Maastricht University

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FASD Prevention
What to Change in the First Place?

Sylvia Roozen

Vancouver March 7th 2019

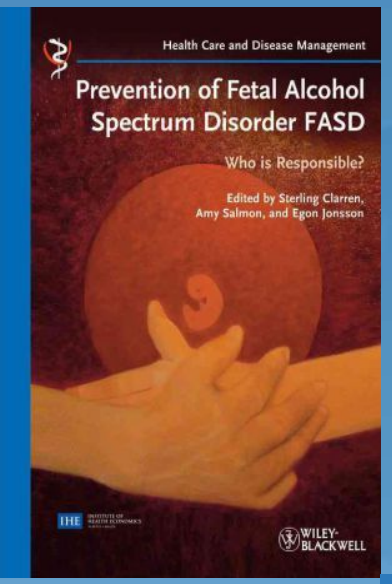
Presenter Disclosure

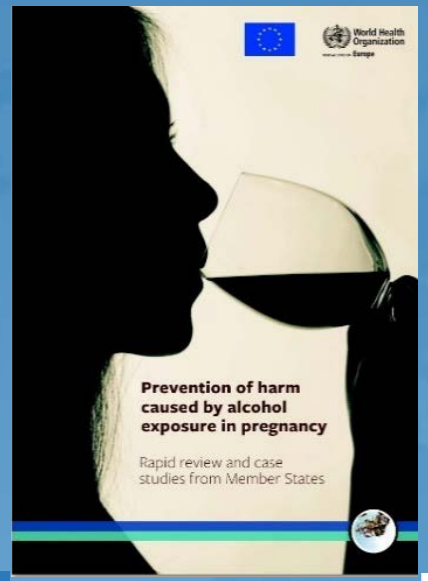
Sylvia Roozen

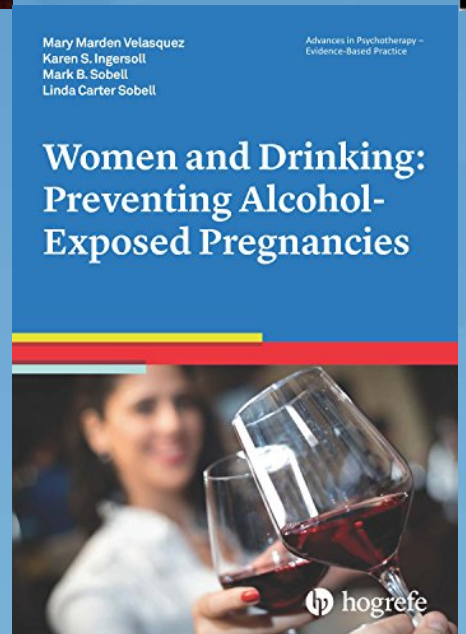
I have no current or past relationship with commercial entities.


efficacy
interview
learning
behaviors
stepwise
interventions
interpersonal
public
self
preconception
stigma
diagnosis
implementation
Group
pregnancy
primary
community
healthcare
fasd
based
web
policy
app
research
intervention
change
management
tertiary
posterscreening
advocacy
secondary
evaluation
motivational
needs
campaign
prevention
care
norm
sessions
environment
awareness
support
alcohol
interviewing
session
networkstrategy
mapping
multidisciplinair
assessment
alliance
ethics
activities
brief
knowledge
therapy
planning
determinants
education
empowerment
organizational
television
partner

How far have we come on Prevention?



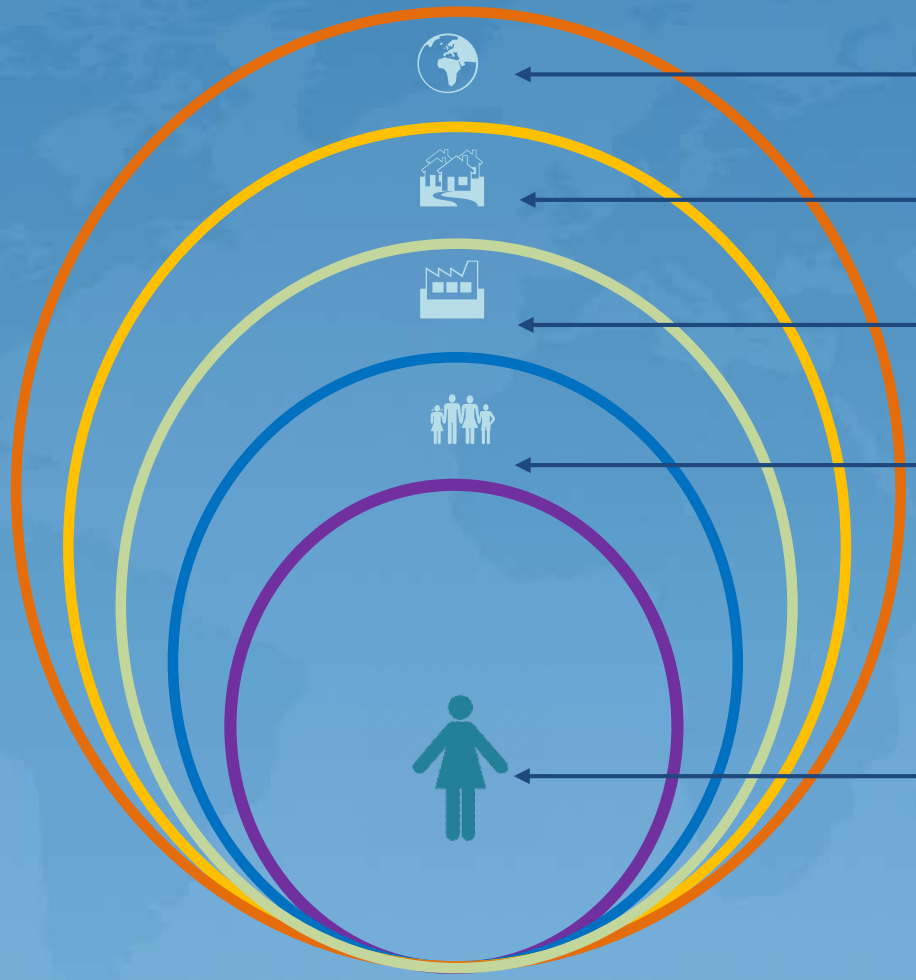




Problem Identification → Problem Solving

Roozen, S., Black, D., Peters, G.Y., Kok, G., Townend, D., Nijhuis, J.G., Koek, G.H. and Curfs, L.M.G. (2016). Fetal Alcohol Spectrum Disorders (FASD): an Approach to Effective Prevention. Current Developmental Disorders Reports, pp.1-6.

Who to Influence?



