population study. *European Journal of Public Health*, 1-6

Verdonk-Kleinjan WMI, RA Knibbe, FES Tan, MC Willemsen, HN de Groot, H de Vries (2009) Does the workplace smoking ban eliminate differences in risk for environmental tobacco smoke exposure at work?. *Health Policy*, 92, 197-202.

Researchers

W Verdonk-Kleinjan (PhD student, VWA), Prof RA Knibbe PhD (promotor), Prof H de Vries PhD (promotor, Maastricht University)

In collaboration with: Food and Consumer Product Safety Authority (VWA), Maastricht University

Term: January 2007 – December 2011

Financing: Food and Consumer Product Safety Authority (VWA)

34 Smoking in movies: impact on European youth and policy options

Aim and research questions

Longitudinal research suggests that exposure to smoking in movies accounts for as much as half of adolescent smoking initiation in the USA (e.g., Sargent, 2005; Sargent et al., 2005). In European youth the population exposure to smoking in movies and its effects have not been assessed. This project investigates the impact of exposure to smoking in movies on smoking initiation and current smoking in six European countries. In addition, we are interested in exposure to alcohol use in movies and adolescents' drinking. Besides the relation between movie exposure and risk behavior, this project also examines policy options. Currently, smoking in movies is neglected in European tobacco control initiatives. The focus of this project is to develop policy options to incorporate smoking in movies into the European anti-tobacco strategy.

Methods

Six European countries (the Netherlands, Germany, Italy, Iceland, the UK and Poland) participate in this EU-funded project. Longitudinal questionnaire data are collected among 12 to 16-year old pupils students to examine the research questions. Data were collected end 2010/begin 2011.

Results

Data collection and analysis are in progress.

Output

-

Researchers

EAP Poelen PhD (researcher), RHJ Scholte PhD (project leader)

In collaboration with: IFT-Nord, Kiel, Germany; Avogadro University, Novara, Italy; Public Health Institute of Iceland, Reykjavik, Iceland; Medical Research Council, Glasgow, UK; University of Medical Sciences, Poznan, Poland.

Term: November 2009 – November 2011

Financing: European Union

35 Media influences on smoking behaviour of youth

Aim and research questions

Recent research has shown that smoking in movies is omnipresent and is almost always portrayed in a positive and desirable way. Cross-sectional and longitudinal studies have documented that smoking portrayal in movies is associated with smoking initiation among adolescents.

The aim of this project is to examine the effect of smoking cues in movies on smokers and non-smokers. Using experimental designs, we test whether adolescents who are confronted with smoking characters in popular movies are more likely to develop positive attitudes towards smoking, have a greater desire to smoke, and show more actual smoking behaviour than adolescents confronted with non-smoking characters. Underlying mechanisms involving identification and transportation will be tested. In addition, following this line, we will conduct in-depth studies to test the development of attentional biases to smoking cues in smoking and non-smoking adolescents and young adults.

Methods

To test the immediate effects of smoking portrayals in movies we will conduct a series of experimental studies. The experiments will be located at the labs of the Radboud University Nijmegen and in schools.

Results

Smoking initiation experimental research has shown that short exposure to movie smoking affects smoking-related cognitions in adolescents. This study tested that association in children. In two experiments, 8-11 year-olds were exposed to either a cartoon or family-oriented movie and randomly assigned to 20-minute segments with or without smoking characters. The majority of both samples of children had very unfavorable cognitions regarding smoking. Exposure to movie smoking had no effect on any explicit smoking cognition or implicit associations towards smoking in either experiment. Possible explanations include a floor effect, in which children are cognitively resistant to short-term smoking prompts, or lack of salience of movie smoking prompts from cartoons and family-oriented movies.

Smoking continuation research has shown that smokers have an attentional bias for pictorial smoking cues. The objective of the present study was to examine whether smokers also have an attentional bias for dynamic smoking cues in contemporary movies. We examined smokers' and non-smokers' eye movements while watching a movie clip by using eye-tracking technology. Our results confirm the results of traditional pictorial attentional bias research. Smokers initially directed their gaze more quickly towards smoking-related cues, focusing on them more often and for a longer duration compared with non-smokers.

Thus, smoking cues in movies directly affect the attention of smokers. These findings indicate that the effects of dynamic smoking cues, in addition to other environmental smoking cues, need to be taken into account in smoking cessation therapies in order to increase successful smoking cessation and to prevent relapses.

The aim of the present study was to test whether smoking cues in movies function as triggers to evoke craving. To accomplish this, we examined smokers' reactivity to smoking characters in a movie and tested whether smokers who are confronted with smoking characters in a movie segment have a greater desire to smoke than smokers confronted with non-smoking characters.

Participants were assigned randomly to one of two movie conditions (smoking versus non-smoking characters). No differences in craving were found between those who watched smoking characters and those who watched non-smoking characters. No effect of smoking cues in movies on craving was found, in contrast with research supporting the cue-craving link. Thus, if replicated, this might indicate that smoking cues in such contexts do not affect smokers' desire to smoke as expected.

The objective of this study was to investigate the effect of smoking cues in movies on immediate smoking behavior. We tested whether smokers who are confronted with smoking characters in a movie smoke more cigarettes while watching than those confronted with non-smoking characters and whether this effect is less profound when smokers are more involved in the narrative (i.e., transportation).

The results showed a significant interaction effect between movie condition and transportation on immediate smoking behavior, indicating that smokers who were less transported smoked significantly more cigarettes when they were exposed to smoking characters compared with non-smoking characters. However, in a same study with adolescent smokers no effects of smoking cues in movies on immediate smoking behaviour was found.

Output

Lochbuehler K, RCME Engels, RHJ Scholte (2009) Influence of smoking cues in movies on craving among smokers. *Addiction*, 104(12), 2102-2109.

Lochbuehler K, M Peters, RHJ Scholte, RCME Engels (2010) Effects of smoking cues in movies on immediate smoking behavior. *Nicotine & Tobacco Research*, 12(9), 913-918.

Researchers

K Lochbuehler MSc (PhD student), Prof RCME Engels PhD (promotor)

Term: December 2007 - December 2012

Financing: Radboud University Nijmegen

36 Shared and non-shared familial influences on smoking behaviour in adolescence

Aim and research questions

In general, the majority of previous studies concentrated on parental own smoking behaviour and their smoking-related norms as well as general parenting practices, as precursors of adolescent smoking.

However, less is known about the ways parents specifically deal with smoking at home (i.e. antismoking socialization). This project focuses on effects of parental anti-smoking socialization practices on adolescent smoking behaviour. Furthermore, this project investigates to what extent parents raise their children differently, and whether possible differences in treatment affect differences in smoking behaviour between siblings. In addition, this project explores the ways parents might indirectly affect adolescent smoking, since parents may affect their children in their affiliation with particular (smoking) friends, or in their susceptibility to peer pressure.

Methods

Data are gathered from 428 families, consisting of two parents and two adolescent children that were followed for 5 years. This "Family and Health" project, with a total of 6 annual assessments, allows to examine predictors of specific trajectories of smoking in adolescents on the short and long term. An extensive battery of instruments on parental and child behaviours were filled out by all family members.

Results

Results from the first study on the "Family and Health" data demonstrate that a high quality of parental smoking-specific communication is related to a lower likelihood of adolescent smoking, whereas the frequency of communication is positively associated with adolescent smoking. Parental smoking was negatively associated with the quality of smoking-specific communication. The findings suggest that parental smoking-specific communication is associated with adolescent smoking both directly and indirectly by influencing the friends the adolescents will associate with.

In the second study we examined to what extent bi-directional relations exist between smoking attitudes and behaviour. Findings revealed that smoking attitudes did not consistently predict smoking over time. However, past smoking moderately affected subsequent attitudes, suggesting that adolescents who started to smoke developed less negative attitudes towards smoking.

In the third study we tested to what extent smoking-specific parenting and changes in this parenting are related to adolescents' smoking trajectories. Four trajectories were found, consisting of Non-smokers, Increasesers, Stable smokers, and Decreasers.

Quality of parental smoking-specific communication was strongly related to adolescents' membership of the different smoking trajectories, indicating that parents who talked about smoking in a constructive and respectful manner and retained this over time were more likely to have non-smoking children. In contrast, parents who talked often about smoking-related issues and increased these discussions over time were more likely to have smoking children. These findings imply that prevention programs should focus on reinforcing parents' smoking-specific socialization, with which the smoking prevalence among adolescents could be reduced.

In the fourth study we examined the role of smoking in the interpersonal environment on the development of nicotine dependence in adolescence. Findings revealed that smoking of sibling and best friend were related to baseline levels of nicotine dependence, but not to the rates of change over time. Of all models, having only smoking friends in the friendship group was related to a faster development of nicotine dependence. These findings highlight the key role of smoking friends in the development of nicotine dependence and suggest that interventions targeted at peers are probably effective in reducing the prevalence of nicotine dependence symptoms among adolescents.

In the fifth study we examined if the effects of peer smoking, family smoking, and parenting on smoking development during adolescence are moderated by personality characteristics of adolescents. Findings revealed that having peers who smoked was associated with an increased likelihood of being a smoker at baseline. Further, significant interactions revealed that adolescents lower in agreeableness were more likely to be a smoker at baseline if they had an older sibling who smoked or if their parents engaged in frequent smoking-related discussions with them and that effective smoking-specific conversation was more strongly related to smoking at baseline among adolescents who were highly emotionally stable. No interactions predicted growth in smoking over time; however, significant main effects showed that growth in smoking was associated with higher levels of extraversion, lower levels of emotional stability, and less effective parental smoking-specific communication.

This study highlights the relevance of personality-target interventions and policy programs directed at parents and peers.

Apart from the above-described studies on the "Family and Health" data, we conducted two additional studies. In one of these studies we aimed to investigate whether parental smoking was associated with smoking-related play behaviour in young children. For this study, we asked young children to pretend that they were grown-ups having dinner. They were invited to act out this situation in a play corner with a toy kitchen and a child-sized dining area, including a package of fake cigarettes upon the table. The sample of this study consisted of 100 children between 4 and 8 years of age. The main outcome measure was whether or not a child pretended to be smoking a cigarette. Child and parent reports were used to assess parental smoking. Findings revealed that 37% of the children had at least one "puff" during their play. Children were more likely to pretend to smoke if they reported having smoking parents.

Analyses for the model with parent reports on parental smoking did not yield any direct association. Children's explicit attitudes were unrelated to their smoking-related play behaviour. These findings indicate that young children, who reported having smoking parents, already associate having dinner with an (after-dinner) cigarette.

The subject of the other study was media parenting and smoking. In this study we established the prevalence of having a full parental restriction on watching Restricted movies (R-movies) among a nationally representative U.S. sample of adolescents. Moreover, we examined the bi-directional relationship between parental R-movie restrictions and child's sensation seeking, and how this interplay is related to smoking initiation. Data were used from a four-wave longitudinal study including 6,522 adolescents (aged 10-14 years). Findings demonstrated that 32% of the U.S. adolescents report to be completely restricted from watching R-movies by their parents. Model findings revealed that child's sensation seeking was not only directly related to a higher risk for smoking initiation, but also indirectly through their parents becoming more indulgent. Parental restrictions were found to lower the risk of smoking initiation directly and indirectly by changing their child's sensation seeking. These findings imply that the relation between child's sensation seeking and parental R-movie restrictions in explaining smoking initiation is bi-directional in nature.

Output

Leeuw RNH de, RCME Engels, RHJ Scholte (2010) Parental smoking and pretend smoking in young children. *Tobacco Control*, 19, 201-205.

Leeuw RNH de, RCME Engels, AA Vermulst, RHJ Scholte (2008) Do smoking attitudes predict behaviour? A longitudinal study on the bi-directional relations between adolescents' smoking attitudes and behaviours. *Addiction*, 103, 1713-1721.

Leeuw RNH de, RCME Engels, AA Vermulst, RHJ Scholte (2009) Relative risks of exposure to different smoking models on the development of nicotine dependence during adolescence: A five-wave longitudinal study. *Journal of Adolescent Health*, 45, 171-178.

Leeuw RNH de, JD Sargent, M Stoolmiller, RHJ Scholte, RCME Engels, SE Tanski (2011) Interplay between R-rated movie restrictions and sensation seeking explaining smoking initiation. *Pediatrics*, 127, 1-10.

Leeuw RNH de, RHJ Scholte, Z Harakeh, JF van Leeuwe, RCME Engels (2008) Parental smoking-specific communication, adolescents' smoking behavior and friendship selection. *Journal of Youth and Adolescence*, 37, 1229-1241.

Leeuw RNH de, RHJ Scholte, JD Sargent, RCME Engels (2010) Do interactions between personality and social-environmental factors explain smoking development in adolescence? *Journal of Family Psychology*, 24, 68-77.

Leeuw RNH de, RHJ Scholte, AA Vermulst, RCME Engels (2010) The relationship between parental smoking-specific socialization practices and developmental smoking trajectories of adolescents: How are changes in parenting related to changes in smoking? *Psychology and Health*, 25, 999-1021.

Leeuw RNH de, M Verhagen, C de Wit, RHJ Scholte, RCME Engels (in press) "One cigarette for you and one for me" Children of smoking and non-smoking parents during pretend play. Manuscript accepted for publication in *Tobacco Control*.

Leeuw RNH de, RCME Engels, AA Vermulst, RHJ Scholte (2008) De longitudinale relatie tussen de houding ten opzichte van roken en het rookgedrag zelf: wat leidt tot wat? [The longitudinal relationship between smoking attitudes and behaviour: Which is guiding what?] *Psychologie & Gezondheid*, 36, 200-208.

Leeuw RNH de, RCME Engels, RHJ Scholte (2009) Jong geleerd, oud gedaan? Roken van ouders en gespeeld rookgedrag van jonge kinderen. [Learning young, learning fair? Parental smoking and pretend smoking in young children.] *Tijdschrift voor Orthopedagogiek*, 48, 471-482.

Researchers

RNH de Leeuw MSc (PhD student), Prof RCME Engels PhD (promotor), RHJ Scholte PhD (copromotor)

In collaboration with: Dartmouth Medical School, University of Oregon

Term: April 2006 - March 2011

Financing: Dutch Cancer Society

37 "Smoke-free-kids": test of a smoking prevention program for parents of primary school children

Aim and research questions

The aim of 'Smoke-free Kids' is to test a highly innovative and successful program in the USA for parents of primary school children in a sample of Dutch parents.

Methods

A randomized controlled trial is conducted among 1478 parents of 9-11 year-old children. The intervention program consists of a series of six activity guides including communication tip sheets for parents and children to complete together.

The control group receives an alternative program based on facts. This longitudinal design with yearly waves will measure smoking behavior of adolescents, and anti-smoking socialization, like communication about smoking, over a 3-year period.

Results

Data were collected at baseline, and at 6 and 12 months follow-up. Analyses are in progress.

Output

Hiemstra M, L Ringlever, R Otten, C Jackson, OCP van Schayck, RCME Engels (2009) Efficacy of Smoking Prevention Program 'Smoke-free Kids': Study Protocol of a Randomized Controlled Trial. *BMC Public Health*. 9:477 doi:10.1186/1471-2458-9-477.

Researchers

M Hiemstra MSc (PhD student), Prof RCME Engels PhD (promotor), R Otten PhD (copromotor), Prof CP van Schayck PhD (promotor, Maastricht University)

In collaboration with: University Maastricht, Netherlands Institute for Mental Health and Addiction (Trimbos Institute), Dutch Foundation on Smoking and Health (STIVORO)

Term: September 2008 - September 2012

Financing: Netherlands Organization for Health Research and Development (ZonMw)

38 “Smoke-free-kids”: evaluation of a smoking prevention program for parents of asthmatic children

Aim and research questions

A successfully tested program in the USA, *Smoke-free Kids*, will be applied to a Dutch sample of smoking parents of children with asthmatic symptoms. Research has shown that smoking behaviour of adolescents with asthma is similar to that of their non-asthmatic peers. There is evidence that adolescents' responsiveness to smoking prevention programs diminishes once they have initiated smoking; therefore we focus on parents of 9-12 year-olds. We expect that parents involved in this program (compared to controls) will be more involved in constructive communication on smoking topics. Moreover, we expect that children involved in this program will be less likely to experiment with smoking three years post-baseline.

Methods

A large amount of primary schools have been contacted in order to reach the families. Furthermore, other ways of recruiting participants were used as well, for instance via media, hospitals, and general practitioners. In total, 1,479 mother-child dyads participated in the baseline measurement of this RCT study. Half of the families received activity guides, one each month, for five months in a row, with assignments for both mother and child. The other half of the families received information booklets, also for five months in a row, with information only for mother. Mothers and children were contacted before the intervention started. Children were then interviewed again by telephone or by questionnaires by post right after the intervention period (6 months follow-up) and at 12 months follow-up. Currently we are working on the 24-month follow-up. In 2012, the final wave (36-month follow-up) will take place.

In addition, between March and May 2010, all children currently experiencing asthmatic symptoms were visited at home to conduct lung function measures, as well as collect more detailed information about the asthma.

