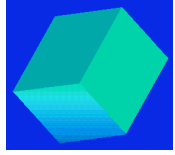


Centre for Rehabilitation and Health Psychology Research



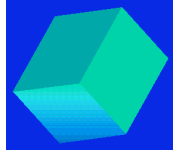
Symposium Youths at risk

How to detect and what are the
determinants?



We have 3 (4) presentations

- Screening the risk (Hüsler, G.)
- Connected and disconnected adolescents (Cartierre, N.)
- Influences on trajectories of internalizing and externalizing problems, and substance use in youths at risk (Werlen, E.)
- A self-regulation intervention for youths at risk (Hertli, B.)



Centre for Rehabilitation and Health Psychology Research

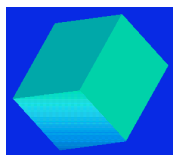


Screening the risk

Psychosocial diagnostic tool

Gebhard Hüsler
Egon Werlen

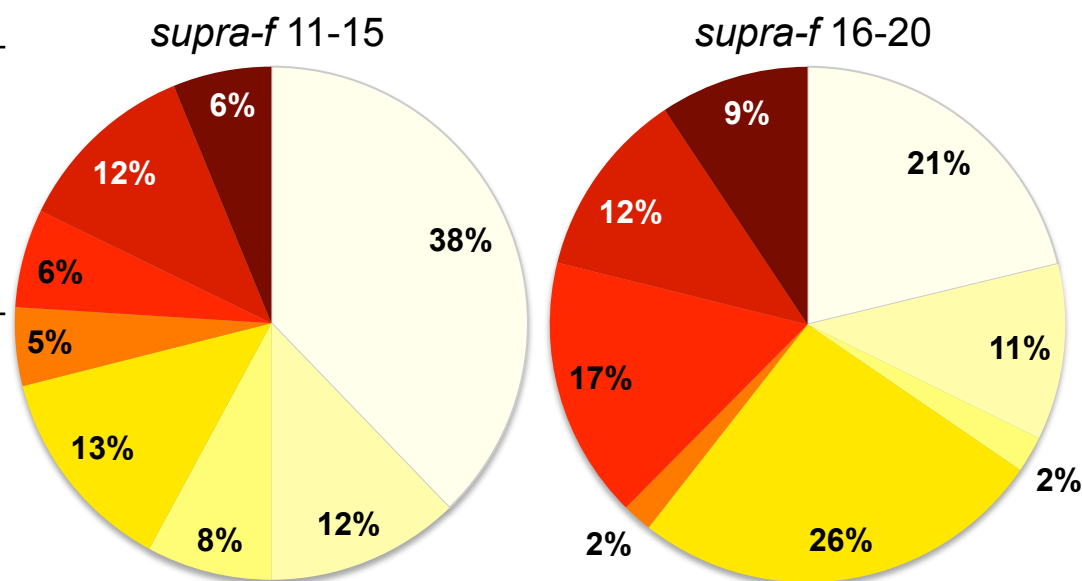
Centre for rehabilitation and health psychology research
University of Fribourg, Switzerland



The story of the Psychosocial Diagnostics

supra-f (12 institutions for the reintegration in school and professional life)

	<i>supra-f</i> <16	<i>supra-f</i> >15
N	975	1269
age	14.2	17.0
male	29%	39%
female	71%	61%