Society: Governmental agencies, Policies

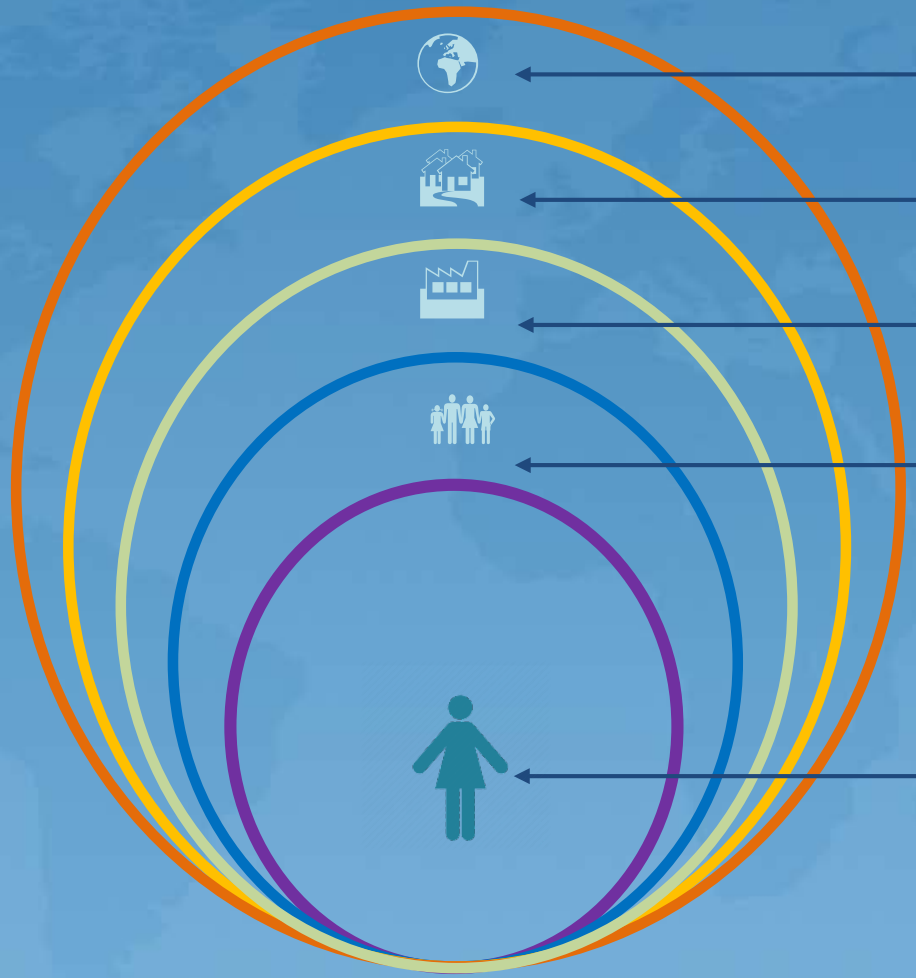
Community: Community leaders

Organization: Hospital, Healthcare providers

Interpersonal: Partner, Family, Friends

Individual: Pregnant women, Women in childbearing age, Women with alcohol abuse, Etc.

Example Approaches



Large-scale campaigns, alcohol policy, network linkages, research

Community-based interventions, mobilizing advocacy

Holistic services for e.g., high risk pregnant women

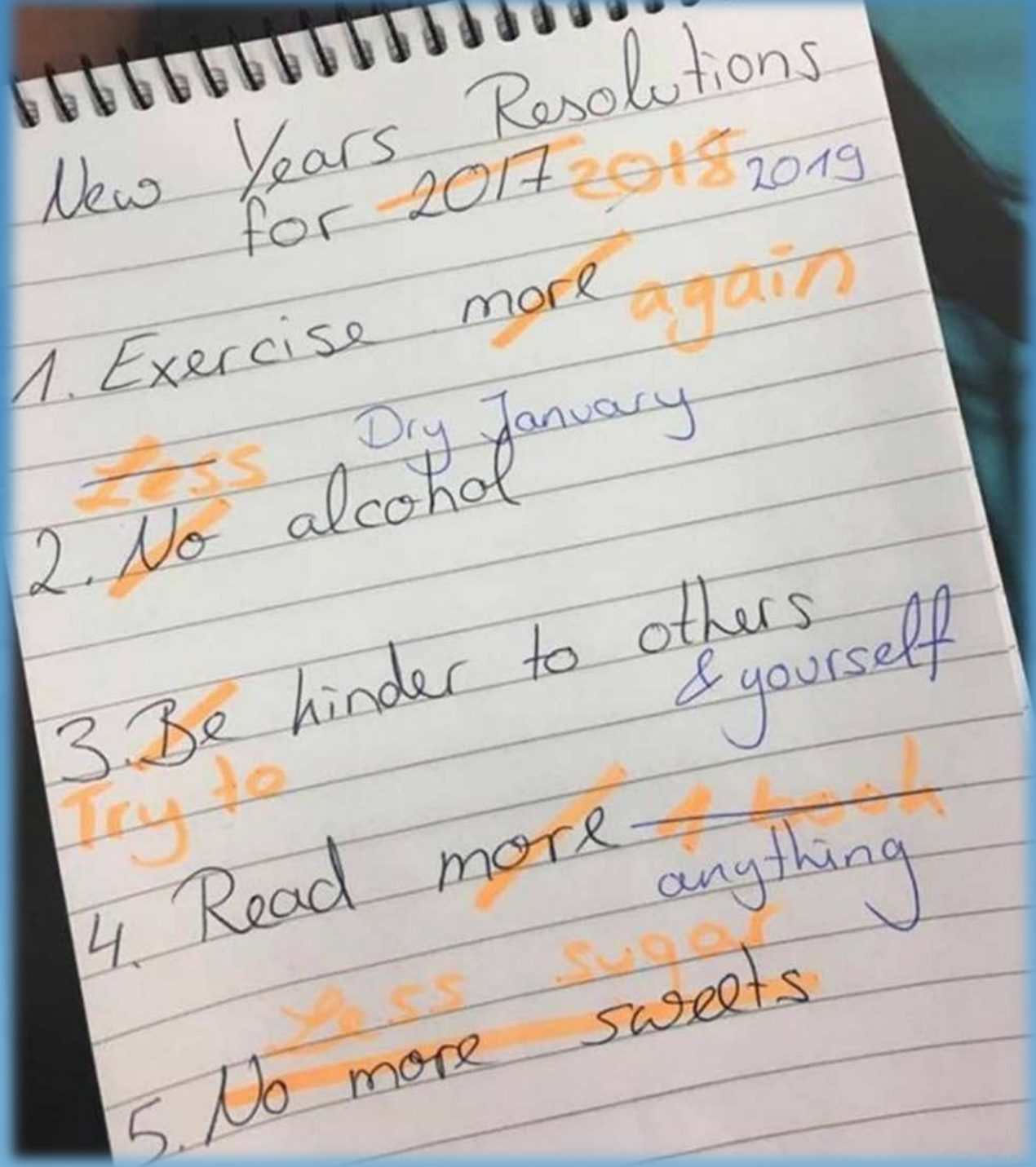
Support Services for e.g., family

Screening, brief ìnterventions (motivational interviewing)