Results

Data collection and analysis for the effects of the intervention program is in progress.

Based on data of the baseline measurement, we found that children with a diagnosis of asthma were more likely to have smoked a puff of a cigarette at age 9-12 years old, as compared to children without a diagnosis of asthma. This while important confounders as parental smoking, socio-economic status, and child problem behaviors were controlled for. The manuscript describing this finding will be resubmitted to the European Journal of Public Health.

Output

Ringlever L, R Otten, RNH de Leeuw, RCME Engels (2010). Effects of parents' education and occupation on adolescent smoking and the mediating role of smoking-specific parenting and parent smoking. *Eur Addict Res*, 17(2), 5-63.

Researchers

L Ringlever MSc (PhD student), R Otten PhD (copromotor), Prof RCME Engels PhD (promotor), Prof O van Schayck PhD (promotor, Maastricht University), C Jackson PhD (advisor, RTI International)

In collaboration with: Maastricht University, RTI International N. Carolina USA

Term: March 2008 - March 2013

Financing: Netherlands Asthma Foundation

Obesity

39 Environmental determinants of dietary behaviours of children, the IVO Nutrition and Physical Activity Child cohort (INPACT)

Aim and research questions

The main objective is to investigate the environmental determinants of dietary behaviour of children aged 10-12 years.

Research questions

1. Which environmental determinants influence the dietary behaviours of children aged 10-12 years?

Environmental determinants include determinants at the micro level and apply to the:

- Physical neighbourhood environment (availability of food shops and take-away restaurants)
- Political environment (school food policy)
- Economic environment (price of fruit and vegetables in the neighbourhood)

2. Does the influence of determinants of dietary behaviours vary among children in different socioeconomic groups?

Methods

This study is an extension of the ongoing INPACT study (IVO Nutrition and Physical Activity Child cohort, started in 2008). The INPACT study is a longitudinal study with a 4-year follow-up. The extension consists of 2 measurements of the INPACT study (measurement 3 in 2010 and measurement 4 in 2011) focusing on the physical, economic and political environmental determinants that might influence dietary behaviour of children.

The INPACT cohort consists of 1844 primary school children and their parents (first measurement) living in Eindhoven and surrounding areas. Data collection takes place through 91 schools in the areas. Outcome measures are: consumption of fruit, vegetables, sugar sweetened soft drinks, snacks, fast food and breakfast.

Data among children and parents are collected through questionnaires (objective data on height and weight are collected by means of body measurements of the children). Objectively measured data on the environmental characteristics of the neighbourhood are gathered through neighbourhood observations. Data on school policy determinants are collected by means of semi-structured interviews with school directors and teachers.

Results

In 2010 the third data collection round took place. A total of 1612 children and 1501 parents participated in this measurement (n=1754, response rate of 92.8% and 85.6%, respectively).

Furthermore teachers and school directors of 81 primary schools were interviewed. First results are expected in 2011.

Output

-

Researchers

WJC van Ansem MSc (researcher), Prof H van de Mheen PhD (promotor), CTM Schrijvers PhD (copromotor), A Oenema PhD (advisor, Erasmus Medical Centre Rotterdam), Prof AJ Schuit PhD (advisor, RIVM)

In collaboration with: Erasmus Medical Centre Rotterdam, National Institute for Public Health and Environment (RIVM)

Term: April 2010 - October 2012

Financing: Netherlands Organization for Health Research and Development (ZonMw)

40 Relationship between parental behaviour and overweight in primary school children in the Netherlands, the IVO Nutrition and Physical Activity Child cohort (INPACT)

Aim and research questions

The INPACT study aims to gain insight in the influence of parents on weight development of children aged 8-12 years. The study started in 2008 and focuses on the home environment concerning eating and physical activity. The home environment can be divided into a social environment and a physical environment.

The social environment consists of parenting styles in general, parental policies around eating/physical activity, and parental role-modelling of healthy eating/physical activity. The physical environment consists of the availability and accessibility of food/physical activity.

The main study question of INPACT is: Which - modifiable - parenting styles, parental role behaviours and other factors in the home situation of children aged 8-12 years are most predictive of their body mass index; and how do they relate to demographic and environmental factors? In the search for preventive interventions that are able to diminish a child's risk to become overweight, there is a need for insight into parental behaviours that are modifiable.

Methods

This is a four-year longitudinal cohort study in which body weight and height of children are measured (N=1,844). Questionnaires are filled in with schoolchildren and their parents, at four moments in time (with one-year intervals), starting when the children are 8 years old (group 5 in primary schools). The first period of data collection took place from September to December 2008, the second from September to December 2009 and the third from September to December 2010.

Results

The first paper, based on the INPACT study, focuses on the relationship between parenting and child weight. One aim was to examine whether adding the parenting dimension 'psychological control' to the generally accepted dimensions 'support' and 'behavioural control' would help to elucidate the mechanisms through which parenting effects child weight. The second aim was to investigate whether socio-demographic variables moderate the potential association between parenting and child weight. Based on the data collected in the autumn of 2008, we conducted a cross-sectional study among 1,665 parent-child dyads. Mean age of the children was 8 years. The child's height and weight were measured by qualified research assistants to calculate their Body Mass Index (BMI). Parents completed a questionnaire to measure the three parenting dimensions and construct parenting styles. Child BMI z-scores were regressed on parenting, adjusting for parental BMI, child ethnicity, and parent's education level.

The parenting dimensions support and behavioural control were not associated with child BMI. Of the five parenting styles, rejecting parenting - characterized by high psychological control, low support and low behavioural control - was associated with a higher child BMI, also adjusted for parental BMI, child ethnicity and parent's education level ($\beta=0.074$, $p<0.001$). The association was not moderated by socio-demographic variables.

By adding the dimension of psychological control to the concept of parenting, this study has elucidated the mechanisms whereby parenting may affect child weight. By showing that rejecting parenting is associated with a higher child weight, we stress the need for longitudinal studies in which parenting style is measured three-dimensionally. Potential mediating effects of parental feeding style and children's eating style as well as age moderation should be included in these studies.

The second paper focuses on the role-modeling influence of parents on child fruit consumption. Results of this paper are expected in the first half of 2011.

Output

Rodenburg, G, SPJ Kremers, A Oenema, D van de Mheen (In press). Psychological control by parents is associated with a higher child weight. *International Journal of Pediatric Obesity*.

Researchers

G Rodenburg MSc (PhD student), SPJ Kremers PhD (copromotor, Maastricht University), A Oenema PhD (copromotor, Erasmus Medical Centre Rotterdam), Prof H van de Mheen PhD (promotor)

In collaboration with: Erasmus Medical Centre Rotterdam, Maastricht University

Term: March 2007 – March 2012

Financing: Erasmus Medical Centre Rotterdam, Netherlands Organization for Health Research and Development (ZonMw), IVO, Erasmus University Rotterdam

41 Ethnic differences in overweight and obesity among primary school children in the Netherlands, the IVO Nutrition and Physical Activity Child cohort (INPACT)

Aim and research questions

In the Netherlands, the prevalence of overweight and obesity is higher in migrants. These prevalence rates also apply to children. Although Dutch figures on migrant children are scarce, available evidence shows a higher prevalence in migrant than in native Dutch children.

In order to design effective prevention programmes, knowledge is needed on the factors affecting overweight and obesity in children, especially in modifiable factors.

The present study addresses these factors in children aged 7/8 – 11/12 years old, focusing on ethnic differences in these factors.

The hypothesis is that parental behaviour is the link between environment on the one side, food intake and physical exercise of children on the other side. Although information is available on the role of some aspects of parental behaviour, the role of other aspects remains unclear (e.g. the role of rewarding children with specific foods). Also, the influence of own parental role behaviour with respect to eating and physical activity is unclear.

The present PhD project addresses what the ethnic differences are in modifiable factors affecting overweight and obesity in Dutch primary school children (aged 8-12), focusing on the role of parental influence in the relation between environment and food intake and physical exercise.

Main research question are:

1. What is the prevalence of overweight and obesity and of (un)healthy eating and exercise patterns among migrants children as compared to Dutch children? To what degree do these differences reflect socioeconomic difference?
2. Are there differences in eating and exercise behaviour between native and migrants children? To what degree do these differences reflect socioeconomic differences and to what degree do they reflect differences in parental educational styles?
3. Are there differences in the relative importance of environmental and parental factors in the development of overweight and between native and migrants children? How do parental and environmental factors interact in the development of overweight and obesity in migrant children?

Methods

This is a four-year longitudinal cohort study in which body weight and height of children are measured (N=1,844). Questionnaires are filled in with schoolchildren and their parents, at four moments in time (with one-year intervals), starting when the children are 8 years old (group 5 in primary schools).

The first period of data collection took place from September to December 2008; the second from September to December 2009, the third from September to December 2010.

Results

First results are expected in 2011.

Output

-

Researchers

LJW Labree (PhD student, Erasmus University Rotterdam), Prof H van de Mheen PhD (promotor), Prof F Rutten PhD (promoter, Erasmus University Rotterdam), MME Foets PhD (copromotor, Erasmus University Rotterdam)

In collaboration with: Erasmus University Rotterdam

Term: 2008 - 2012

Financing: Erasmus University Rotterdam

42 Social Influence on Food Intake

Aim and research questions

Experimental studies employing experimental confederates who were instructed to eat a lot or a little showed that people tend to eat as much or as little as those with whom they eat.

These so-called modeling or imitation effects are extremely powerful and may even overrule feelings of hunger and satiety, even after a food-deprived period of 24 hours.

However, the extent to which people model each other's eating behavior is not the only situational cue that eaters use in deciding how much to eat. Some researchers suggested that the physical appearance of the people with whom one eats is important in explaining the magnitude of modeling effects. Further, studies showed that larger portion sizes led to greater energy intake.

To date, the portion-size literature, social-modeling and impression-management literature have been relatively independent research areas. In this project, we intend to combine these three fields by examining the potential influences of these types of situational norms (eating confederate and portion size). In sum, the overall aim is to gain insight into the underlying mechanisms of social-modeling effects on food intake by examining whether and how situational cues moderate social modeling of eating.

Methods

A series of experiments is conducted to study participants' modeling of eating behavior in a relatively naturalistic setting. The advantage of these kinds of observational experiments in a naturalistic setting is that people generally display more typical, real-life behaviors than in a clinical or experimental setting.

To stimulate a naturalistic setting, we make use of small room furnished as a living room. People feel at ease quickly and several participants commented on the pleasant atmosphere of the room. Each experiment will include about 100-120 participants.

Results

- Females who were exposed to confederates who ate a large amount of high-density food (chocolate-coated peanuts; M&Ms) consumed more than those who were confronted with confederates who ate a little or nothing at all. However, these modeling effects were only found in the manipulated conditions (a confederate who had a somewhat thicker abdomen). Findings suggest that women only model the eating behavior of another woman if their appearance is somewhat similar.
- In a replication of the first study, we again found that women consumed more when exposed to large-eating confederates. However, in this experiment we offered the participants and the confederates healthy snack food (carrots and cucumber), instead of M&Ms.
- No differences were found between participants' intakes in the slim and normal-weight confederate conditions, suggesting that the physical appearance of the model was of no influence on the intake of healthy food.
- To test whether the nature of the social interaction between the participant and the confederate was of influence in the amount of food consumed, we made use of a sociable and an unsociable model. It was found that participants consumed significantly less if exposed to an unsociable woman who consumed only a small amount of M&Ms, this suggests that impression-management strategies or uncertainty suppressed participants' intentions to eat palatable food.

- To test whether young males are also vulnerable to social modeling, we conducted a study among male students. It was found that only the males who were hungry, modeled the intake of the same-sex confederate. This finding suggests that men have to be in a state of hunger before social modeling processes come to the fore, whereas women's default response seems to be modeling the intake of the other person.
- To examine whether social modeling affects food intake in situations for which a pre-existing norm for appropriate intake already exists, we conducted a study on modeling of breakfast intake in young women. It was found that participants only ate less when their eating companion ate nothing, whereas they did not eat more when the other ate a small or large amount of breakfast. This study suggests that social modeling might be restricted to situations in which the norm for appropriate intake is unclear.
- We experimentally tested the effects of manipulating portion size and the intake of others on young women's meal intake during a 20-min eating opportunity. Both portion size and the confederate's intake influenced young women's intake. Participants consumed more when offered a larger portion than when offered a smaller portion, and they also ate more when their eating companion ate more. The results extend previous research by suggesting that the effect of the intake of others may add to the portion-size effect, resulting in greater intake in young women. Thus, both types of situational norms might guide an individual's intake during a single eating occasion.

Output

Hermans RCJ, JK Larsen, CP Herman, RCME Engels (2010) Effects of portion size and social modeling on food intake of young women. *Appetite*, 54(3), 649.

Hermans RCJ, JK Larsen, CP Herman, RCME Engels (2010) Social modeling of food intake. An overview of three experimental observational studies. *Appetite*, 55(13), 167.

Hermans RCJ, CP Herman, JK Larsen, RCME Engels (2010) Social modeling effects on young women's breakfast intake. *Journal of the American Dietetic Association*, 110, 1901-1905.

Hermans RCJ, CP Herman, JK Larsen, RCME Engels (2010) Social modeling effects on snack intake among young men: The role of hunger. *Appetite*, 54, 378-383.

Hermans RCJ, RCME Engels, JK Larsen (2010) Een goed begin van de dag: een experimentele studie naar imitatie-effecten van eetgedrag. *Psychologie & Gezondheid*, 36(4), 163-170.

Hermans RCJ, JK Larsen, CP Herman, RCME Engels (2009) Effects of social modeling on young women's nutrient-dense food intake. *Appetite*, 53, 135-138.

Hermans RCJ, RCME Engels, JK Larsen, CP Herman (2009) Modeling of palatable food intake: The influence of quality of social interaction. *Appetite*, 52, 801-804.

Hermans RCJ, JK Larsen, RCME Engels (2008) Zien eten doet eten: een experimentele studie naar imitatie van eetgedrag bij jonge vrouwen. *Psychologie & Gezondheid*, 36, 191-199.

Hermans RCJ, JK Larsen, CP Herman, RCME Engels (2008) Modeling of palatable food intake in female young adults. Effects of perceived body size. *Appetite*, 51, 512-518.

Researchers

RCJ Hermans MSc (PhD student), JK Larsen PhD (copromotor), Prof CP Herman PhD (copromotor, University of Toronto), Prof RCME Engels PhD (promotor)

In collaboration with: University of Toronto

Term: 2007 - 2012

Financing: Radboud University Nijmegen

43 Imitation of food intake and choices in children

Aim and research questions

The aim of this project is to explore the social influence in children's food choices related to their food intake and food purchases. The study investigates whether there is a difference in the magnitude of imitation behavior between overweight and normal-weight children and whether imitation behavior is influenced by maternal restriction strategies.

Main research questions:

1. Do children model eating behavior?
2. Do maternal restriction strategies influence imitation behavior or food intake?

Methods

Data are gathered in several (including longitudinal) experimental studies at primary schools and in shops.

Imitation behavior will be tested by using confederates, who are instructed in advance to perform certain behavior. Information about maternal restriction strategies and other (control) factors are collected via questionnaires.

Results

- Children imitate food intake regardless of their weight
- A more restrictive feeding style by parents decreases children's food intake in a free access setting to palatable food
- For girls, the higher the BMI the less popular regardless of the class mean BMI

Output

Bevelander KE, DJ Anschütz, RCME Engels (2010) Setting a social norm regarding food intake in children. *Appetite*, 54(3), 635.

Researchers

KE Bevelander MSc (PhD student), Prof RCME Engels PhD (promotor)

Term: September 2008 – September 2013

Financing: Radboud University Nijmegen

44 How beauty ideals influence our self-appraisal: effects of media on body image

Aim and research questions

Many women in the Western world are dissatisfied with their bodies. This is of great concern, given the relationship between body dissatisfaction and the development of eating disorders, social phobias and depression. One of the major contributors to body image dissatisfaction is the extremely thin beauty ideal that is promoted by the media.

Although this ideal is unrealistic, unhealthy and unattainable for most women, women feel pressurized to live up to this ideal, feel themselves lacking and experience negative effects. Indeed, numerous studies have demonstrated the detrimental effects thin-ideal media have on women's body image. However, not all women are negatively affected by the thin ideal. For some women the thin ideal works in an inspiring way, leading to more positive self-evaluations. But which individual characteristics determine whether one is positively or negatively affected by thin-ideal media?

Study 1

The first study investigated the effect of sexually objectifying music video exposure on bodily self-perception in females, and the moderating role of self-esteem.

Methods

Fifty-six normal weighted female participants were either exposed to three sexually objectifying music videos, or three neutral music videos.

Perceived and ideal body size were measured both before and after video exposure, using horizontally stretched and compressed photographs of the participant's own body in swimming garment.