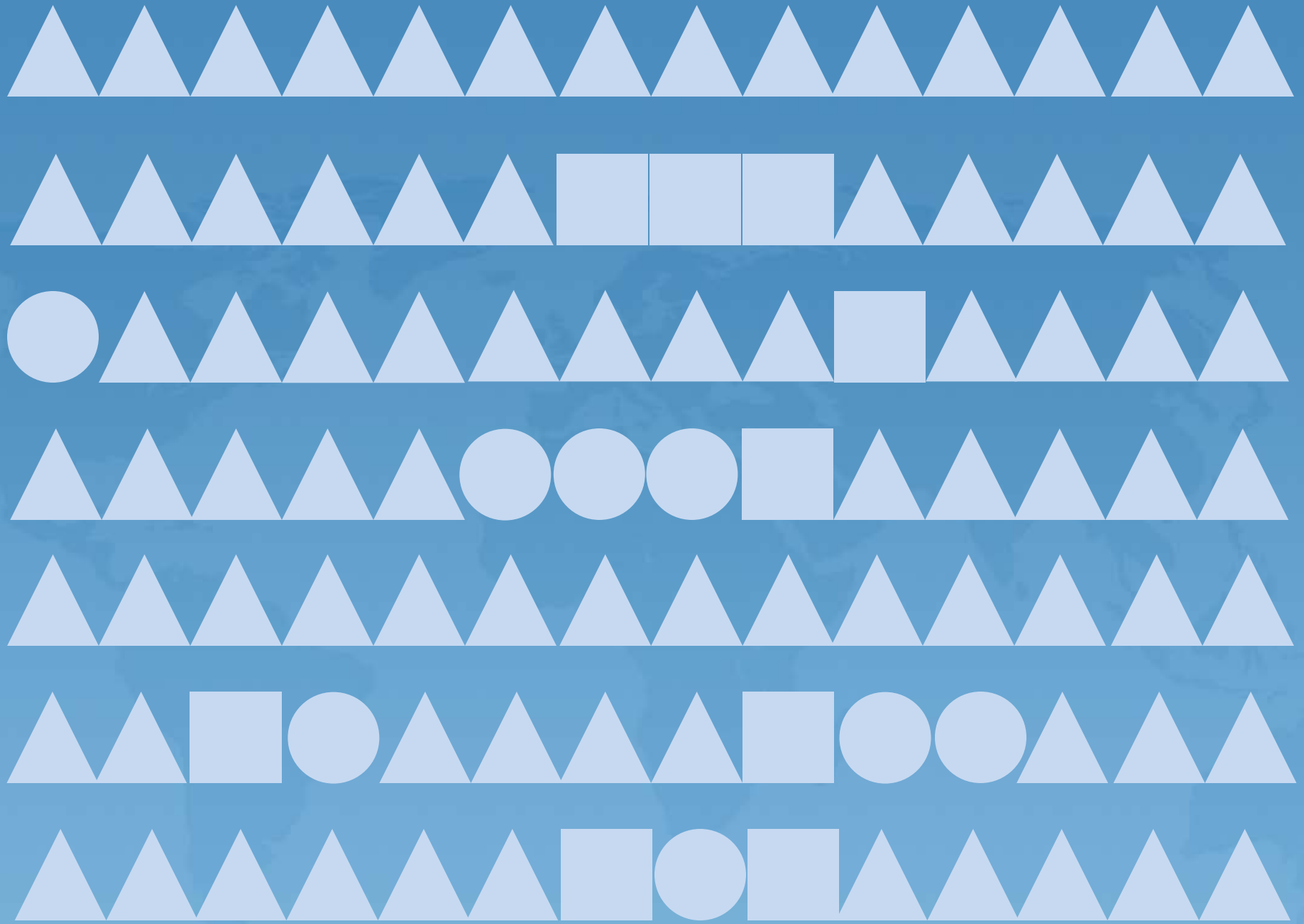
Undesired behavior(s)

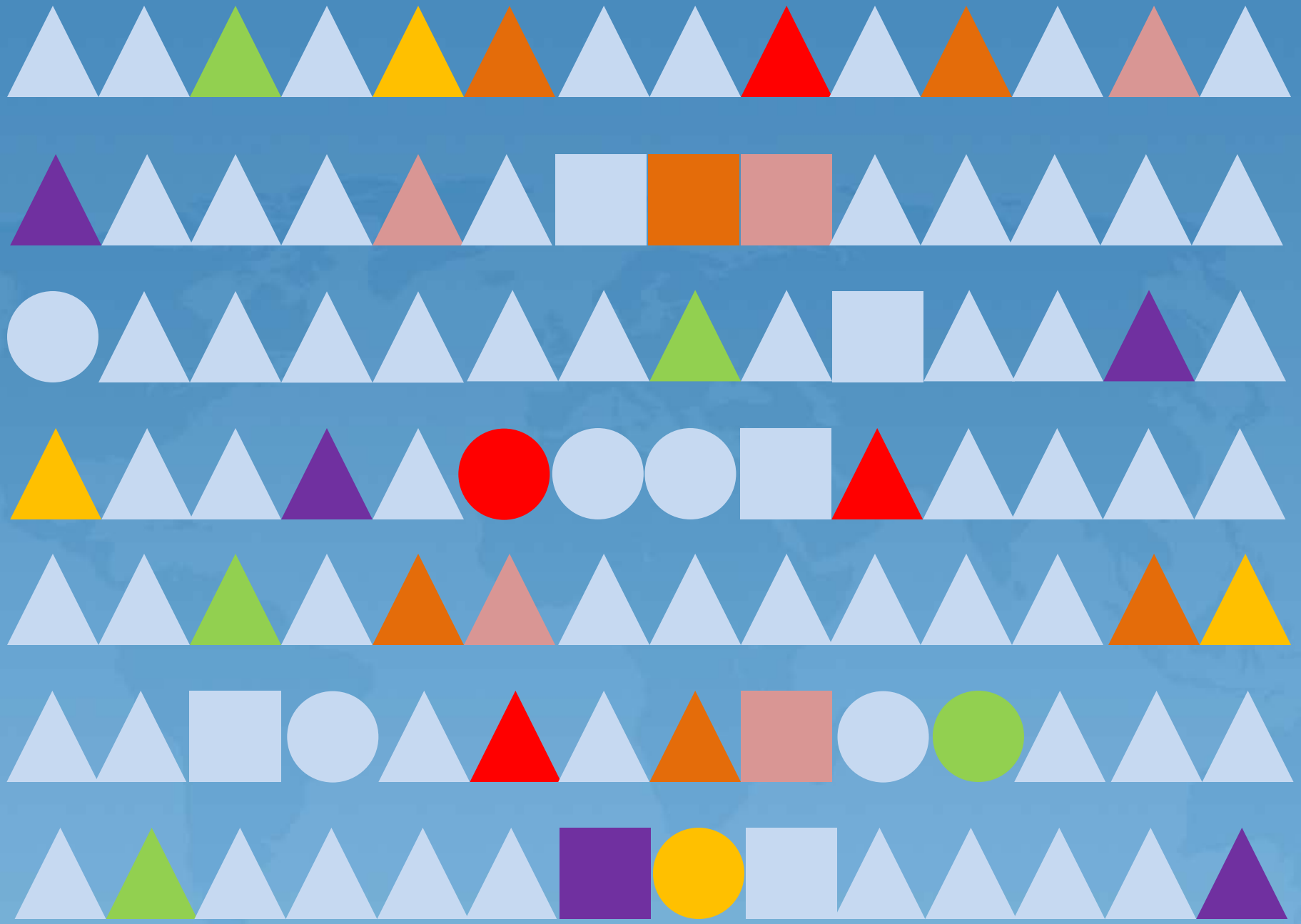
What to Change?

Desired behavior(s)


New Years Resolutions
for 2017 2018 2019
1. Exercise more again
less
2. No alcohol Dry January
3. Be kinder to others
& yourself
Try to
4. Read more
less sugar
anything
5. No more sweets

Materials and Methods





Maternal Data Types

Numerical

Logical

Categorical

Categorical

Characteristics of mothers of children with FAS (N=353).

Maternal characteristics	FAS cases[a]	FAS %	Approximate female U.S. population % [j]
Number of drinks in one sitting during pregnancy			
<4 drinks	16	32%	97%
≥4 drinks	34	68%	3%
Number of days per week drinking during pregnancy [j]			
<7	15	36%	97%
7	27	64%	3%

Table 3 Self-reported alcohol consumption and smoking rates

		Case mothers		Control mothers	
		n	%	*n*	%
Before pregnancy Alcohol	None	5	11.9	14	31.8
	Mild	1	2.4	7	15.9
	Moderate	4	9.5	10	22.7
	Heavy	32	76.2	13	29.5
	Total	42	100.0	44	100.0
During pregnancy Alcohol	None	10	22.2	30	63.8
	Mild	0	0.0	4	8.5
	Moderate	4	8.9	5	10.6
	Heavy	31	68.9	8	17.0
	Total	45	100.0	47	100.0

Logical

Maternal characteristics	Children without FAS/PFAS N = 769		Children with FAS/PFAS N = 55	
	N	%	N	%
Alcohol consummation period				
1st trimester	21	2.7	0	0.0
2nd trimester	6	0.8	0	0.0
3rd trimester	5	0.7	4	7.3
entire pregnancy	19	2.5	3	5.5

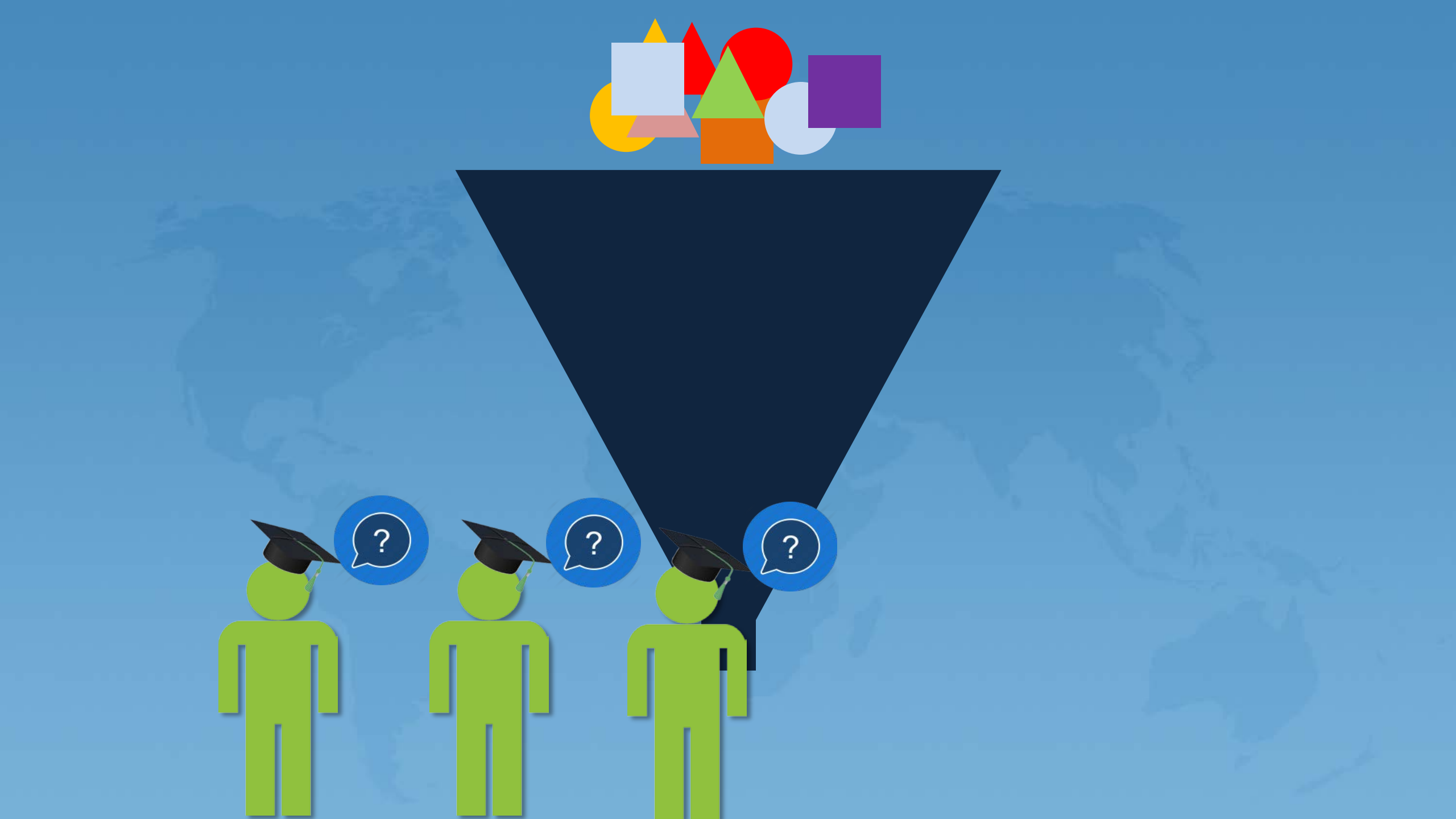
Variables	*Non-FASD n/N (%)*	*FASD n/N (%)*
Maternal Variables		
Maternal alcohol use during pregnancy†		
1 week	6/39 (15)	1/36 (3)
2-3 weeks	2/39 (5)	5/36 (14)
Every week	5/39 (13)	25/36 (69)
Never	26/39 (67)	5/36 (14)