Results

As expected, self-esteem moderated the relationship between music video exposure and bodily self-perception. Only women low in self-esteem were negatively affected by the sexually objectifying content of the music videos: they perceived themselves as bigger and showed an increased discrepancy between their perceived and ideal body size after video exposure. For the neutral music video condition, there was no effect of self-esteem. This study showed that exposure to sexually objectifying music videos has detrimental effects on the way women perceive their own body, but only in women with low self-esteem. These findings suggest that high self-esteem can protect women against the adverse effects of sexually objectifying media.

Studies 2 and 3

We are currently running two experiments in which we investigate the role of individual characteristics (like self-esteem, body dissatisfaction, restrained eating, internalization of the thin ideal, and expectancies of thinness) on social comparison with media models. In these studies social comparison is measured using an eye-tracker device, to see where women are looking when confronted with thin-media models. Data collection is almost finished.

Output

-

Researchers

IHS Mischner MSc (PhD student), Prof RCME Engels PhD (promotor), H van Schie PhD (copromotor, Radboud University Nijmegen), R van Baaren PhD (copromotor, Radboud University Nijmegen), Prof D Wigboldus PhD (copromotor, Radboud University Nijmegen)

In collaboration with: Radboud University Nijmegen
Term: November 2008 – November 2013
Financing: Radboud University Nijmegen

45 Sex and the City: effects of thin media images on body image and food intake

Aim and research questions

The aim of the study is to examine the effects of exposure to thin media images on mood, body image and food intake of normal weight adolescent females, in relation to their dietary restraint and tendency to overeat.

The research questions are: Does exposure to thin body images result in overeating and changes in mood and body image? Does this occur in relation to the subjects' degree of dietary restraint or rather in relation to the subjects' tendency toward overeating? Do changes in mood and body image support the negative contrast or rather the inspiration hypothesis? Finally, what is the moderating role of thinness attainability beliefs in this?

Our hypotheses are tested in a series of experiments among adolescent females.

Methods

A series of experiments is conducted to study the participants' behaviour in a naturalistic setting (specially equipped relaxing room at our lab), due to the lack of ecological validity of studies in the laboratory and their high association with demand characteristics. Each experiment will include about 120 participants.

Results

The results of the first study show that high restrained females who were exposed to commercials with slim models and diet-related products ate less food, whereas low restrained eaters ate slightly more after seeing commercials with slim models and diet-related products.

These findings suggest that restrained eaters who are confronted with diet products and slim media images when watching television will be reminded of their restricted eating behaviour and eat less.

The second study examines the effects of exposure to televised thin and average size models on body dissatisfaction and actual food intake. Two interaction effects were found between screen size and restrained eating on body dissatisfaction and actual food intake. Restrained eaters tended to feel worse and eat less in the average size condition compared to the thin model condition, whereas unrestrained eaters felt worse and ate less in the thin model condition compared to the average size condition. Thus, body size of televised images affected body dissatisfaction and food intake, differentially for restrained and unrestrained eaters.

Results of a third study showed that the ideal body figure of young women was unaffected by exposure to thin ideal media, whereas the perception of their own body figure changed. Women exposed to a thin ideal television program perceived themselves as larger than women exposed to a neutral movie.

Output

Anschütz DJ, RCME Engels, T van Strien (2010) The effects of adult-targeted food commercials on concurrent snack food intake in young children and the moderating role of maternal encouragement to be thin. *Appetite*, 55, 117-123.

Anschütz DJ, RCME Engels, (2010) The effects of playing with Barbie on body image and food intake in young girls. *Sex Roles*, 63, 621-630.

Anschutz DJ, RCME Engels, T van Strien (2010) Maternal encouragement to be thin moderates the effect of commercials on children's snack food intake. *Appetite*, 55, 117-123.

Anschutz DJ, RCME Engels, J van Leeuwe, T van Strien (2009) Watching your weight? The relations between watching soaps and music television and body dissatisfaction and restrained eating in young girls. *Psychology and Health*, 24, 1035-1950

Anschutz DJ, RCME Engels, ES Becker, T van Strien (2009) The effects of TV commercials using average sized models on young women's mood, body image and actual food intake. *Body Image*, 6, 270-276.

Anschutz DJ, T van Strien, M van de Ven, RCME Engels (2009) Eating style and energy intake in young women. *Appetite*, 53, 119-122.

Anschutz DJ, RCME Engels, T van Strien (2009) Side effects of television food commercials on concurrent nonadvertised sweet snack food intakes in young children. *American Journal of Clinical Nutrition*, 89, : 1328-1333.

Anschutz DJ, LJA Kanters, T van Strien, AA Vermulst, RCME Engels (2009) Maternal behaviors and restrained eating and body dissatisfaction in young children. *International Journal of Eating Disorders*, 42, 54-61.

Anschutz DJ, RCME Engels, ES Becker, T van Strien (2008) The bold and the beautiful: Influence of body size of televised media models on body dissatisfaction and actual food intake. *Appetite*, 51, 530-537.

Anschutz DJ, T van Strien, RCME Engels (2008) Exposure to slim images in mass media: Television commercials as reminders of restriction in restrained eaters. *Health Psychology*, 27, 401-408.

Anschutz DJ, RCME Engels, T van Strien (2008) Susceptibility for Thin Ideal Media and Eating Styles. *Body Image*, 5, 70-79.

Anschutz DJ, T van Strien, RCME Engels (2007) Het effect van slanke vrouwen in commercials op eetgedrag bij lijners. *Gedrag & Gezondheid*, 35(3), 117-128.

Anschutz DJ, T van Strien, ES Becker, RCME Engels (2007) Effects of TV screen size on consumption and body dissatisfaction. *Health Psychology Review*, 1(suppl. 1), 104.

Anschutz DJ, T van Strien, RCME Engels (2006) Food Intake and Success or Failure of Dietary Restraint. *Psychology & Health*, 21(suppl. 1), 13.

Researchers

DJ Anschütz MSc (PhD student), T van Strien PhD (copromotor, Radboud University Nijmegen), Prof RCME Engels PhD (promotor)

In collaboration with: Radboud University Nijmegen

Term: 2005 - 2010

Financing: Radboud University Nijmegen

46 Mental health and health habits in adolescence

Aim and research questions

Adolescents are faced with a variety of novel experiences that may tax their regulation resources and jeopardize their well-being. Moreover, high-risk health behaviors, such as smoking, alcohol use, and fat intake are increasingly prevalent among adolescents. This prospective study examines the reciprocal relations between mental health and health behaviors and possible mediators and moderators of these relations.

Methods

A three-year prospective cohort study of adolescents aged 12-13 and 14-15 years at baseline (adolescents from first and second grades).

A nationwide group of 2200 heterogeneous adolescents (equal number of boys and girls) will be enrolled in this prospective study at baseline to eventually gain complete prospective information of 1600 adolescents fulfilling the standards of this study.

Results

- For girls, but not for boys, the depression-smoking association disappeared after controlling for weight concerns and dieting.
- Peer group snack and soft drink consumption were associated with individual intake, particularly when availability in the canteen and vending machines was high.
- A higher BMI was associated with both identified by self and peers victimization and self-identified victimization. Intrapersonal feelings (i.e., depressive complaints and self-esteem) were found to mediate these associations. However, BMI was not related with peer-identified victimization.
- The association between BMI and bullying was moderated by gender. Boys, but not girls, with a higher BMI were more likely to be bullying perpetrators.
- A weak cross-sectional association between depressive mood and body weight among adolescent girls was found that was partly explained by menarcheal status as a third variable.
- Our findings highlight the potential importance of adolescent depressive symptoms as a precursor for habitual use of expressive suppression.
- Previous studies examining whether depressive symptoms precede weight gain during adolescence were often limited by using self-reported weight and height data. Our results with measured weight data do not support any link from depressive symptoms to weight changes in adolescents.
- Socialization processes explained the increase in similarity of depressive symptoms mainly in female dyads. These findings highlight the importance of examining friendship relations as a potential context for the development of depressive symptoms.
- Other findings attest to the significance of reciprocal friendship group correlates of eating disorder risk factors, but suggest that during early-to-mid-adolescence, levels of body image concerns and dieting within reciprocal friendship groups do not influence adolescents' own body image concerns and dieting over a period of 1 year.

Output

Larsen JK, R Otten, RCME Engels (2009) Adolescent depressive symptoms and smoking behavior: The gender-specific role of weight concern and dieting. *Journal of Psychosomatic Research*, 66, 305-308.

Larsen JK, H Zijlstra, B van Ramshorst, R Geenen (2010) Conversion to Gastric Bypass in patients with unsuccessful weight loss after gastric banding may depend on mental quality of life. *Obesity Facts*, 3, 127-130.

Researchers

JK Larsen PhD (researcher), Prof RCME Engels PhD (project leader)

In collaboration with: Radboud University Nijmegen, Utrecht University, Wayne State University, VU University Amsterdam

Term: 2006 - 2010

Financing: Netherlands Organization for Scientific Research (NWO), Radboud University Nijmegen

Social Relief and Social Care

47 Cohort study amongst homeless people in Amsterdam, The Hague, Rotterdam and Utrecht (the G4) – Coda-G4

Aim and research questions

In 2006 the Strategy Plan for Social Relief officially started in the four largest cities of the Netherlands: Amsterdam, Rotterdam, The Hague, and Utrecht. The Strategy Plan aims to improve the situation of the homeless, the neglected and the deprived and at the same time to reduce the nuisance caused by this group. This is done by realising a person-oriented approach whereby the homeless are included in an individual assistance program. All four cities have a central application facility to which the target group of the Plan has to report before a social care program can be outlined. Existing and new clients receive program plans focused on their individual care needs.

The question arises as to whether the homeless benefit from these individual assistance programs, and who does (not). This question is addressed in a longitudinal cohort study, financed by the Ministry of Health, Well-being, and Sport.

The main objectives are to determine: 1) the needs and urges of homeless people who participate in the individual assistance program, in relation to their background and problems; 2) possible improvements, and predictors of improvement, in the objective and subjective quality of life of homeless people; 3) housing transitions as well as possible predictors of stable housing; and 4) perceived benefits by the homeless of their participation in the individual assistance programs.

Methods

A multi-site observational cohort study will be conducted. Homeless people who qualify to participate in the individual assistance program while living in Amsterdam, Rotterdam, The Hague or Utrecht (i.e. the respondents) will be followed for 36 months. During this period they will be interviewed four times using a structured interview, to establish what changes take place in their situation and functioning. Information on their situation and functioning will be collected at two moments during these 36 months by the social worker who is closest to the respondent at that moment. The selection of respondents is based on the registrations of the central application facilities in the four cities. Structured interviews (using questionnaires) with the respondents are conducted within 3 weeks after they start to participate in the individual assistance program (T0). This baseline measure is followed by three measures; after 6 months (T1), 18 months (T2) and 36 months (T3). The baseline data are used to determine the predictors of improved subjective quality of life and stable housing.

Results

The first results are expected in the second half of 2011.

Output

-

Researchers

B van Straaten MSc (PhD student), CTM Schrijvers PhD (copromotor), Prof H van de Mheen PhD (promotor), J van der Laan MSc (PhD student, Radboud University Nijmegen Medical Centre), M Maas PhD (copromotor J van der Laan, Radboud University Nijmegen Medical Centre), Prof J Wolf (promotor, Radboud University Nijmegen Medical Centre)

In collaboration with: Nijmegen University Medical Centre, Social Care Research Centre (Omz)

Term: February 2010 – February 2015

Financing: Ministry of Health, Welfare and Sport

48 Detection of alcohol abuse and psychiatric problems among homeless people

Aim and research questions

The number of homeless people in homeless organizations (MO) was estimated at 57,000 in 2006 (VWS, 2008). Moreover, the percentage of homeless people with alcohol dependence and/or a mental disorder is very high. However, only a minority of the respondents in these studies were referred to for specialist care.

This is troubling, and it should be noted that alcohol abuse can lead to physical disorders, brain damage, and mental and social problems. Early detection of clients with an alcohol problem speeds up treatment which should increase the standard of living.

Given the high prevalence of alcohol abuse and mental disorders among homeless people there is much to be gained from effective early detection and subsequent timely care.

A 2006 pilot study by IVO developed and tested a screener to facilitate such detection in the city of Rotterdam. It was tested for overall quality in terms of sensitivity and specificity. If a screener correctly detects a high percentage of clients with a disorder correctly it is said to be sensitive, and if it correctly detects a high percentage of the clients with no disorder it is said specific. The two statistics are related: more sensitivity results in lower specificity. For alcohol abuse the 2006 screener was found to be highly sensitive and specific, but for depression and psychotic disorders there was room for improvement. More specifically, too many people would be referred to care for these disorders if the screener was the only source of information. The current project aims to develop better screener items for depression and psychoses. Additionally, it aims to test if the alcohol items do equally well in a wider sample, in preparation of nationwide use of the screener.

Methods

The proposed project consists of three phases in which a screener is developed and tested. In Phase I, a literature study is performed to obtain a preliminary selection of screener items that will be tested in Phase II. The (international) literature will be searched for shorter and longer questionnaires which are commonly used for detection of alcohol abuse, depression and psychotic disorders.

Specifically, we search for instruments that are both brief, have a high sensitivity, and a high specificity. Based on the review of the literature, a selection of questionnaires will be chosen. This selection will serve as the foundation for the questionnaire which will be tested in Phase II of the project. This questionnaire will also include the most effective items from the screener which was developed in the earlier, 2006, screener study. Finally, in Phase III, the usefulness of the screener will be examined by testing it in two MO institutions.

Results

The project is currently in progress; results are expected in 2012.

Output

-

Researchers

AJ van Rooij MSc (researcher), EG Wits MSc (project leader)

In collaboration with: Various institutions for social care

Term: September 2010 – August 2012

Financing: NutsOhra Fund, Volksbond Foundation Rotterdam

49 Care for young homeless people with severe mental health problems

Aim and research questions

In the Netherlands, the care for young homeless people with severe mental health problems is still inadequate. In Rotterdam, the current situation concerning the care for this target group is being investigated in order to:

1. Obtain knowledge on the gaps in care for young homeless people (aged 18-23 years) with severe problems, such as mental health problems, addiction or minor learning disabilities and
2. Develop a suitable offer of (residential) care for these categories of young homeless people.

Methods

The research combines several strategies:

Analysis of documents and interviews with key informants;

1. A longitudinal study following 55 young homeless people who sought help from the Rotterdam social care organizations in 2009. After baseline measurements (October 2009-February 2010), two follow-up measurements took place at 6 months (April-July 2010) and 1 year (October-December 2010) after the baseline measurement.
2. Respondents were interviewed about their home situation during childhood, health (both mental and physical); financial situation; education; daily activities; need for care; use of care; use of alcohol and drugs.
3. A qualitative study on the turning point in the lives of 15 former young homeless people, who have been living in a stable situation for at least one year.

Results

Data analyses are in progress; the report will appear in June 2011.

Output

-

Researchers

C Barendregt MSc (researcher), JE Baars PhD (researcher), CTM Schrijvers PhD (project leader)

Term: April 2009 – June 2011

Financing: Municipality of Rotterdam; Volksbond Foundation Rotterdam

50 Effectiveness of intensive community-based care for persons with complex addiction problems: contribution of specific program components

Aim and research questions

Intensive community-based care is meant for clients who do not make use of available health care services despite having serious problems on several life areas, such as addiction, psychiatric disorders, housing and finance. Many organizational variants exist. In Europe, little is known about the effectiveness of the different variants.

This study aims to provide longitudinal information on the effectiveness of intensive community-based care, and to formulate hypotheses on the contribution of specific (groups of) program components to effectiveness.

The research questions are: 1) What is the effectiveness of intensive community-based care programs on the client level, including both short-term and long-term outcome measures? 2) What specific (groups of) program components are related to effectiveness?

Methods

The study has a natural quasi-experimental research design. Three intensive community-based care programs are involved. The three programs are comparable on their corporate strategy, including who they target, where they are situated, what their organizational structure is, and what they aim at. All clients entering these programs during a period of three years will be followed. Measurements are done for each client at intake (T=0), after referral (T=1) and at a 6-month follow-up (T=2).

For the 'long stay' clients remaining in the team long enough, additional measurements are done every six months until they are referred. Measures included are: problem severity, engagement to healthcare services, regular healthcare use, quality of life and satisfaction with healthcare services. Team characteristics are measured with the Intensive Community-Based Care Program Characteristics (ICPC). The ICPC is a descriptive instrument, developed in the Netherlands, to profile an intensive community-based care team on all its relevant features, including items on the organization, healthcare process, staff and objectives. The ICPC enables detailed comparison of teams. The study is performed in close cooperation with the teams.

Results

Data collection and analysis in progress. Description follows later

Output

-

Researchers

M Voogt MSc (PhD student), DPK Roeg MSc (project leader), Prof LAM van de Goor PhD (advisor), Prof HFL Garretsen PhD (promotor)

In collaboration with: Community-Based care teams of Mental Health Care (GGZ) Oost Brabant, Community-Based Care Team Eindhoven, Community-Based Care Team Tilburg, Novadic-Kentron Addiction Care, Municipal Health Authority "Hart voor Brabant"

Term: April 2008 – April 2012

Financing: Netherlands Organization for Health Research and Development (ZonMw)

51 Client flow within the social relief system: perspective and practice

Aim and research questions

Objective of the Strategy Plan Social Relief is to prevent social and personal decay of homeless people, and to increase safety and liveability of the cities concerned. Since the Strategy Plan Social

Relief was put into practice in 2006, many homeless people in Rotterdam and other large cities have been offered a trajectory of care that aims to attain the highest level possible of self-sufficiency. New housing projects, with various degrees of support, were initiated and a system to monitor and manage client flow was implemented. Basic assumption is that (former) homeless people follow a step-by-step trajectory leading to the highest level of self-sufficiency possible.