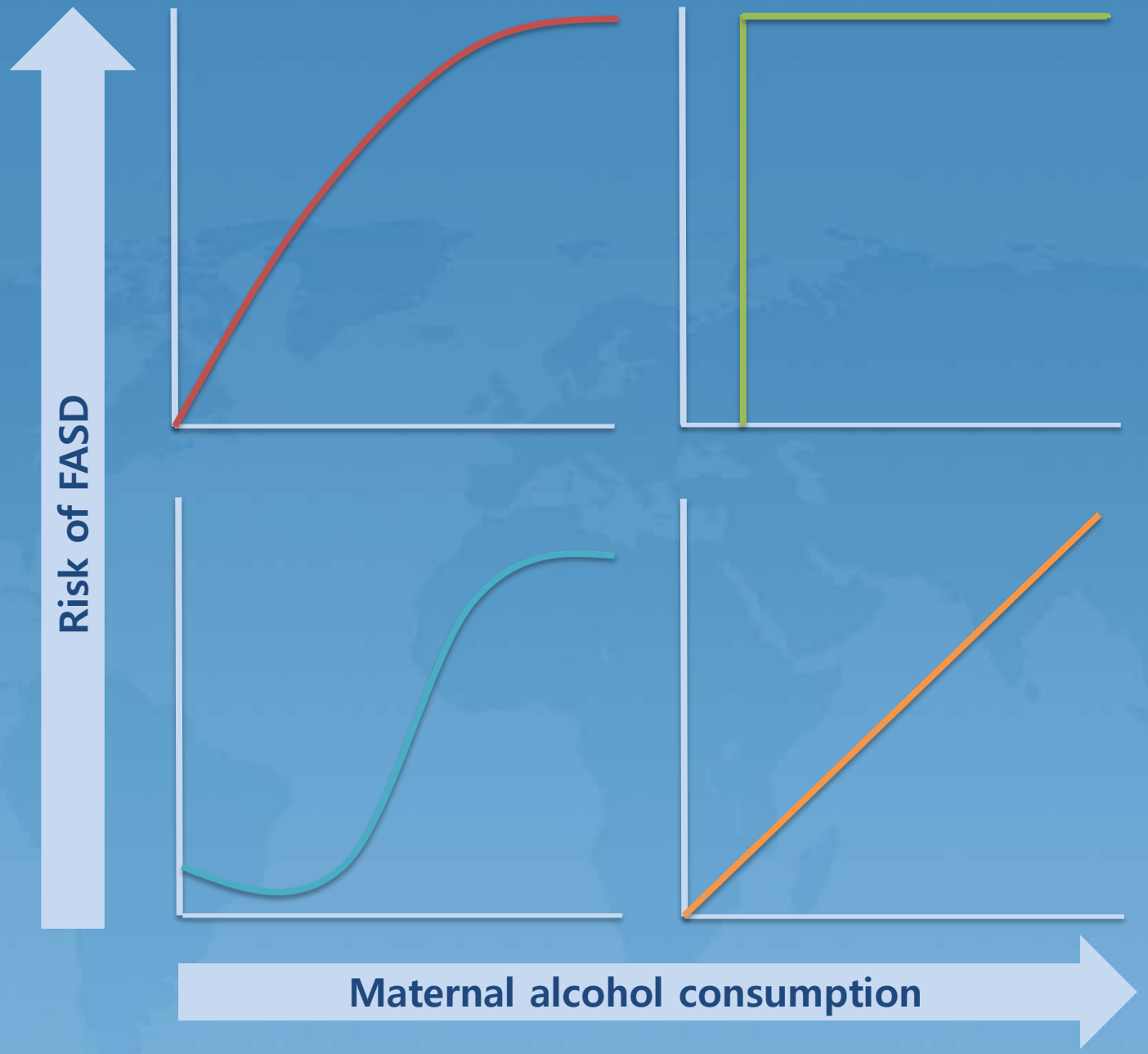
Numerical

Maternal Characteristic and Risk Indicator Variables	FASD $n = 30$ Mean (SD)	Controls[a] $n = 80$ Mean (SD)
Drinks per drinking day 3 months before mother's pregnancy	2.7 (1.5)	1.4 (1.9)
First trimester: usual number of drinks per drinking day	0.5 (1.4)	0.1 (0.6)
Second trimester: usual number of drinks per drinking day	0.1 (0.4)	0.0 (0.1)
Third trimester: usual number of drinks per drinking day	0.0 (0.2)	0.0 (0.1)

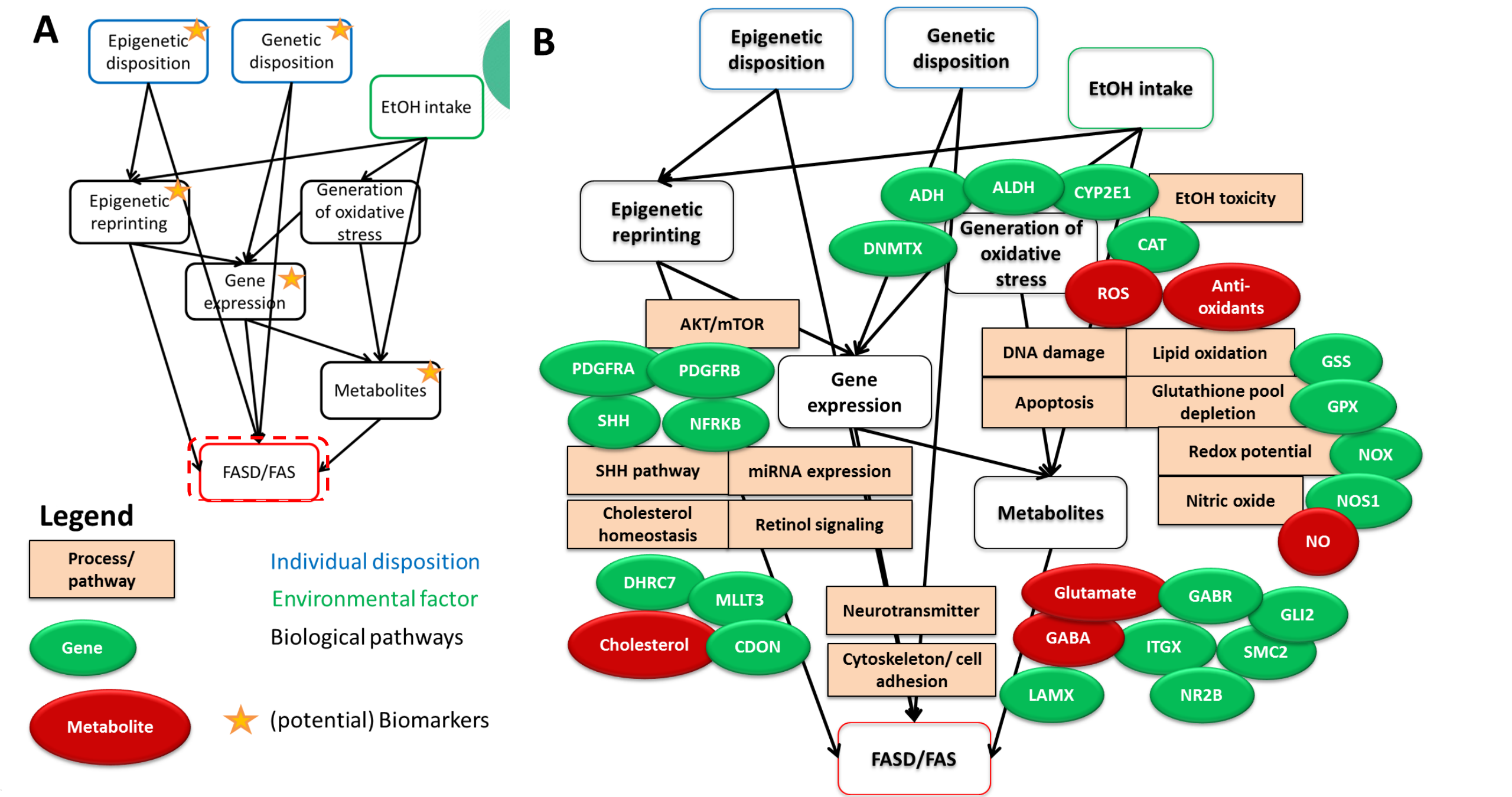
Maternal drinking behavior during pregnancy by diagnostic group within FASD: Mean and standard deviations.