This study focuses on what care providers can do to stimulate self-sufficiency and (thus) the upward flow of clients within the social relief system, and what care providers can do to prevent relapse and (thus) downward flow in the social relief system.

Methods

A total of 31 trajectories (selected in 2008 for a study on monitoring and management of client flow) form the basis for this study. The trajectories selected represent all involved care organizations. Cases that appeared to be simple at the time were not selected. Almost two years after the first interview, the clients concerned were approached again and the majority were interviewed (five persons were non-traceable). The care professionals most concerned with the clients (usually a mentor and a counsellor) were also interviewed. If available, the initial trajectory plans of the clients were examined. The flow of trajectories was examined by reading the input of care professionals entered in a central database that monitors all clients who use municipal social relief provisions.

Results

Most trajectories showed an upward movement on the so-called 'housing ladder'. This achievement is due to the extensive level of housing provisions on the one hand and the individual characteristics of the client on the other.

Successful upward flow is related to less or shorter periods of marginalisation. Intensive substance use, physical problems and psychological/cognitive limitations were associated with stagnant and instable trajectories. Long- term support in financial and administrative matters is necessary. Care providers and counsellors appear to have a pragmatic approach to their clients. This approach may be typified as: first-things-first. Self-sufficiency is a non-explicit but almost self-evident reference to judge (on a daily basis) what the clients needs are.

A slow but steady progress is observed in a number of clients. This approach fits the ideal scenario of most care providers. Clients with unrealistic plans are usually discouraged, but if they are motivated and persistent they are given a chance. Some care providers recommend to add smaller steps to the 'housing ladder' as they observe that the gap between 24/7 housing support and independent housing with weekly counselling is too great.

Output

Barendregt C, B van Straaten, CTM Schrijvers (2010) *Doorstromen in de Maatschappelijke Opvang. Praktijk en visie van Rotterdamse zorgaanbieders*. Rotterdam, IVO.

Researchers

C Barendregt MSc (researcher), B van Straaten MSc (researcher), CTM Schrijvers PhD (project leader)

Term: October 2009 – March 2010

Financing: Municipal Health Authority Rotterdam-Rijnmond

52 Evaluation of pilot project: Family group conference (Eigen Kracht) for former homeless

Aim and research questions

Family group conferencing (*Eigen Kracht*) for ex-homeless people is rooted in the experience with this method among young people in contact with youth protection service. In family group conferencing, an independent conference coordinator organizes a network meeting with friends and family of a person concerned. The general aim is to reduce problems and strengthen the informal support network. This pilot project aims to implement the method within the social relief and addiction service for adults.

The research questions are:

- How is the family group conference for former homeless implemented?
- What social benefits are apparent three months after the conference?
- What mechanisms make family group conferences beneficial for former homeless people?

Methods

The pilot project is evaluated using the basic assumption of realistic evaluation (Pawson & Tilley, 1997). The assumption is that the outcome of an intervention can only be understood if both the context and the mechanism are taken into account.

The aim was to monitor a total of 25 cases. However, preliminary results indicated that the care and treatment services that should deliver candidates are reluctant to cooperate, leading to relaxation of the eligibility criteria, which resulted in failure to organize a conference.

Over time, only eight conferences were organized in a period of 16 months. This small number gave rise to a change in the assignment. The remaining time was spent in establishing why service providers were reluctant to cooperate. Ten open interviews with people involved with the project were carried out, including professionals responsible for implementation, treatment and service providers and client representatives.

Results

It appeared that the Municipal Health Authority had not sufficiently gained and assured support from the management of the care and treatment services. This made successful implementation too dependent on cooperative individuals at the execution level.

Another reason is that one organization refused to collaborate. Client representatives of this organization considered the intervention proposed unsuitable for this particular target group whose network is too small and too vulnerable to restore.

Output

Risselada A, C Barendregt, CTM Schrijvers (2010) *Terugblik op het proefproject 'Eigen Kracht conferenties voor voormalig dak- en thuislozen in Rotterdam*. Rotterdam, IVO. (Internal report)

Researchers

A Risselada MSc (researcher), C Barendregt MSc (researcher), CTM Schrijvers PhD (project leader)

Term: October 2009 – February 2011

Financing: Municipal Health Authority Rotterdam-Rijnmond

Internet

53 Internet use within schools

Aim and research questions

The longitudinal Monitor Study Internet and Youth is designed to study internet use and internet addiction in Dutch adolescents.

While the main project focuses increasingly on scientific knowledge, initiatives were undertaken to facilitate further dissemination of results within the Netherlands towards professionals, policymakers and parents. One of these initiatives is the ongoing collaboration with the Kennisnet Foundation, and the inclusion of questions which aim at utilization of the internet within the classroom and for educational purposes.

Methods

Yearly, the monitor study includes a representative sample of Dutch adolescents aged 10-15 years. Data collection for the fifth measurement took place in April 2010. As in the third and fourth measurement, only secondary schools participated in the study. The fifth measurement in 2010 consisted of ten schools, including four new schools (when compared to 2009). Participation in the study means that the adolescents fill out a paper questionnaire in the classroom, under the supervision of their teacher. Instructions are provided for the teacher, and questionnaires are returned in closed white envelopes to increase the anonymity of responses entered.

Results

The main study finding, according to the Kennisnet Foundation, was that students spend increasing amounts of time in collaboration behind PCs at school. However, the full report contains a wide variety of other comparisons and multi-year trends. It was published in the public domain by Kennisnet as follows:

Output

Rooij AJ van (2010) *Internet op School 2006-2010: vijf jaar internetgebruik in de klas in beeld [Developments in internet use on schools over five years]*. Zoetermeer: Stichting Kennisnet. Retrieved from <http://bit.ly/i0VfVf>

Rooij AJ van, J Jansz, TM Schoenmakers (2010) *Wat weten we over ... games. Een beknopt overzicht van wetenschappelijk onderzoek naar de effecten van games*. Zoetermeer: Stichting Kennisnet.

Researchers

AJ van Rooij MSc (researcher), TM Schoenmakers PhD (project leader)

Term: February 2010 – October 2010

Financing: Kennisnet Foundation; also made possible by financing of the fourth and fifth measurements of the Monitor Internet and youth by the Netherlands Organization for Health Research and Development (ZonMw)

54 Monitor Internet and youth: video game addiction

Aim and research questions

During the last 10 years, Internet use has become the most important leisure time activity among Dutch adolescents. On average, Dutch adolescents aged 13-14 years spent about 16 hours a week on Internet use for private purposes. However, until now, few Dutch studies have been conducted on this subject, and none of these studies have used representative samples. Moreover, few studies have used a longitudinal research design.

These methodological shortcomings limit conclusions about the Internet use of Dutch adolescents. They also indicate a need for more systematic research, in which a representative sample of Dutch adolescents is followed for a longer period of time.

Therefore, the Monitor Study Internet and Youth has a longitudinal research design and includes a representative sample of Dutch adolescents in the age of 10-15 years. The monitor started in 2006 and until 2010 five measurements were carried out.

The specific aim of the Fourth and Fifth measurement of the monitor was to obtain specialized knowledge about the phenomenon of Video Game Addiction. The fourth measurement for the Monitor Internet and Youth was conducted in April 2009, while the Fifth measurement was conducted in April 2010.

Some areas of focus in this fundamental research project are the following:

- Prevalence and incidence of excessive online video game usage
- Developments over time in excessive gaming
- Multi-use or co-morbidity when compared to substance use and other internet applications
- Risk factors (personal and environmental) which might contribute to developing excessive gaming
- Consequences of excessive gaming
- The question of diagnosis and terminology – can excessive gaming be viewed as a behavioral addiction?

Methods

Data collection for the fourth measurement took place in April 2009. As in the third measurement, only secondary schools participated in the study. One new school was recruited, while three schools dropped out, leaving a total sample of ten schools. The fifth measurement in 2010 again included ten schools and included four new schools (when compared to 2009). Participation in the study means that the adolescents fill out a paper questionnaire in the classroom, under the supervision of their teacher. Instructions are provided for the teacher, and questionnaires are returned in closed white envelopes to increase the anonymity of responses entered.

Results

Three monitor-based studies have been published so far. The first study using the Monitor (Van den Eijnden et al. 2009) showed that qualitatively good communication regarding internet use is a promising tool for parents to prevent their teenage children from developing compulsive internet use. Also, parental rules regarding the content of internet use may help prevent compulsive use. Strict rules about time of internet use, however, may promote compulsive tendencies.

A second study using the Monitor (Van Rooij et al. 2010) showed that social (i.e. communication) applications on the internet and games were associated with Compulsive Internet Use. Of these, online gaming was shown to have the strongest association with Compulsive Internet Use. Moreover, changes in online gaming were most strongly associated with changes in Compulsive Internet Use over time for a longitudinal cohort.

In a third study (Van Rooij et al., 2011) we identified a small group of compulsive heavy online gamers by using latent class analysis (3% of all online gamers), representing about 1.5% of all children aged 13-16 years in the Netherlands. Although these gamers report addiction-like problems, relationships with decreased psychosocial health were less evident, a finding which was further explored in a paper focusing on the role friendship quality (submitted). Also, a study was submitted which provides a new scale, the Video game Addiction Test (VAT), to measure video game addiction.

Output

Eijnden RJJM van den, A Vermulst, AJ van Rooij, GJ Meerkerk (2006) Monitor internet en jongeren: Pesten op internet en het psychosociale welbevinden van jongeren. Factsheet: IVO.

Meerkerk GJ, RJJM van den Eijnden, AJ van Rooij (2006) Monitor internet en jongeren: Compulsief internetgebruik onder Nederlandse jongeren. Factsheet: IVO.

Rooij AJ van, RJJM van den Eijnden (2007). Monitor Internet en Jongeren 2006 en 2007. *Ontwikkeling in internetgebruik en de rol van opvoeding*. IVO-reeks nr. 54. Rotterdam: IVO

Rooij T van, Meerkerk GJ, Schoenmakers T, Eijnden R van den, Mheen D van de. *Monitor internet en jongeren. Ontwikkelingen in het internetgebruik van Nederlandse jongeren*. Factsheet. Rotterdam, IVO, 2008

Rooij T van, Schoenmakers T, Meerkerk GJ, Mheen D van de. *Monitor internet en jongeren. Videogames en Nederlandse jongeren*. Factsheet. Rotterdam, IVO, 2008

Rooij AJ van, Schoenmakers T, Meerkerk GJ, Mheen D van de. *Monitor internet en jongeren 2006-2009. Wat doen jongeren op internet en hoe verslavend is dit?* Factsheet. Rotterdam, IVO, 2009

Eijnden RJJM van den, R Spijkerman, AA Vermulst, AJ van Rooij, RCME Engels (2009) Compulsive Internet Use Among Adolescents: Bidirectional Parent–Child Relationships. *Journal of Abnormal Child Psychology*, 38(1), 77-89

Rooij AJ van (2009). Gameverslaving, fabel of feit. *TSG Tijdschrift voor gezondheidswetenschappen*, 87(5), 2010-211

Rooij AJ van (2009) Videogameverslaving - een verkenning. *TSG Tijdschrift voor Gezondheidswetenschappen*, 87(3), 24

Eijnden RJJM van den, R Spijkerman, AA Vermulst, AJ van Rooij, RCME Engels (2010) Compulsive Internet Use Among Adolescents: Bidirectional Parent-Child Relationships. *Journal of Abnormal Child Psychology*, 38(1), 77-89. doi:[10.1007/s10802-009-9347-8](https://doi.org/10.1007/s10802-009-9347-8)

Rooij AJ van, TM Schoenmakers, RJJM van den Eijnden, H van de Mheen (2010) Compulsive Internet Use: The Role of Online Gaming and Other Internet Applications. *The Journal of Adolescent Health*, 47(1), 51-57. doi:[10.1016/j.jadohealth.2009.12.021](https://doi.org/10.1016/j.jadohealth.2009.12.021)

Rooij AJ van, TM Schoenmakers, AA Vermulst, RJJM van den Eijnden, H van de Mheen (2011) Online video game addiction: identification of addicted adolescent gamers. *Addiction*, 106(1), 205-212. doi:[10.1111/j.1360-0443.2010.03104.x](https://doi.org/10.1111/j.1360-0443.2010.03104.x)

Rooij AJ van (2011) *Online Video Game Addiction. Exploring a new phenomenon [PhD Thesis]*. Rotterdam, The Netherlands: Erasmus University Rotterdam.

Researchers

AJ van Rooij MSc (researcher), TM Schoenmakers PhD (copromotor), Prof H van de Mheen PhD (promotor), RJJM van den Eijnden PhD (copromotor, Utrecht University, IVO until 31-05-2008)

Term: Monitor Internet and Youth November 2005 – July 2011
Fourth and Fifth measurement January 2009 - July 2011

Financing: Fourth and Fifth measurement: Netherlands Organization for Health Research and Development (ZonMw)

55 Neurocognitive aspects of online game addiction; the role of cognitive control

Aim and research questions

Computer game addiction is characterized by compulsive online gaming behavior and diminished control over the gaming behavior. Prolonged compulsive gaming may result in psychological, social, and occupational or learning problems. In contrast to the emerging knowledge on the neurocognitive mechanisms of alcohol and drug addiction, the neurocognitive mechanisms behind game addiction are poorly understood. The main goal of the present proposal is to examine these mechanisms of game addiction to identify why some gamers become addicted to computer games.

The study is based on the theory that both reward sensitivity and lack of behavioral inhibition play a major role in the development and maintenance of addictive behaviors. Further, it elaborates on studies suggesting an important role for these brain structures which are thought to regulate, mediate and inhibit reward-related stimulus driven responses.

The main question is: Is game addiction related to deficiencies in the areas known to be involved in reward processing and behavioral inhibition: the mesolimbic reward circuit, dorsal prefrontal cortex, and anterior cingulate gyrus?

Methods

To answer the research question the mesolimbic and prefrontal functioning of two groups of participants are compared: compulsive gamers (i.e. gamers in addiction treatment) and healthy controls. The two groups will be compared using fMRI scanning techniques while performing tasks (Stroop task and Go/NoGo).

Results

Data collection and analysis in progress.

Researchers

GJ Meerkerk PhD (researcher), M Luijten (researcher, Erasmus University Rotterdam), TM Schoenmakers PhD (project leader), Prof I Franken PhD (project leader, Erasmus University Rotterdam), A van der Lugt PhD (advisor Erasmus Medical Centre Rotterdam), J van der Geest PhD (advisor Erasmus Medical Centre Rotterdam)

In collaboration with: Department of Psychology Erasmus University Rotterdam, Department of Radiology Erasmus Medical Centre Rotterdam

Term: September 2009 – September 2011

Financing: Volksbond Foundation Rotterdam

56 Treatment of internet addiction: evaluation of a pilot treatment for internet addiction

Aim and research questions

Because internet addiction is a relatively new form of problematic behavior, no evidence-based treatment programs currently exist that take into account the specific characteristics of this form of compulsive behavior. In February 2009 Brijder Addiction Care started a pilot treatment program in which 20 self-proclaimed internet addicts were treated with the well-established cognitive-behavioral treatment program "Lifestyle training" (*Leefstijltraining*), adjusted for internet addiction. IVO evaluates the pilot treatment program, with the aim to establish whether the program is suitable for the treatment of problematic internet use and which aspects need modification.

Methods

Using a combination of validated questionnaires and qualitative reports, the current study evaluates the strengths and shortcomings of the applied "Lifestyle training" treatment program. Information is collected from a website-based intake questionnaire. Additional questionnaires are presented before the first session, after the program ends, and once during a follow-up by mail. Qualitative information is also collected from treating psychologists, both in written form (structured session notes) and from (group) interviews.

Results

Therapists report that the program, which is ordinarily used for substance dependence and pathological gambling, fits the problem of internet addiction quite well. Interventions mainly focused on controlling and reducing internet use, and involved expanding (real life) social contacts, regaining a proper daily structure, constructive use of free time, and reframing beliefs. Therapists further indicated that the treatment achieved some measure of progress for all of the twelve treated patients, while patients reported satisfaction with the treatment and actual behavioral improvements.

Results were published in the *International Journal of Mental Health and Addiction*:

Output

Rooij AJ van, MF Zinn, TM Schoenmakers, H van de Mheen (2010) Treating internet addiction with cognitive-behavioral therapy: A thematic analysis of the experiences of therapists. *International Journal of Mental Health and Addiction*. doi:10.1007/s11469-010-9295-0

Researchers

AJ van Rooij MSc (researcher), TM Schoenmakers PhD (project leader), MF Zinn MSc (advisor, Brijder Addiction Care)

In collaboration with: Brijder Addiction Care

Term: October 2008 – March 2010

Financing: Volksbond Foundation Rotterdam

57 Games: brief overview of research on the effects of playing digital games

Aim and research questions

A booklet, written for the Dutch Kennisnet Foundation, provides an overview of research on the positive and negative effects of playing both commercial and educational games. Of special interest is the applicability of the findings to the classroom situation and the perspective of teachers.

Methods

The basis for the overview was an extensive study of current scientific and mainstream literature on the effects of gaming, focusing on an educational perspective.

Results

The booklet was published in 2010, through the official Kennisnet channels, and is now available for use in education and teaching environments.

Output

Rooij AJ van, J Jansz, TM Schoenmakers (2010) *Wat weten we over de effecten van games. Een beknopt overzicht van wetenschappelijk onderzoek naar de effecten van games*. Zoetermeer: Stichting Kennisnet. Retrieved from <http://bit.ly/hmR4DF>

Rooij AJ van, Zinn M, Schoenmakers TM, Mheen D van de (in press) Treating internet addiction with cognitive-behavioral therapy: A thematic analysis of the experiences of therapists. *Mental Health & Addiction*.

Researchers

AJ van Rooij MSc (researcher), TM Schoenmakers PhD (project leader), Prof J Jansz PhD (project leader, Erasmus University Rotterdam)

In collaboration with: Erasmus University Rotterdam

Term: July 2009 – March 2010

Financing: Kennisnet Foundation

58 Media attention for the social responsibility of the game industry

Aim and research questions

Our publication on the social responsibility of the game industry in game addiction (Van Rooij et al., 2010, *Addiction Research and Theory*) presents evidence for the existence of game addiction and examines whether the industry offers referral services or customer care for online game addicts. We concluded that the industry is insufficiently involved in preventing game addiction or helping people with these problems. Within this project we tried to contact the game industry to ask their opinion about this issue. Since there was no response, this follow-up project aims to inform a broader audience about the publication, thereby triggering the industry and policymakers to consider this issue.

Methods

Our publication was translated into an easy-to-read Dutch report. The national newspaper Trouw was invited to write an article on the role of the industry, referring to our report. The day the Trouw article was published (2 Feb, 2010), we sent a general press release to inform the media about our report.

Also, several members of parliament (SP and CU) were requested to discuss the role of the industry with the Minister of Health.

Results

Trouw placed an article on the front cover, as well as a 2-page article (background information) inside the newspaper. The same day, the topic was addressed in several online news sites.

Further, we had 4 radio interviews (twice on Radio 1, Funx Radio, Wereldomroep/Dutch World Service), 1 interview on a national channel (SBS6), and 1 on a regional channel (TV Gelderland). Other newspapers reported the issue on the following day (as a news article), or on the following weekend (background information).

Questions addressed to the Minister of Health about the article and IVO report were asked by four political parties (PvdA, CU, SP, CDA). No response had been received at the end of the project.

Some organizations within the game industry responded to the media reports, generally indicating that they believe game addiction does exist. However, they did not agree with the placement of warning messages (one of our proposals).

Output

Rooij AJ van, GJ Meerkerk, TM Schoenmakers, MD Griffiths, H van de Mheen (2010) Video game addiction and social responsibility. *Addiction Research & Theory*, 18(5), 489-493.

Rooij AJ van, TM Schoenmakers, GJ Meerkerk, M Griffiths, H van de Mheen (2010) *Videogameverslaving & maatschappelijke verantwoordelijkheid van de game industrie*. Rotterdam: IVO.

Researchers

AJ van Rooij MSc (researcher), TM Schoenmakers PhD (project leader), Prof H van de Mheen PhD (advisor), Prof M Griffiths PhD (advisor, Nottingham Trent University UK)

In collaboration with: Nottingham Trent University (UK)

Term: December 2009 – March 2010

Financing: Volksbond Foundation Rotterdam

Other

59 Implementation pilot VSV: an integrat treatment program for physical maltreatment of children. Evaluation of success and failure factors, and recommendations for future research

Aim and research questions

The aim is to obtain insight into the conditions for continuing the project Safe, Strong and Further (*Veilig, Sterk en Verder*): a study on the effectiveness of an integral treatment for offenders and victims of physical maltreatment of children. The research questions are: How can the VSV program be implemented in a precise and economically feasible way? What are success and failure factors?

Methods

A range of data sources is used to obtain the required information about the project and its implementation: descriptions of the VSV program and the pilot in The Hague (aimed at the offender), registration numbers of clients, time registrations, costs registrations, and interviews with personnel and management of various organizations (for both offender and victim treatment).

Results

The program is considered valuable for handling child maltreatment cases, particularly because it focuses on strengths and safety within the family context. One problem is cooperation between the organization aimed at the offender and organizations aimed at the victim (the child). Further, cooperation with, and the management role of the care office (Bureau Jeugdzorg) is lacking. Finally, there is low inflow and high costs due to the frequency and intensity of reflections for personnel. For future implementation it is recommended to focus on publicity for the VSV program, in particular the role of the diverse partners, and the expectations towards one another.

Output

Ende D, E Wits, D van de Mheen. (2010) *Implementatie pilot-VSV. Evaluatie van de succes- en faalfactoren en aanbevelingen met het oog op toekomstig onderzoek*. Rotterdam: IVO (Internal report)

Researchers

DVM van den Ende MSc (researcher), EG Wits MSc (project leader), Prof H van de Mheen PhD (advisor)

In collaboration with: De Waag Centre for Ambulant Forensic Psychiatry

Term: February 2010 – May 2010

Financing: Netherlands Organization for Health Research and Development (ZonMw)

60 Victimization in patients with severe mental illness, a nationwide multi-site study

Aim and research questions

This nationwide multi-site cross-sectional study, initiated by Erasmus Medical Centre Rotterdam Rotterdam and Tilburg University, investigates victimization rates and risk factors among persons with severe mental illness. IVO is coordinating the collection of data among net 940 patients with severe mental illness.

Methods

At each site a random sample, stratified on sex and age, will be selected. In a structured interview, experiences and consequences of victimization, discrimination and self-stigmatization, perpetration of violence, childhood trauma, symptom severity and co-morbid psychopathology (e.g. anger, PTSD) will be assessed.

Results

Findings will be compared with a matched sample from the Dutch general population. Additionally, a preliminary conceptual model will be developed.

Output

-

Researchers

A Risselada MSc (researcher), EG Wits MSc (project leader), Prof H van de Mheen PhD (advisor)

In collaboration with: Erasmus Medical Centre Rotterdam, Tilburg University

Term: October 2010 – July 2011

Financing: Netherlands Organization for Scientific Research (NWO)

61 Behind the excitement. A study on the use and abuse of online pornography in the Netherlands

Aim and research questions

The availability of pornographic stimuli has considerably increased during the last decade through the development of the internet, which appears an ideal medium for the distribution of pornography. There are various signals that the ubiquitous, cheap and easy availability of online pornography triggers uncontrolled, obsessive or addictive consumption behaviour in some internet users. However, national and international studies focusing on this problem are sparse. The present study aims to gain insight into the use of online pornography in the Dutch population, and into problems that this may entail. Main research questions are: What pornography is consumed how often and by whom? Which demographic and personality features predict pornography consumption, and, what is the relation between the consumption of pornography and psychosocial wellbeing, sexual behaviour and sexual health?

Methods

Qualitative data are gathered by means of semi-structured interviews with experienced therapists who have dealt with patients struggling with an (online) sex addiction, and with patients who have suffered from an online sex addiction. Furthermore, an online survey in a large representative sample (n ca. 1,900) of the Dutch population (aged 18 years and older) will provide information on the use and abuse of online pornography in the Dutch adult population. The survey contains questions on the actual use of online pornography and instruments to assess compulsive online behaviour and personality features (e.g. impulsivity, sensitivity to reward and punishment, and depression).

Results

Data collection and analysis are in progress.

Output

-

Researchers

GJ Meerkerk PhD (researcher), TM Schoenmakers PhD (project leader), DVM van den Ende MSc (researcher)

Term: November 2010 – May 2011

Financing: Volksbond Foundation Rotterdam

62 Non prescribed use of ADHD medication; reasons for use, consequences and addiction

Aim and research questions

It is known that ADHD medication (for example, Ritalin) is used without prescription. In those cases, it is used as a recreational (party) drug, or as cognition enhancer. In this study, the aim is to investigate why people use non-prescribed ADHD medication, what the positive and negative effects of non-prescribed use are, and if addictive effects occur.

Methods

A total of 162 respondents (recruited from party sites and drug information websites, institutes and universities) filled in an online survey about non-prescribed use of ADHD medication. Also, structured face-to-face interviews were held with problematic users.

Results

Some of the respondents were dependent on ADHD medication. These respondents mostly used the medication as cognition-enhancing drugs.

Nondependent respondents primarily used the medication recreationally. ADHD medication dependency was more prevalent among people with an indication for ADHD than among people without an indication for ADHD.

Also, dependency occurred more often in respondents who used ADHD medication both prescribed and non-prescribed, in people who reported many positive effects, and in people who snorted the medication. The interviews offered insight in the manifestation of symptoms of dependence, and in how the medication is used by dependent consumers.

Output

Ende DVM van den, TM Schoenmakers, SM Issa, H van de Mheen (2010) *Niet voorgeschreven gebruik van ADHD medicatie: Redenen voor gebruik, gevolgen en verslaving*. Rotterdam: IVO Reeks 67.

Researchers

DVM van den Ende MSc (researcher), TM Schoenmakers PhD (project leader), SM Issa MSc (researcher), Prof H van de Mheen PhD (advisor)

Term: January 2010 – October 2010

Financing: Volksbond Foundation Rotterdam

63 Role of Holland Casino in the development and maintenance of gambling addiction in the Netherlands

Aim and research questions

In the Netherlands, gambling activities are strictly controlled by the government to prevent problematic gambling. A limited number of suppliers are allowed to provide a limited range of gambling products. One of them is Holland Casino with 14 legal casinos. Nevertheless, in 2008, over 2600 clients were in treatment for pathological gambling. The aim of this project was to reveal the nature, extent and development of gambling addiction in the Netherlands.

Methods

The project consisted of two phases; the first phase is carried out by IVO, the second by the Foundation for the Facility of Information on Care (*Stichting IVZ*). The results of the first phase provide direction for the second phase of the project: extension and adaptation of the National Alcohol and Drug Information Registration System (LADIS). This should ultimately allow monitoring of the development of gambling addiction in the Netherlands in greater detail.

In the first phase, IVO determined the nature and extent of gambling addiction. A mixture of qualitative and quantitative research methods was used: a review of the literature, interviews with key informants (such as staff members of addiction care centres), interviews with clients currently in treatment for gambling problems, an online survey among gambling clients, and, an online survey among a sample of the Dutch general population aged 16 years and older. The online survey contained the Canadian Problem Gambling Index (CPGI) for estimating gambling behaviour and problem gambling.

Results

Based on the online survey it was estimated that 0,24% (95% CI: 0.1% - 0.6%) of the population aged 16 years or older could be defined as problematic gambler. This corresponds to about 32,000 problem gamblers (32,346; 95% CI 13,478-80,866) in the Netherlands. Comparing these figures with results from earlier studies shows that the number of problem gamblers in the Netherlands is fairly stable.

This notion is supported by the data on the number of problem gamblers in addiction care which declined by 6% from 2007 to 2009, and the results of the interviews with the key informants that showed that the number and nature of problem gambling did not change dramatically in recent years.

On the other hand, some addiction care organizations mentioned a growing number of gambling clients having problems with online gambling, in particular online poker.

In general, short odds gambling games such as slot machines bear the largest risk for problematic gambling. Many clients in care started with slot machines, although some key informants expect a shift towards online gambling to become the main entry for novice gamblers.

Most problem gamblers are males. Non-western immigrants might be overrepresented although their number in addiction care is still low. Many problem gamblers suffer from psychological problems, problems at home, with their partner or at work.

The results of the study, especially the concern for the effects of the growing possibilities of online gambling, warrant studies at a regular intervals to monitor problem gambling in the population. Furthermore, registration of gambling clients in addiction care should be extended to the type of gambling game involved and the location where it is played.

Output

Schrijvers CTM, A Risselada, GJ Meerkerk (2010) *Aard en omvang van kansspelverslaving in Nederland in 2010*. Rotterdam: IVO.

Researchers

A Risselada MSc (researcher), GJ Meerkerk PhD (researcher), CTM Schrijvers PhD (project leader)

In collaboration with: Foundation for the Facility of Information on Care (*Stichting IVZ*)

Term: October 2009 – May 2010

Financing: Holland Casino

64 Research into the nature, severity and extent of poker addiction in the Netherlands

Aim and research questions

The popularity of poker has increased significantly in recent years. This may be related to the increased exposure of poker on television and the rise of the internet which makes it possible to play online poker at any time. With the growing popularity of poker, the concerns increased for possible negative effects such as excessive poker playing and poker addiction. The aim of the present study was to determine whether this concern is justified.

Methods

Using both qualitative (interviews with key figures) and quantitative (survey among a sample of the Dutch population) research methods, the question was posed whether poker addiction exists, and if so, what is the nature, severity and extent of the problem in the Netherlands.

Results

The results show that poker theoretically features a number of characteristics of a potentially addictive game and thus could trigger excessive playing, which in time could lead to problems.

In practice, however, the addiction risk is small. The number of poker addicts is limited, particularly given the large number of players, and the reported gambling problems often turn out to be associated primarily with other forms of gambling, in particular playing on slot machines. The problems with poker that are reported appear to be related to playing online poker (as opposed, for example, to offline poker with friends at home). This may be related to the lack of physical and social control and other (formal) prevention procedures with regard to online poker. The number of gambling addicts who have a problem with online poker is small, though in recent years a slight increase is noticeable. There are no signs that the regular addiction care organizations are not able to respond adequately to this increase. However, because of the absence of specific records on the nature of gambling problems, it is not possible to be specific about the exact number of poker addicts in addiction care. However, it is clear that addiction care organizations are not yet confronted with a large number of poker addicts and, under the present circumstances, there is no reason to expect this to change in the near future.

Output

Meerkerk GJ, A Risselada, CTM Schrijvers (2010) *De kaarten op tafel Verslag van een onderzoek naar aard, ernst en omvang van pokerverslaving in Nederland*. Rotterdam: IVO.

Researchers

GJ Meerkerk PhD (researcher), A Risselada MSc (researcher), CTM Schrijvers PhD (project leader)

Term: November 2009 – May 2010

Financing: The Netherlands Gaming Control Board

65 Satisfaction level of practitioners who refer patients to Altrecht Mental Health Care Agency

Aim and research questions

The aim is to determine the level of satisfaction that practitioners (mainly GPs) have with the services of Altrecht (a mental healthcare agency) after referral of their patients. In addition, to identify aspects of the service (e.g. feedback information, patient registration, professional information, etc.) that need improvement.

Methods

The study consisted of three measurements. First, all GPs that refer their patients to Altrecht were invited to fill out a brief online questionnaire, mainly to gather quantitative data regarding their satisfaction with the different services/divisions of Altrecht. Of the 563 practitioners that were approached 79 (14%) of them responded. Second, 19 GPs were interviewed by telephone to elaborate on the quantitative information. Third, a focus group meeting was held with a selection of the Altrecht staff with regular contacts with referrers. During this meeting results of the survey and ideas for improvement of services discussed. Eighteen people participated in this meeting.

Results

Practitioners who refer patients to Altrecht expressed their satisfaction with the quality of the treatment and the expertise of the professionals. There is appraisal for the introduction of the electronic referral system and the central reception desk that deals with special cases. The practitioners addressed some issues concerning the clarity of the admission criteria and feedback of information.

These issues have been discussed in the focus group meeting and resulted in recommendations to improve the services.

Output

Baars JE, C Barendregt, TM Schoenmakers (2010) *Tevredenheidsonderzoek onder verwijzers van Altrecht*. Rotterdam: IVO.

Researchers

JE Baars PhD (researcher), C Barendregt MSc (researcher), TM Schoenmakers PhD (project leader), SM Issa MSc (research assistant)

Term: October 2009 – April 2010
Financing: Altrecht Mental Health Care Agency

66 Master Class Addiction 2010: Nanos gigantum humeris insidentes¹

Aim and research questions

Scientific insight into the mechanisms behind addiction has increased considerably in the last decades, especially in the field of neurobiology. Unfortunately, knowledge transfer between various disciplines (e.g. psychology, neurobiology, sociology, epidemiology, criminology) appears limited and disciplines may stay unaware of progress made in other disciplines.

Moreover, young researchers tend to be educated in one discipline and become more and more specialized during their career, thus impeding broader views. As a result, the influence of scientific knowledge on addiction and drug policy, prevention and treatment is not optimal.