	Mothers of children with FAS ($n = 63$)	Mothers of children with PFAS ($n = 48$)	Mothers of children with ARND ($n = 32$)	Mothers of exposed control children ($n = 26$)	Mothers of Unexposed Control Children ($n = 81$)
Timing					
First trimester					
Drinks consumed per drinking day, **first trimester**, Mean (SD)	6.8 (6.4)	6.0 (7.0)	5.9 (4.5)	3.8 (3.0)	0.0 (0.0)
Peak BAC (estimated)**	.175 (.11)	.132 (.09)	.170 (.11)	.110 (.09)	–
Second trimester					
Drinks consumed per drinking day, **second trimester**, Mean (SD)	6.5 (6.9)	5.1 (7.2)	4.9 (5.1)	2.1 (2.9)	0.0 (0.0)
Peak BAC (estimated)**	.161 (.10)	.119 (.08)	.167 (.12)	.140 (.09)	–
Third trimester					
Drinks consumed per	5.2 (6.9)	4.3 (7.2)	3.8 (5.6)	2.0 (3.0)	0.0 (0.0)





Roozen et al., (2018). Systematic literature review on which maternal alcohol behaviors are related to Fetal Alcohol Spectrum Disorders (FASD). *BMJ open*, *8*(12), e022578.



Ehrhart, F.*, Roozen, S.*, Verbeek, J., Koek G., Kok, G., Van Kranen, H., Evelo, C. T., Curfs, L.M.G (2018). Review and gap analysis: molecular pathways leading to Fetal Alcohol Spectrum Disorders. *Molecular Psychiatry, 1*

Beliefs

"Some family members or friends also drank alcohol throughout pregnancy and had very normal, even beautiful kids"

"My family said that drinking alcohol would help me during pregnancy"

"If I have already eaten well and I drink a little glass of red wine, I do not feel that I put my baby at risk"

"If I do not drink alcohol in pregnancy I feel more stressed"

Roozen, S., Peters, G. Y., Kok, G., & Curfs, L (2018). Identifying psychosocial determinants related to alcohol consumption during pregnancy: a systematic literature review. *Preprint.*

Determinants

Descriptive norm

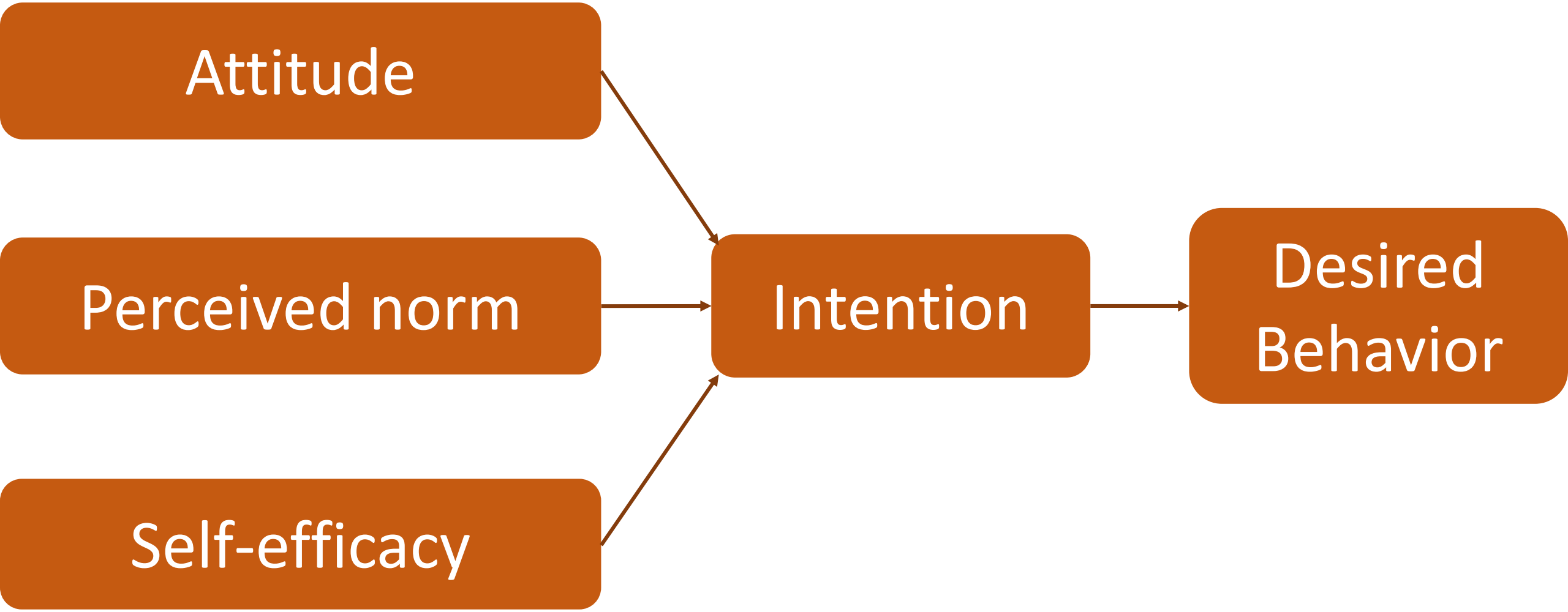
Injunctive norm

Attitude / Self Efficacy

Risk perception

Roozen, S., Peters, G. Y., Kok, G., & Curfs, L (2018). Identifying psychosocial determinants related to alcohol consumption during pregnancy: a systematic literature review. *Preprint.*