Methods

The Master Class Addiction 2010 aimed at stimulating the exchange of knowledge and expertise between various scientific disciplines and to offer young scientists the opportunity to broaden their horizon beyond their own discipline and thus enrich their scientific world view. Goal was both horizontal (between disciplines) and vertical (from senior to junior) dissemination of knowledge on addictive behaviour.

Results

The IVO Master Class 2010 took place in the Kurhaus Hotel in Scheveningen on April 15 and 16 2010. Nine leading senior and 14 promising young addiction researchers from various disciplines from all over the world came together to discuss the latest insights on the definition of the phenomenon, the results and meaning of neurobiological studies, the validity and legitimacy of so-called behavioral addictions and the implications of these latest insights for treatment, prevention, policy, and, law enforcement.

Output

Film: Master Class Addiction 2010: A meeting of the minds. (www.ivo.nl)

Researchers

GJ Meerkerk PhD (researcher), Prof H van de Mheen PhD (project leader), MJ Audenaardt (organizer)

Term: September 2008 – April 2010
Financing: Volksbond Foundation Rotterdam

67 Acceptance of help among perpetrators of domestic violence. A qualitative study on factors influencing the acceptance of help among perpetrators of domestic violence.

Aim and research questions

In January 2009 a new national approach to domestic violence was introduced. Perpetrators of domestic violence may be served with a temporary restraining order related in situations where there is an acute threat to victims and/or children. The initial restraining order lasts 10 days but can be extended to 4 weeks if the threat continues. The people involved will receive professional help during the 10-day restraining order.

The study explores whether perpetrators who received the 10-day restraining order are more likely to accept professional help compared with perpetrators who are in a rapid-justice trajectory. The study is limited to the Rotterdam region.

¹ Standing on the shoulders of giants

Methods

Semi-structured interviews were held with local professionals responsible for the issuing of temporary restraining orders (i.e. police, local health authority, probation officers) and with professionals offering help to perpetrators and victims. Semi-structured interviews were held with 8 perpetrators in a rapid-justice trajectory and 12 perpetrators who received a restraining order. All interviewed perpetrators accepted professional help. Semi-structured interviews were held with 20 victims of domestic violence; 10 of the perpetrators were in a rapid-justice trajectory and 10 had been issued with a restraining order. Interviews were audiorecorded and transcribed ad verbatim. The interviews were entered in the computer program Nvivo and codes were assigned to text fragments. All codes were associated with the phenomenon "treatment acceptance". Based on a comparison between and within codes the results were produced.

Results

Most perpetrators who accepted treatment were extrinsically motivated when they started treatment, some developed intrinsic motivation in the course of treatment. Perpetrators who are intrinsically motivated from the beginning are exceptional. Three perpetrator types emerged from the interviews: calculating perpetrators who typically try to avoid negative consequences; docile perpetrators are also extrinsically motivated but less calculating, and tend to do what public servants tell them to do; and the intrinsically motivated perpetrator who is ready to change because they want to stop the violence. The calculating and docile perpetrators consider the restraining order as punishment and were reluctant to enter treatment because they felt they had already been punished. The rapid-justice approach seems to contribute to the extrinsic motivation, as formal imprisonment and offender registration can often be avoided if treatment is accepted.

Output

Barendregt C, B van Straaten, S Eppinga, EG Wits (2010) *Hulpacceptatie van plegers van huiselijk geweld. Een kwalitatieve studie naar factoren die de hulpacceptatie van plegers beïnvloeden*. Rotterdam: IVO

Researchers

C Barendregt MSc (researcher), B van Straaten MSc (researcher), A Nanhoe (researcher, Municipal Health Authority, Rotterdam-Rijnmond), EG Wits MSc (project leader)

In collaboration with: Municipal Health Authority Rotterdam-Rijnmond

Term: June 2009 – June 2010

Financing: Municipal Health Authority Rotterdam-Rijnmond

IVO Seminars 2010

June 23rd 2010: 'Addiction and the elderly: enjoying the autumn of your life (in moderation)'

Speakers:

J Wisselink (staff member, Foundation for the Facility of Information on Care (*Stichting IVZ*)), A Risselada MSc (researcher, IVO), J den Dulk (Location Manager Woodstock, Parnassia Bavo Group).

Introduction

Due to the considerable increase in substance use (particularly of alcohol) among older adults (aged 55+), this group more often contact addiction care. To limit damage due to excessive use of substances, early recognition and intervention is important. However, is the regular offer of services sufficient? Are adjustments needed in the light of recent findings from policymakers and (healthcare) professionals? This seminar addressed a range of questions related to this topic.

For example, what are the developments related to substance use among the older population? Can we identify the determinants of this type of substance use? Can problems be identified and treated at an early stage to prevent excessive use? If the situation escalates, will separate facilities be required for this older group? These topics were addressed by three experts.

In his presentation Jeroen Wisselink focused on older adults in addiction care using data from the National Alcohol & Drugs Information System (in Dutch: LADIS). He reported that the number of older people (aged 55+) with addictive problems is increasing, with a concomitant increase in requests for help. Of the older persons already in addiction care the majority have alcohol problems (75%), but the number of opiate addicts among them is also increasing. This is in contrast to the trend of a decreasing number of opiate addicts in the general population. This is mainly due to the fact that the 'known' population of opiate addicts is ageing. Wisselink reported that the rising trend of alcohol addicts among older people is expected to continue in the coming years, and that this is a problem that has to be faced.

Anneke Risselada's presentation focused on early signaling and intervention of alcohol problems among older people. She pointed out that considerable attention is paid to alcohol use among youth, but little attention is given to the elderly. Due to the increase in both alcohol use and requests for help with alcohol-related problems by the elderly, Risselada finds that there is a deficiency in signaling by professionals in primary health care. She claims that older people should drink less than the average indicated by the World Health Organization, and discussed implementation of the module 'Safe drinking in older adults' (*Drink veilig op leeftijd*). This module was developed for general practitioners and focuses on early signaling and intervention. After evaluation of this module, Risselada concluded that the module does support awareness and signaling is improving, but these effects are decreasing over time. She emphasized the importance of safe boundaries for drinking patterns in older adults.

In the last presentation Johan den Dulk outlined the basic principles of Woodstock - a home for older addicts. In Woodstock the participants can work or follow daytime activities. This provides a goal so that they have the possibility to avoid being constantly focused on their addictive needs. The aim of Woodstock is to activate and motivate older addicts. Den Dulk reported the advantages of staying in Woodstock rather than wandering the streets and causing nuisance. He also reported on the difficulties related to the start of Woodstock, and the constant confrontation with various ethical, social and financial problems.

The meeting was attended by about 50 participants.

November 25th 2010: 'Brain doping: a chance or a threat?'

Speakers:

TM Schoenmakers PhD (Psychologist, research coördinator, IVO), M Schermer PhD (Philosopher, Medical Ethics, Erasmus Medical Centre Rotterdam), R Niesink PhD (Pharmacologist, toxicologist, senior researcher, Trimbos Institute)

Introduction

Some prescription drugs are used by healthy people as cognitive enhancers. For example, the prescription drug for ADHD (methylphenidate, MPH) is also used without prescription. It is debatable whether such drugs really work as cognitive enhancers in healthy persons, whether it is ethical to use these drugs, and whether these drugs are safe and can be used without negative consequences. In this seminar, these questions were addressed by three speakers.

Tim Schoenmakers presented results from two studies by the IVO on the use of prescription drugs by healthy people. In the first study, the prevalence of the use of prescription drugs was measured among Dutch adolescents. It was found that various drugs were used, including MPH. In the second study, among adults, the results showed that MPH may lead to negative consequences. Symptoms of addiction were found in subgroups of respondents. Respondents in that study used MPH both as a cognition enhancer and as a recreational ('party') drug.

Raymond Niesink focused on how cognitive-enhancing drugs work from a neurobiological point of view. He explained that these drugs (MPH in particular) are in fact not effective. They increase dopamine levels in the brain leading to a feeling of pleasure and, for those with attention disorders, to an increased level of focus. This increased focus can be beneficial in performing certain tasks. In healthy people, however, increased levels of dopamine would not lead to increased task performance because it has no effect on working memory capacity.

Maartje Schermer discussed a number of ethical aspects of cognitive enhancement. For example, if these enhancers are proven effective would/should people still have the freedom of choice to use them or not? What would be the role of physicians in prescribing these drugs? Would everyone be able to buy these drugs and who will cover the costs for them? For now, the effectiveness and use of cognitive enhancers is very limited, but Schermer argued that it is important to address these questions before cognitive enhancers become more popular and more effective.

The general conclusion from the seminar is that cognitive-enhancing drugs are not effective in healthy people, that problems with these drugs are currently limited, and that the prevalence of their use is probably very low. It was generally considered that not too much attention should be paid to these drugs, in order to avoid increasing their popularity.

The meeting was attended by about 50 participants.

3. ORGANIZATION

Staff 2010

Miranda J Audenaardt	0,7	Director Business Affairs		audenaardt@ivo.nl
prof H Dike van de Mheen Phd	1,0	Director Research & Education		vandemheen@ivo.nl

Support

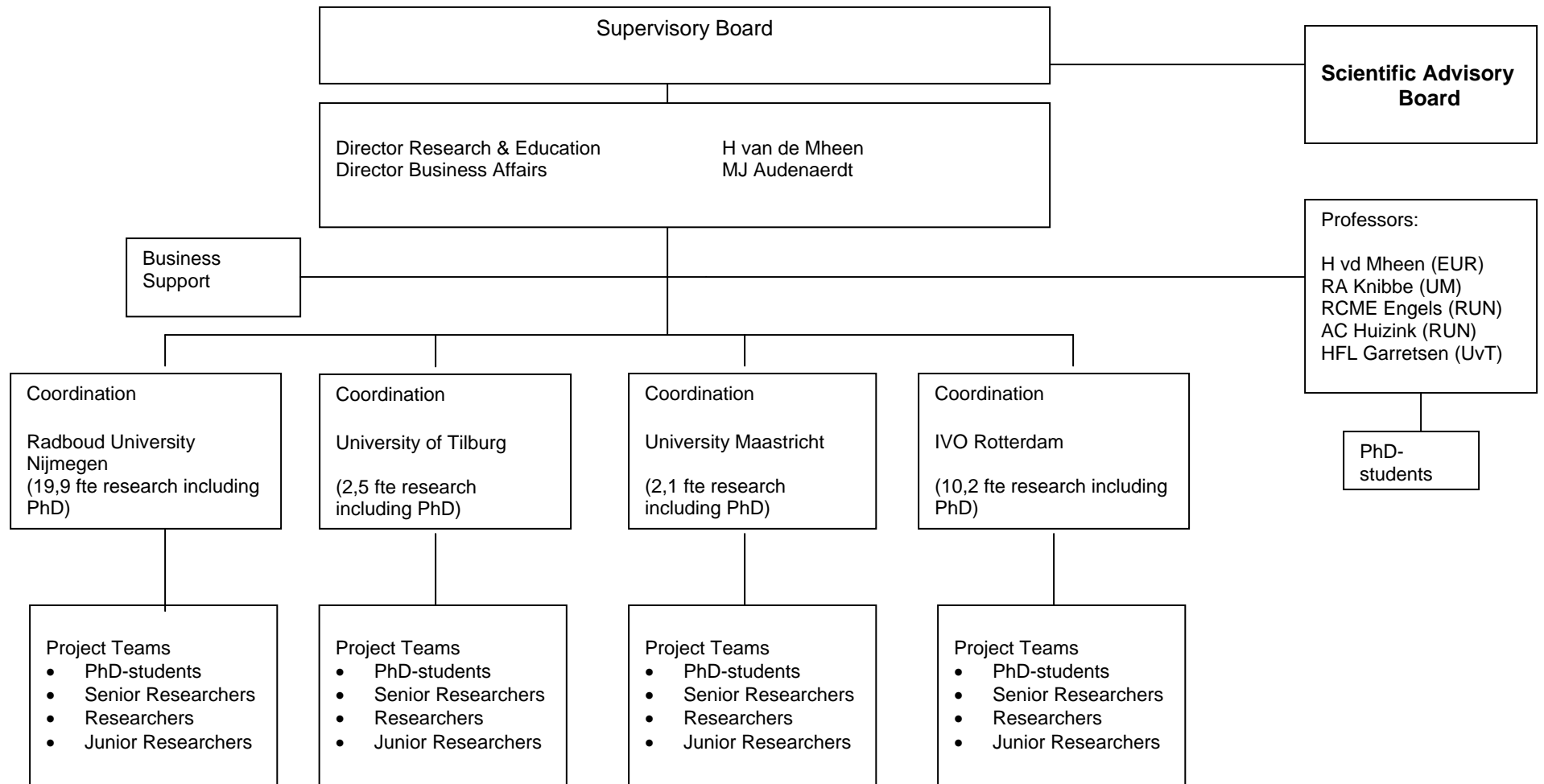
Chrisje PG Couwenbergh PhD	0,6	Coordinator Aquisition		
Mieke Derickx	0,5	Research assistant Maastricht		mieke.derickx@maastrichtuniversity.nl
Cindy TJC van der Ent	1,0	Secretary Rotterdam		secretariaat@ivolnl
Samson M Issa MSc	0,8	Research assistant Rotterdam	till 30/6	
Robert Koops	0,6	Business Affairs Rotterdam		koops@ivo.nl
Estella van der Wal MSc	0,4	Research assistant Rotterdam	till 31/3	
Ineke H Zoutendijk	0,6	Human Resources Rotterdam		zoutendijk@ivo.nl

Research

Wilke JC van Ansem MSc	1	Researcher Rotterdam	since 17/5	ansem@ivo.nl
Doeschka J Anschutz MSc	0,8	PhD student Nijmegen	till 6/9	
Jessica E Baars PhD	0,8	Researcher Rotterdam	till 31/3	
Cas Barendregt MSc	0,8	Researcher Rotterdam		barendregt@ivo.nl
Kris Bevelander MSc	1	PhD student Nijmegen		k.Bevelander@pwo.ru.nl
Jeroen Bommelé MSc	0,8	PhD student Rotterdam	since 15/11	bommele@ivo.nl
Evelien PM Brouwers PhD	0,1	Researcher Tilburg		e.p.m.brouwers@uvt.nl
Debby VM van den Ende MSc	0,8	Researcher Rotterdam	since 22/2	
prof Rutger CME Engels PhD	0,2	Professor Nijmegen		r.engels@pwo.ru.nl
prof Henk FL Garretsen PhD	0,2	Professor Tilburg		h.garretsen@uvt.nl
Ien LAM van de Goor PhD	0,2	Research coordinator Tilburg		l.vandeGoor@uvt.nl
Roel CJ Hermans MSc	0,8	PhD student Nijmegen		r.hermans@pwo.ru.nl
Marieke Hiemstra MSc	1	PhD student Nijmegen		m.Hiemstra@pwo.ru.nl
prof Anja C. Huizink PhD	0,2	Professor Nijmegen		a.c.huizink@uva.nl
Jan Joosten PhD	0,1	Researcher Maastricht		jan.joosten@maastrichtuniversity.nl
Marloes Kleinjan PhD	0,7	Assistant professor Nijmegen		m.kleinjan@pwo.ru.nl
prof Ronald A Knibbe PhD	0,5	Professor Maastricht		r.knibbe@maastrichtuniversity.nl
Elke Koopman MSc	0,8	PhD student Nijmegen	till 1/7	
Renske Koordeman MSc	0,8	PhD student Nijmegen		r.koordeman@pwo.ru.nl
Helle Larsen MSc	0,8	PhD student Nijmegen		h.Larsen@pwo.ru.nl
Junilla K Larsen PhD	0,4	Assistant professor Nijmegen		j.Larsen@pwo.ru.nl
Rebecca HN de Leeuw MSc	0,8	PhD student Nijmegen		r.deleeuw@pwo.ru.nl

Paul HHM Lemmens PhD	0,5	Researcher Maastricht		p.lemmens@maastrichtuniversity.nl
Kirsten Lochbühler MSc	0,8	PhD student Nijmegen		k.lochbuehler@pwo.ru.nl
Monique Malmberg MSc	1	PhD student Nijmegen		m.Malmberg@pwo.ru.nl
Gert-Jan Meerkerk PhD	0,8	Researcher Rotterdam		meerkerk@ivo.nl
Isabelle Mischner MSc	0,8	PhD student Nijmegen		i.Mischner@pwo.ru.nl
Karen Offermans MSc	1	PhD student Maastricht		karen.offerfans@gvo.unimaas.nl
Roy Otten PhD	1	Assistant Professor Nijmegen		r.otten@pwo.ru.nl
Saar Pieters MSc	0,8	PhD student Nijmegen		s.pieters@pwo.ru.nl
Evelien AP Poelen PhD	0,8	Researcher Nijmegen		e.Poelen@pwo.ru.nl
Linda Ringlever MSc	0,8	PhD student Nijmegen		l.ringlever@pwo.ru.nl
Anneke Risselada MSc	1	Researcher Rotterdam		risselada@ivo.nl
Gerda Rodenburg MSc	1	PhD student Rotterdam		rodenburg@ivo.nl
Diana PK Roeg PhD	0,8	Researcher Tilburg		d.p.k.roeg@uvt.nl
Tony AJ van Rooij MSc	1	Researcher Rotterdam		rooij@ivo.nl
Rosalie van der Sar MSc	1	PhD student Tilburg		r.vdrsar@uvt.nl
Tim M Schoenmakers PhD	0,9	Research coordinator Rotterdam		schoenmakers@ivo.nl
Ron HJ Scholte PhD	0,5	Assistent Professor Nijmegen		r.scholte@pwo.ru.nl
Carola TM Schrijvers PhD	0,8	Research coordinator Rotterdam		schrijvers@ivo.nl
Kathrin Schuck MSc	1	PhD student Nijmegen		k.schuck@pwo.ru.nl
Anke Snoek MSc	0,8	Researcher Rotterdam	till 19/8	
Renske Spijkerman PhD	0,8	Researcher Nijmegen		r.spijkerman@pwo.ru.nl
Barbara van Straaten MSc	0,8	PhD student Rotterdam		straaten@ivo.nl
Hanneke Teunissen MSc	1	PhD student Nijmegen		h.Teunissen@pwo.ru.nl
Dana Tiggelman MSc	1	PhD student Nijmegen	since 1/9	d.tiggelman@pwo.ru.nl
Carmen Voogt MSc	1	PhD student Nijmegen	since 4/1	c.voogt@pwo.ru.nl
Margot Voogt MSc	0,2	PhD student Tilburg		m.voogt@uvt.nl
Haske van der Vorst PhD	0,8	Researcher Nijmegen		h.vanderVorst@pwo.ru.nl
Elske G Wits MSc	0,8	Coordinator Advice and Implementation Rotterdam		wits@ivo.nl
Carmen S van der Zwaluw MSc	0,8	PhD student Nijmegen		c.vanderZwaluw@pwo.ru.nl
Total fte's Researchers + PhD's 2010	: 34,7			
– Total fte's Reseachers 2010	: 16,1			
– Total fte's PhD's 2010	: 18,6			
Total fte's Support 2010	: 5,3			

Organization chart IVO



4. PUBLICATIONS

International Journals

Anschütz DJ, RCME Engels, T van Strien (2010) The effects of adult-targeted food commercials on concurrent snack food intake in young children and the moderating role of maternal encouragement to be thin. *Appetite*, 55, 117-123.

Anschütz DJ, RCME Engels, (2010) The effects of playing with Barbie on body image and food intake in young girls. *Sex Roles*, 63, 621-630.

Anschütz DJ, RCME Engels, T van Strien (2010) Maternal encouragement to be thin moderates the effect of commercials on children's snack food intake. *Appetite*, 55(1), 117-123.

Baars JE, BJJ Boon, HFL Garretsen, H van de Mheen (2010) The reach of a free hepatitis B vaccination program: results of a Dutch study among drug users. *International Journal of Drug Policy*, 21, 247-25.

Barendregt C, H van de Mheen (2010) Then there was silence on the streets. Developments in the street scene of Rotterdam in the last decade. *Drugs: education, prevention and policy* 2009;16:497-511/addendum, 179(3), 1.

Bevelander KE, DJ Anschütz, RCME Engels (2010) Setting a social norm regarding food intake in children. *Appetite*, 54(3), 635.

Blanken P, W van den Brink, VM Hendriks, IA Huijsman, MG Klous, EJ Rook, JS Wakelin, C Barendregt, JH Beijnen, JM van Ree (2010) Heroin Assisted treatment in the Netherlands: History, findings and international context. *European Neuropsychopharmacology* 20 (suppl 2): 105-158.

Creemers HE, JK Dijkstra, WA Vollebergh, J Ormel, FC Verhulst, AC Huizink (2010) Predicting life-time and regular cannabis use during adolescence; the roles of temperament and peer substance use: the TRAILS study. *Addiction*, 105(4), 699-708.

Creemers HE, Z Harakeh, DM Dick, J Meyers, WA Vollebergh, J Ormel, FC Verhulst, AC Huizink (2010) DRD2 and DRD4 in relation to regular alcohol and cannabis use among adolescents: Does parenting modify the impact of genetic vulnerability? The TRAILS study. *Drug Alcohol Depend.* (Epub ahead of print)

Crutzen R, RA Knibbe, Y Mysyuk (2010) Unraveling the role of drinking motives in the relationship between stress and alcohol use and its related problems. *Mental Health and Substance Use: dual diagnoses*, 3, 38-46.

Eijnden RJJM van den, R Spijkerman, AA Vermulst, AJ van Rooij, RCME Engels (2010) Compulsive Internet Use Among Adolescents: Bidirectional Parent–Child Relationships. *Journal of Abnormal Child Psychology*, 38(1), 77-89.

Engels RCME (2010) What we do and do not know about addiction [commentary]. *Addiction*, 105(1), 14-15.

Engels RCME (2010) The booze, the bar and the others: studies of peer influences on alcohol use during emerging adulthood. *Alcoholism-Clinical and Experimental Research*, 34(8), 50A.

Garretsen HFL (2010) The Dutch and their drugs: the end of an era? Reflections on Dutch policies towards tobacco, alcohol and illegal drugs. *Drugs: Education, prevention and policy*, 17, 485-495.

Garretsen HFL, EPM Brouwers, LAM van de Goor (2010) Towards evidence based policy regarding drugs and mental health. *Mental Health and Substance Use: dual diagnosis*, 3, 4-9.

Giletta M, RHJ Scholte, RCME Engels, JK Larsen (2010) Body mass index and victimization during adolescence: the mediation role of depressive symptoms and self-esteem. *Journal of Psychosomatic Research*, 69, 541-547.

Harakeh Z, RCME Engels, K Monshouwer, PF Hanssen (2010) Adolescent's Weight Concerns and the Onset of Smoking. *Substance Use & Misuse*, 45(12), 1847-1860.

Harakeh Z, RCME Engels, KD Vohs, RB van Baaren, JD Sargent (2010) Exposure to movie smoking, antismoking ads and smoking intensity: an experimental study with a factorial design. *Tobacco Control*, 19(3), 185-190.

Harakeh Z, RHJ Scholte, AA Vermulst, H de Vries, RCME Engels (2010) The Relations Between Parents' Smoking, General Parenting, Parental Smoking Communication, and Adolescents' Smoking. *Journal of Research on Adolescence*, 20(1), 140-165.

Hermans RCJ, JK Larsen, CP Herman, RCME Engels (2010) Effects of portion size and social modeling on food intake of young women. *Appetite*, 54(3), 649.

Hermans RCJ, JK Larsen, CP Herman, RCME Engels (2010) Social modeling of food intake. An overview of three experimental observational studies. *Appetite*, 55(13), 167.

Hermans RCJ, CP Herman, JK Larsen, RCME Engels (2010) Social modeling effects on snack intake among young men: The role of hunger. *Appetite*, 54, 378-383.

Hermans RCJ, CP Herman, JK Larsen, RCME Engels (2010) Social modeling effects on young women's breakfast intake. *Journal of the American Dietetic Association*, 110, 1901-1905.

Houben K, TM Schoenmakers, RWHJ Wiers (2010) I didn't feel like drinking beer but I don't know why: Evaluative conditioning changes drinking behavior and explicit attitudes. *Addictive Behaviors*, 35(1161-1163).

Huizink AC, E Levälähti, T Korhonen, DM Dick, L Pulkkinen, RJ Rose, J Kaprio (2010) Tobacco, cannabis, and other illicit drug use among Finnish adolescent twins: causal relationship or correlated liabilities? *J Stud Alcohol Drugs*, 71(1), 5-14.

Kleinjan M, B Wanner, F Vitaro, RJJM van den Eijnden, J Brug, RCME Engels (2010) Nicotine dependence subtypes among adolescent smokers: Examining the occurrence, development and validity of distinct symptom profiles. *Psychology of Addictive Behaviors*, 24, 61-74

Koning IM, Z Harakeh, RCME Engels, WAM Vollebergh (2010) A comparison of self-reported alcohol use measures by early adolescents: Questionnaires versus diary. *Journal of Substance Use*, 15(3), 166-173.

Koning IM, RCME Engels, JEE Verdurmen, WAM Vollebergh (2010) Alcohol-specific socialization practices and alcohol use in Dutch early adolescents. *Journal of Adolescence*, 33(1), 93-100.

Koordeman R, DJ Anschütz, R van Baaren, RCME Engels (2010) Exposure to soda commercials affects sugar-sweetened soda consumption in young women: An observational experimental study. *Appetite*, 54, 619-622.

Korhonen T, AP van Leeuwen, SA Reijneveld, J Ormel, FC Verhulst, AC Huizink (2010) Externalizing behavior problems and cigarette smoking as predictors of cannabis use: the TRAILS Study. *J Am Acad Child Adolesc Psychiatry*, 49(1), 61-9.

- Korhonen T, E Levälähti, DM Dick, L Pulkkinen, RJ Rose, J Kaprio, AC Huizink (2010) Externalizing Behaviors and Cigarette Smoking as Predictors for Use of Illicit Drugs: A Longitudinal Study Among Finnish Adolescent Twins. *Twin Res Hum Genet*, 13(6), 550-558.
- Kuntsche EN, RA Knibbe, RCME Engels, G Gmel (2010) Being drunk to have fun or to forget problems; Identifying enhancement and coping drinkers among risky drinking adolescents. *European Journal of Psychological Assessment*, 26(1), 46-54.
- Kuntsche EN, RWHJ Wiers, T Janssen, G Gmel (2010) Same Wording, Distinct Concepts? Testing Differences Between Expectancies and Motives in a Mediation Model of Alcohol Outcomes. *Experimental and Clinical Psychopharmacology*, 18(5), 436-444.
- Kuntsche S, RA Knibbe, EN Kuntsche, G Gmel (2010) Are housewives really desperate? The relevance of societal factors in the association between social roles and alcohol use among mothers. *Alcoholism-Clinical and Experimental Research*, 34(8 Suppl), 45A.
- Larsen H, RCME Engels, PM Souren, I Granic, GJ Overbeek (2010) Peer Influence in a Micro-Perspective: Imitation of Alcoholic and Non-Alcoholic Beverages. *Addictive Behaviors*, 35, 49-52.
- Larsen H, GJ Overbeek, AA Vermulst, I Granic, RCME Engels (2010) Initiation and continuation of best friends and adolescents' alcohol consumption: Do self-esteem and self-control function as moderators? *International Journal of Behavioral Development*, 34, 406-416.
- Larsen H, CS van der Zwaluw, GJ Overbeek, I Granic, B Franke, RCME Engels (2010) A Variable-Number-of-Tandem-Repeats Polymorphism in the Dopamine D4 Receptor Gene Affects Social Adaptation of Alcohol Use: Investigation of a Gene-Environment Interaction. *Psychological Science*, 21, 1064-1068.
- Larsen H, GJ Overbeek, I Granic, RCME Engels (2010) Imitation of Alcohol Consumption in Same-Sex and Other-Sex Dyads. *Alcohol & Alcoholism*, 45, 557-562.
- Larsen JK, H Zijlstra, B van Ramshorst, R Geenen (2010) Conversion to Gastric Bypass in patients with unsuccessful weight loss after gastric banding may depend on mental quality of life. *Obesity Facts*, 3, 127-130.
- Leeuw RNH de, RHJ Scholte, JD Sargent, AA Vermulst, RCME Engels (2010) Do Interactions Between Personality and Social-Environmental Factors Explain Smoking Development in Adolescence? *Journal of Family Psychology*, 24(1), 68-77.
- Leeuw RNH de, RCME Engels, RHJ Scholte (2010) Parental smoking and pretend smoking in young children. *Tobacco Control*, 19(3), 200-205.
- Leeuw RNH de, RHJ Scholte, AA Vermulst, RCME Engels (2010) The relation between smoking-specific parenting and smoking trajectories of adolescents: How are changes in parenting related to changes in smoking? *Psychology & Health*, 25(8), 999-1021.
- Leeuwen AP van, HE Creemers, FC Verhulst, J Ormel, AC Huizink (2010) Are Adolescents Gambling With Cannabis Use? A Longitudinal Study of Impulsivity Measures and Adolescent Substance Use: The TRAILS Study. *J Stud Alcohol Drugs*, 72(1), 70-8.
- Lier PA van, AC Huizink, P Vuijk (2010) The Role of Friends' Disruptive Behavior in the Development of Children's Tobacco Experimentation: Results from a Preventive Intervention Study. *J Abnorm Child Psychol*, 39(1), 45-57 2011.
- Lochbuehler K, M Peters, RHJ Scholte, RCME Engels (2010) Effects of smoking cues in movies on immediate smoking behavior. *Nicotine & Tobacco Research*, 12(9), 913-918.

Luitgaarden J van de, RA Knibbe, RWHJ Wiers (2010) Adolescents Binge Drinking When on Holiday: An Evaluation of a Community Intervention Based on Self-Regulation (doi: 10.3109/10826080902873135) , *Substance Use & Misuse*, 45, 190-203.

Marroun H el, H Tiemeier, EAP Steegers, JW Roos-Hesselink, VWV Jaddoe, A Hofman, FC Verhulst, W van den Brink, AC Huizink (2010) A prospective study on intrauterine cannabis exposure and fetal blood flow. *Early Human Development*, 86(4), 231-236.

Marroun H el, H Tiemeier, VW Jaddoe, A Hofman, FC Verhulst, W van den Brink, AC Huizink (2010) Agreement between Maternal Cannabis Use during Pregnancy according to Self-Report and Urinalysis in a Population-Based Cohort: The Generation R Study. *Eur Addict Res*, 26, 17(1), 37-43.

Meerkerk GJ, RJJM van den Eijnden, IHA Franken, HFL Garretsen (2010) Is compulsive internet use related to sensitivity to reward and punishment, and impulsivity? *Computers in Human Behavior*, 26(4), 729-735.

Malmberg M, GJ Overbeek, M Kleinjan, AA Vermulst, K Monshouwer, J Lammers, WAM Vollebergh, RCME Engels (2010) Effectiveness of the prevention program 'Healthy School and Drugs': Study protocol of a randomized clustered trial. *BMC Public Health*, 8, 541.

Malmberg M, GJ Overbeek, K Monshouwer, J Lammers, WAM Vollebergh, RCME Engels (2010) Substance use risk profiles and associations with early substance use in adolescence. *Journal of Behavioral Medicine*, 33, 474-485.

Martens M, P van Assema, RA Knibbe, RCME Engels, J Brug (2010) Family-Environmental Factors Do Not Explain Differences in the Behavioral Effect of a Healthy Diet Promotion Program in Lower Vocational School Among 12- to 14-Year-Old Adolescents, *American Journal of Health Promotion*, 24, 182-185.

Otten R, ED Barker, B Maughan, L Arseneault, RCME Engels (2010) Self-control and its relation to joint developmental trajectories of cannabis use and depressive mood symptoms. *Drug Alcohol Depend*, 112(3), 201-208.

Otten R, PA van Lier, RCME Engels (2010) Disentangling two underlying processes in the initial phase of substance use: Onset and frequency of use in adolescent smoking. *Addict Behav*, 36(3), 237-240.

Pieters S, H van der Vorst, RCME Engels, RWHJ Wiers (2010) The role of implicit alcohol cognitions on the alcohol use of elementary schoolchildren and early adolescents. *Addictive Behaviors*, 35, 471-478.

Pieters S, H van der Vorst, RWHJ Wiers, WJ Burk, RCME Engels (2010) Puberty dependent sleep regulation and alcohol use in early adolescents. *Alcoholism: Clinical and Experimental Research*, 34, 1512-1518.

Pieters S, H van der Vorst, RCME Engels, RWHJ Wiers (2010) Implicit and explicit cognitions related to alcohol use in children. *Addictive Behaviors*, 35, 471-478.

Prince van Leeuwen A, HE Creemers, FC Verhulst, J Ormel, AC Huizink (2010) Are adolescents gambling with cannabis use? A longitudinal study of impulsivity measures and adolescent substance use: the TRAILS study. *Journal of Studies on Alcohol and Drugs*, 72(1), 70-78.

Ringlever L, R Otten, RNH de Leeuw, RCME Engels (2010) Effects of parents' education and occupation on adolescent smoking and the mediating role of smoking-specific parenting and parent smoking. *Eur Addict Res*, 17(2), 55-63.

Roek MA, R Spijkerman, EAP Poelen, L Lemmers, RCME Engels (2010) The unique contribution of attitudes toward non-alcoholic drinks to the prediction of adolescents' and young adults' alcohol consumption. *Addictive Behaviors*, 35, 651-654.