Example


Attitude
Perceived norm
Self-efficacy
Intention
Desired Behavior

Attitude

Response efficacy

Instrumental attitude

Perceived

tive norm

Self-effi

onomy

Habi

Skills

Knowledge

Craving

vation to comply

HEALTH PSYCHOLOGY REVIEW, 2016
VOL. 10, NO. 3, 297–312
http://dx.doi.org/10.1080/17437199.2015.1077155

Routledge
Taylor & Francis Group

OPEN ACCESS

A taxonomy of behaviour change methods: an Intervention Mapping approach

Gerjo Kok[a], Nell H. Gottlieb[b], Gjalt-Jorn Y. Peters[a,c], Patricia Dolan Mullen[b], Guy S. Parcel[b], Robert A.C. Ruiter[a], María E. Fernández[b], Christine Markham[b] and L. Kay Bartholomew[b]

[a]School of Psychology & Neuroscience, Maastricht University, Maastricht, MD, The Netherlands; [b]School of Public Health, University of Texas, Houston, TX, USA; [c]School of Psychology, Open University, Heerlen, DL, The Netherlands

ABSTRACT

In this paper, we introduce the Intervention Mapping (IM) taxonomy of behaviour change methods and its potential to be developed into a coding taxonomy. That is, although IM and its taxonomy of behaviour change methods are not in fact new, because IM was originally developed as a tool for intervention development, this potential was not immediately apparent. Second, in explaining the IM taxonomy and defining the relevant constructs, we call attention to the existence of parameters for effectiveness of methods, and explicate the related distinction between theory-based methods and practical applications and the probability that poor translation of methods may lead to erroneous conclusions as to

ARTICLE HISTORY
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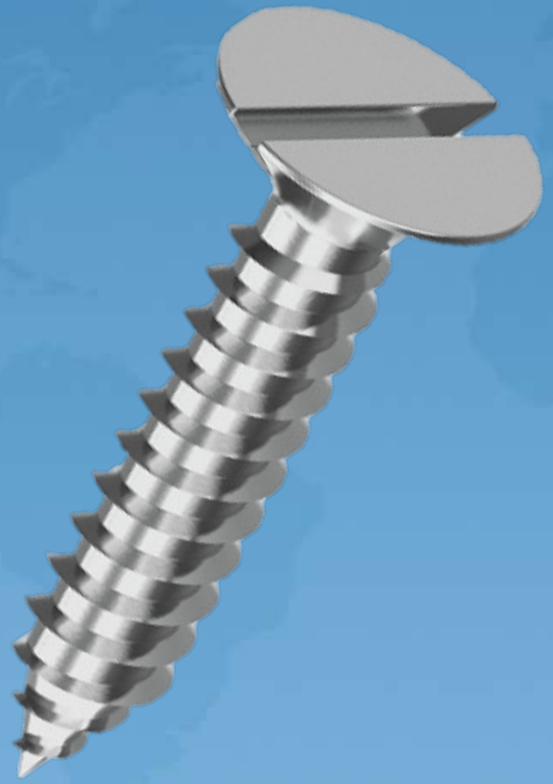
KEYWORDS
Taxonomy; behaviour change; meta-analysis; meta-analyses; review; interventions

Coming Soon…

✓Coding/ Categorizing psycho-social determinants

Determinant	Theory	Parent	Coding operationalisations
Attitude	RAA	Intention	Operationalisations that measure the latent disposition or tendency to respond favourably versus unfavourably to [target behavior], for example using the semantic differentials bad-good, favour/disfavour, like/dislike

Applying Methods



Methods - Parameters

Kok, G., Gottlieb, N. H., Peters, G. J. Y., Mullen, P. D., Parcel, G. S., Ruiter, R. A., ... & Bartholomew, L. K. (2016). A taxonomy of behaviour change methods: an Intervention Mapping approach. *Health psychology review*, *10*(3), 297-312.

Effectiveness?

The Need for a Framework

Step 1
Problem analysis
Needs assessment

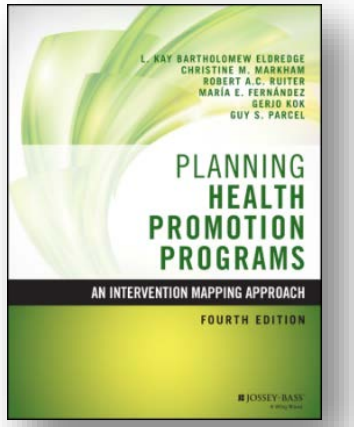
Step 2
Program Objectives
Determinant analysis