- Rooij AJ van, GJ Meerkerk, TM Schoenmakers, MD Griffiths, H van de Mheen (2010) Video game addiction and social responsibility. *Addiction Research & Theory*, 18(5), 489-493.
- Rooij AJ van, TM Schoenmakers, RJJM van den Eijnden, H van de Mheen (2010) Compulsive Internet Use: The Role of Online Gaming and Other Internet Applications. *Journal of Adolescent Health*, 47, 51-57.
- Rooij AJ van, TM Schoenmakers, AA Vermulst, RJJM van den Eijnden, H van de Mheen (2010) Online video game addiction: identification of addicted adolescent gamers. *Addiction*, 06, 205-212.
- Rooij AJ van, MF Zinn, TM Schoenmakers, H van de Mheen (2010) Treating internet addiction with cognitive-behavioral therapy: A thematic analysis of the experiences of therapists. *International Journal of Mental Health and Addiction*, doi:10.1007/s11469-010-9295-0.
- Rots-de Vries MC, LAM van de Goor, K Stronks, HFL Garretsen (2010) Psychosocial child adjustment and family functioning in families reached with an assertive outreach intervention. *Scandinavian Journal of Caring Sciences*, Advanced online publication. doi: 10.1111/j.1471-6712.2010.00822.x.
- Sar R van der, EMP Brouwers, LAM van de Goor, HFL Garretsen (2010) The opinion on Dutch cannabis policy measures: A cross-sectional survey. *Drugs: Education, Prevention, and Policy*. Advanced online publication. doi: 10.3109/09687637.2010.519361.
- Schoenmakers TM, M de Bruin, IFM Lux, AG Goertz, DHA van Kerkhof, RWHJ Wiers (2010) Clinical effectiveness of Attentional Bias Modification Training in Abstinent Alcoholic Patients. *Drug and Alcohol Dependence*, 109, 30-36.
- Schoenmakers TM, RWHJ Wiers (2010) Craving and attentional bias respond differently to alcohol priming: a field study in the pub. *European Addiction Research*, 16, 9-16.
- Spijkerman R, H Larsen, FX Gibbons, RCME Engels (2010) Students' Drinker Prototypes and Alcohol Use in a Naturalistic Setting. *Alcohol Clin Exp Res*, 34, 64-71.
- Spijkerman R, MAE Roek, AA Vermulst, L Lemmens, A Huiberts, RCME Engels (2010) The effectiveness of a web-based brief alcohol intervention in reducing underage drinking and the added value of normative feedback. *Journal of Medical Internet Research*, 12, 5.
- Straaten I van, RW Holland, C Finkenauer, T Hollenstein, RCME Engels (2010) Gazing Behavior During Mixed-Sex Interactions: Sex and Attractiveness Effects. *Archives of Sexual Behavior*, 39(5), 1055-1062.
- Strien T van, CS van der Zwaluw, RCME Engels (2010) Emotional eating in adolescents: A gene (SLC6A4/5-HTT) – Depressive feelings interaction analysis. *Journal of Psychiatric Research*, 44(15), 1035-1042.
- Strien T van, HM Snoek, CS van der Zwaluw, RCME Engels, R.C.M.E. (2010). Parental control and the dopamine D2 receptor gene (DRD2) interaction on emotional eating in adolescence. *Appetite*, 54(2), 255-261.
- Teunissen HA, CB Adelman, MJ Prinstein, R Spijkerman, EAP Poelen, RCME Engels, RHJ Scholte (2010) The interaction between pubertal timing and peer popularity for boys and girls: An integration of biological and interpersonal perspectives on adolescent depression. *Journal of Abnormal Child Psychology*, DOI 10.1007/s10802-010-9467-1
- Ven MOM van de, PA Greenwood, RCME Engels, CA Olsson, GC Patton (2010) Patterns of adolescent smoking and later nicotine dependence in young adults: A 10-year prospective study. *Public Health*, 124(2), 65-70.

- Vorst H van der, RCME Engels, WJ Burk (2010) A comment on Van der Vorst et al. Authors response. *Journal of Studies on Alcohol and Drugs*, 71, 616-618.
- Vorst H van der, RCME Engels, WJ Burk (2010) Do parents and best friends influence the normative increase in adolescents' alcohol use at home and outside the Home? *Journal of Studies on Alcohol and Drugs*, 71, 105-113.
- Vorst H van der, RCME Engels, WJ Burk (2010) A comment on van der Vorst et al. (2010) Response. *Journal of Studies on Alcohol and Drugs*, 71(4), 616-618.
- Vorst H van der (2010) Commentary on Alati et al. (2010): The importance of childhood predictors in the development of alcohol use. *Addiction*, 105(5), 881-882.
- Vorst H van der, RCME Engels, WJ Burk (2010) Do Parents and Best Friends Influence the Normative Increase in Adolescents' Alcohol Use at Home and Outside the Home? *Journal of Studies on Alcohol and Drugs*, 71(1), 105-114.
- Vorst H van der, WJ Burk, RCME Engels (2010) The role of parental alcohol-specific communication in early adolescents' alcohol use. *Drug and Alcohol Dependence*, 111(3), 183-190.
- Wiers RWHJ, M Rinck, R Kordts, K Houben, F Strack (2010) Retraining automatic actiontendencies to approach alcohol in hazardous drinkers. *Addiction*, 105(20), 279-287/
- Woelders CS, JK Larsen, RHJ Scholte, AHN Cillessen, RCME Engels (2010) Friendship Group Influences on Body Dissatisfaction and Dieting Among Adolescent Girls: A Prospective Study. *Journal of Adolescent Health*, 47(5), 456-462.
- Woelders LCS, JK Larsen, RHJ Scholte, AHN Cillessen, RCME Engels (2010) Friendship clique influences on body-dissatisfaction and dieting among adolescent girls: A prospective study. *Journal of Adolescent Health*, 47, 456-462.
- Wouters EJ, JK Larsen, SP Kremers, PC Dagnelie, R Geenen (2010) Peer influence on snacking behavior in adolescence. *Appetite*, 55, 11-17.
- Wouters EJ, JK Larsen, SPJ Kremers, PC Dagnelie, R Geenen (2010) Peer influence on snacking behavior in adolescence. *Appetite*, 55(1), 11-17.
- Zundert RMP van, RCME Engels, SG Ferguson, S Shiffman (2010) Dynamic Effects of Self-Efficacy on Smoking Lapses and Relapse Among Adolescents. *Health Psychology*, 29(3), 246-254.
- Zwaluw CS van der, RCME Engels, AA Vermulst, RJ Rose, J Buitelaar, B Franke, RJ Verkes, RHJ Scholte (2010) Polymorphism in the serotonin transporter gene (5-HTTLPR) predicts the development of adolescent alcohol use. *Drug and Alcohol Dependence*, 112, 134-139.
- Zwaluw CS van der, SAM Valentijn, R Nieuwenhuis-Mark, SMC Rasquin, CM van Heugten (2010) Cognitive functioning in the acute phase post-stroke: A predictor for discharge destination? *Journal of Stroke and Cerebrovascular Diseases*, epub ahead of print.
- Zwaluw CS van der, RCME Engels, AA Vermulst, B Franke, JK Buitelaar, RJ Verkes, RHJ Scholte (2010) Interaction between dopamine D2 receptor genotype and parental rule-setting in adolescent alcohol use: evidence for a gene-parenting interaction. *Molecular Psychiatry*, 15(7), 727-735.

Dutch Journals

Hermans RCJ, RCME Engels, JK Larsen (2010) Een goed begin van de dag: een experimentele studie naar imitatie-effecten van eetgedrag. *Psychologie & Gezondheid*, 36(4), 163-170.

Kaal H, EG Wits, M van Ooyen-Houben (2010) Zorg als bijzondere voorwaarde voor justitiabelen met triple-problematiek. *PROCES* (89) 2, 96 – 107.

Kleinjan M, RCME Engels (2010) Universele preventie van middelengebruik onder jongeren. *Kind en Adolescent*, 31(4), 221-234.

Mheen H van de, J van der Poel, E van Vliet†, MTM Stoele (2010) Mantelzorg en verslavingszorg: "Samen staan we sterk". *TSG Tijdschrift voor Gezondheidswetenschappen*, 88, 297-300.

Risselada A, M Kleinjan, H van de Mheen (2010) Veilig drinken op leeftijd. Lesmodule voor huisartsen gericht op signalering, behandeling en doorverwijzing van alcoholproblematiek bij ouderen. *Verslaving*, 6(2), 15-31.

Schoenmakers TM, GJ Meerkerk (2010) Nieuwe vormen van verslaving in de zorg: ghb- en gameverslaving. *Verslaving*, 6(4), 36-49.

Schoenmakers TM (2010) Automatische processen meenemen in behandeling (alcohol)verslaving. *Voeding Nu*, 12(1), 32-33.

Snoek A, GH de Weert, CAI de Jong, H van de Mheen (2010) De complexiteit van de jeugdverslavingszorg: dilemma's en kansen. *Kind en Adolescent*, 31, 266-279.

Vorst H van der, E Vermeulen, RJJM van den Eijnden (2010) Rook- en alcoholspecifieke opvoeding. De huidige stand van zaken op het gebied van onderzoek en preventie. *Kind en Adolescent*, 31, 255-265.

Zwaluw CS van der, RCME Engels (2010) Gen-omgevingsinteracties in alcoholgebruik. *Kind en Adolescent*, 31(4), 188-203.

International Books/other Publications

Baars JE, BJB Boon, J de Wit, RJJM van den Eijnden, HFL Garretsen, H van de Mheen (2010) Intention to Obtain Hepatitis B Vaccination among Commercial Sex Workers. In: J Jaworski (Ed.), *Advances in Sociology Research*, Volume 6. Nova Science Publishers: 255-267.

Barendregt, C, B van Straaten, EG Wits (2010) Meaning of life among former homeless substance users. In: T Decorte, J Fountain, (Eds): *Pleasure, Pain and Profit, European Perspectives on Drugs*, Lengerich Pabst Science Publishers, 101-119.

Lemmens PHHM (2010) *U-Shaped Curve in Encyclopedia of Research Design*, NJ Salkind (ed.),

Mheen H van de (2010) *Example of the interaction between researchers and policy makers: The Netherlands*, In: Council of Europe: Pompidou Group. *Example of the interaction between researchers and policy makers from 16 countries*. Strasbourg: Council of Europe.

Muscat R, H van de Mheen, C Barendregt, and members of the Pompidou Group research platform (2010) *Towards an integrated policy on psychoactive substances: a theoretical and empirical analysis*. Strasbourg: Council of Europe.

Rots-de Vries MC, LAM van de Goor, K Stronks, HFL Garretsen (2010) Evaluation of an assertive outreach intervention for problem families: characteristics of the target group, intervention methods and early outcomes (chapter 48). In: Knorth EJ, ME Kalverboer, J Knot-Dickscheit (Eds.) *How interventions in child and family care work. An international source book*. Antwerpen/Apeldoorn: Garant.

Dutch Books/Other Publications

Baars JE, C Barendregt, TM Schoenmakers (2010) *Tevredenheidsonderzoek onder verwijzers van Altrecht*. Rotterdam: IVO.

Barendregt C, B van Straaten, CTM Schrijvers (2010) *Doorstromen in de Maatschappelijke Opvang. Praktijk en visie van Rotterdamse zorgaanbieders*. Rotterdam, IVO.

Barendregt C, B van Straaten, S Eppinga, EG Wits (2010) *Hulpacceptatie van plegers van huiselijk geweld. Een kwalitatieve studie naar factoren die de hulpacceptatie van plegers beïnvloeden*. Rotterdam: IVO

Ende DVM van den, TM Schoenmakers, SM Issa, H van de Mheen (2010) *Niet voorgeschreven gebruik van ADHD medicatie: Redenen voor gebruik, gevolgen en verslaving*. Rotterdam: IVO Reeks 67.

Kleinjan M, RCME Engels (2010) Middelengebruik: Determinanten en preventiemogelijkheden vanuit opvoeding, educatie en beleid. In Gerris JRM, JW Veerman & AEJM Tellings (Eds.), *Jeugd- en gezinsbeleid vanuit pedagogisch perspectief. Deel 2: Uitgewerkte beleidsthema's* (pp. 157-176). Antwerpen / Apeldoorn: Garant.

Lemmens PHHM (2010) *Voeding en alcoholgebruik*. In: *Het Voeding Formularium*. Bohn Stafleu van Loghum.

Lemmens PHHM (2010) *U-Shaped Curve in Encyclopedia of Research Design*, NJ Salkind (ed.),

Meerkerk GJ, A Risselada, CTM Schrijvers (2010) *De kaarten op tafel Verslag van een onderzoek naar aard, ernst en omvang van pokerverslaving in Nederland*. Rotterdam: IVO.

Risselada A, TM Schoenmakers (2010) *Protocol voor Signalering, Screening en Kortdurende Interventie van Risicovol Alcoholgebruik bij Jongeren*. Utrecht/Rotterdam: Partnership Vroegsignalering Alcohol/IVO.

Risselada A, TM Schoenmakers (2010) *Vroegsignalering, behandeling en verwijzing van problematische drinkers in de Rotterdamse huisartsenpraktijk Evaluatie van een pilot project*. Rotterdam: IVO.

Risselada A, TM Schoenmakers (2010) Determinanten van middelengebruik en seksueel risicogedrag bij lage SES jongeren: een literatuuroverzicht. In: Schrijvers CTM, AJ Schuit (Eds.), *Middelengebruik en seksueel gedrag van jongeren met een laag opleidingsniveau: aangrijpingspunten voor preventie*. Bilthoven: RIVM.

Risselada A, TM Schoenmakers (2010) Interventies gericht op de preventie van middelengebruik en seksueel risicogedrag bij VMBO scholieren. In: Schrijvers CTM, AJ Schuit (Eds.), *Middelengebruik en seksueel gedrag van jongeren met een laag opleidingsniveau: aangrijpingspunten voor preventie*. Bilthoven: RIVM.

Rooij AJ van, J Jansz, TM Schoenmakers (2010) *Wat weten we over ... games. Een beknopt overzicht van wetenschappelijk onderzoek naar de effecten van games*. Zoetermeer: Stichting Kennisnet.

Rooij AJ van (2010) *Internet op School 2006-2010: vijf jaar internetgebruik in de klas in beeld [Developments in internet use on schools over five years]*. Zoetermeer: Stichting Kennisnet.

Rooij AJ van, TM Schoenmakers, GJ Meerkerk, M Griffiths, H van de Mheen (2010) *Videogameverslaving & maatschappelijke verantwoordelijkheid van de game industrie*. Rotterdam: IVO.

Schrijvers CTM, A Risselada, GJ Meerkerk (2010) *Aard en omvang van kansspeleroverslaving in Nederland in 2010*. Rotterdam: IVO.

Schrijvers CTM, AJ Schuit (Eds) (2010) *Middelengebruik en sexueel gedrag van jongeren met een laag opleidingsniveau. Aangrijpingspunten voor preventie*. Bilthoven: RIVM.

Schrijvers CTM, A Snoek, DVM van den Ende (2010) *Preventie van schadelijk alcoholgebruik en drugsgebruik onder volwassenen*. Rotterdam: IVO.

Snoek A, EG Wits, H van de Mheen, G Wilbers (2010) *Vroegsignalering. Richtlijn vroegsignalering middelengebruik of – afhankelijkheid bij jongeren*. Amersfoort, Resultaten Scoren.

Snoek HM, JK Larsen, JMAM Janssens, GAJ Fransen, GRM Molleman (2010) Overgewicht bij kinderen en jongeren. Familiegerichte interventies en preventiemogelijkheden vanuit opvoeding en jeugdbeleid. In: Gerris JRM, JW Veerman & AEJM Tellings (Eds.), *Jeugd- en gezinsbeleid vanuit pedagogisch perspectief. Deel 2: Uitgewerkte beleidsthema's* (pp. 177-204). Antwerpen/ Apeldoorn: Garant.

Snoek A, EG Wits, JC van der Stel, H van de Mheen (2010) *Kwetsbare groepen. Kwetsbare groepen jeugdigen en (problematisch) middelengebruik: visie en interventiematrix*. Amersfoort: Resultaten Scoren.

Weert GH de, A Snoek, CAF de Jong, H van de Mheen (2010) *Monitor jeugdverslavingszorg. Pilotrapport en advies*. Amersfoort/Nijmegen: Resultaten Scoren.

Wits EG, S Ganpat, TM Schoenmakers, A Snoek, J Boonstra, R den Ouden (2010) *Theoretische handleiding Stay-a-Way. Een gedragsinterventie voor middelenproblematiek bij delinquente jongeren*. Deventer/Rotterdam: Tactus/IVO.

Essays / Theses

Huizink AC (2010) *Middelen om aan de druk te ontsnappen*. Inaugurele rede, bijzondere leerstoel "Biologisch-psychologisch onderzoek naar verslaving bij jeugdigen" Radboud Universiteit Nijmegen, uitgesproken op 19 maart 2010. ISBN 978-90-9025183-7.

Snoek HM (2010) *Families on the balance: eating behaviour and weight status of adolescents and their families*. Radboud Universiteit Nijmegen. Thesis.

Veenstra MY (2010) *Alcohol and Cardiovascular disease: impact of life events and social support. A primary care-based longitudinal study*. Erasmus Universiteit Rotterdam. Thesis.

Zundert RMP van (2010) *Adolescent smoking cessation: not just a lucky strike!* Radboud Universiteit Nijmegen. Thesis.