Step 3
Program Design
Methods & Applications

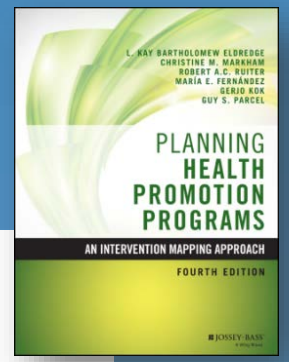
Step 4
Program Production
Intervention

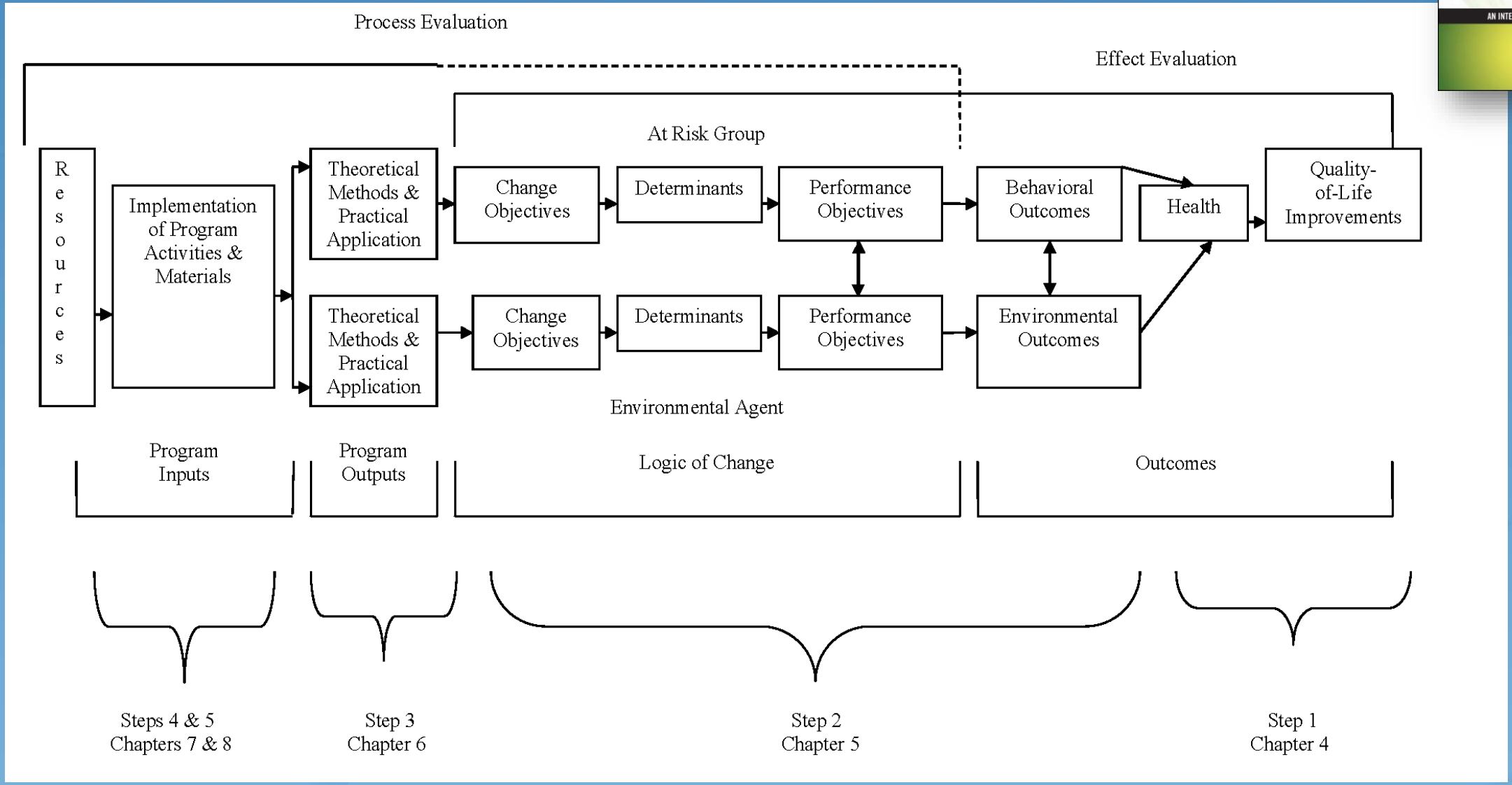
Step 5
Implementation Plan

Step 6
Evaluation Plan



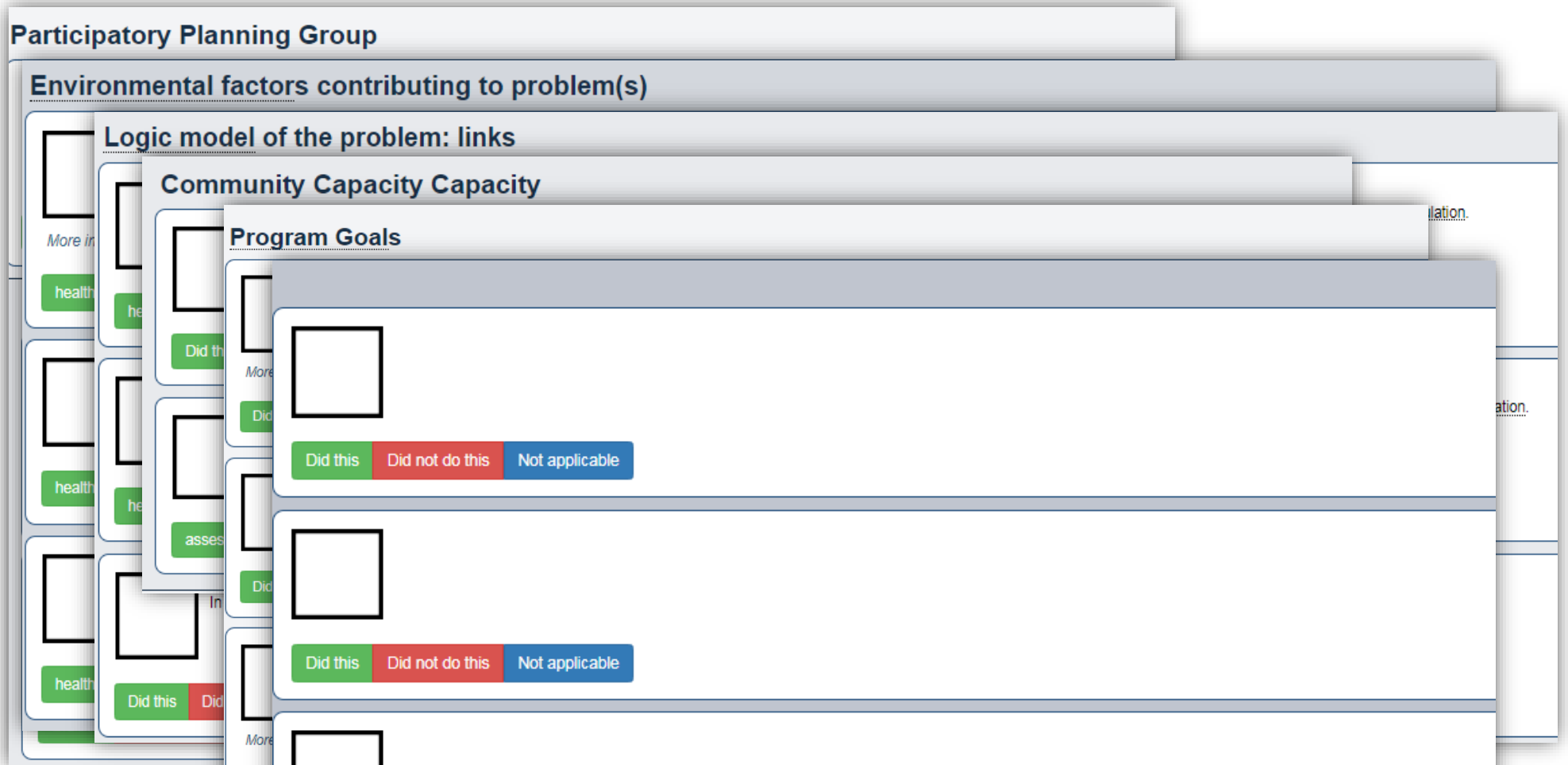
Intervention Logic Model





Coming Soon…

✓Intervention Mapping Checklist



“Each one of us can make a difference.
Together we make change”

EUROPEAN FASD ALLIANCE

farr
foundation for alcohol related research

UKS
Universitätsklinikum des Saarlandes

PARPA

eurocare
European Alcohol Policy Alliance

Open Universiteit

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SZPITAL DZIECIĘCY
ŚW. LUDWIKA W KRAKOWIE

Centre of Excellence for Women's Health

NIH National Institute on Alcohol Abuse and Alcoholism

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Thank You

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