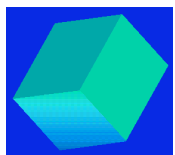


□ no problems
□ int and ext

□ internalizing problems
□ int and sub

□ externalizing problems
□ ext and sub

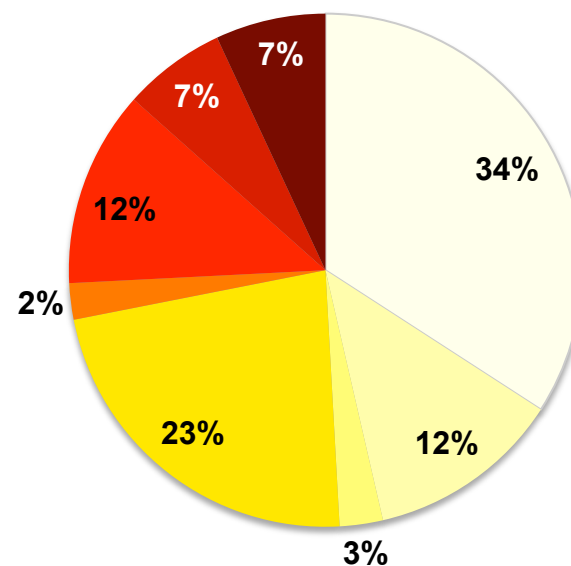
□ substance use
□ int and ext and sub



The story of the Psychosocial Diagnostics

SeMo (Institutions helping to find an apprenticeship / vocational training)

	SeMo
N	3033
age	17.7
male	51%
female	48%



□ no problems

□ int and ext

□ internalizing problems

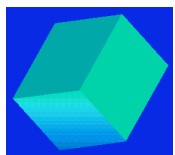
□ int and sub

□ externalizing problems

□ ext and sub

□ substance use

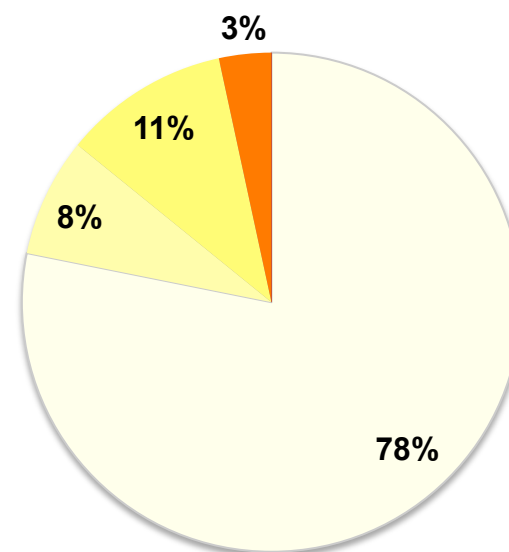
□ int and ext and sub



The story of the Psychosocial Diagnostics

PRFR (elementary schools, years 5 and 6)

	PRFR
N	334
age	11.7
male	52%
female	48%



□ no problems

■ int and ext

■ internalizing problems

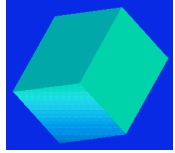
■ int and sub

■ externalizing problems

■ ext and sub

■ substance use

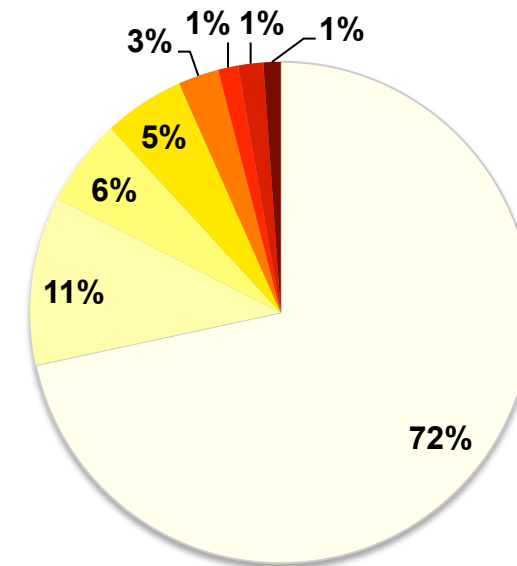
■ int and ext and sub



The story of the Psychosocial Diagnostics

COFR (secondary school; years 7 to 9)

	COFR
N	3780
age	14.1
male	50%
female	50%



no problems

int and ext

internalizing problems

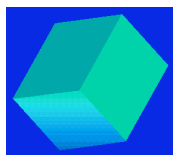
int and sub

externalizing problems

ext and sub

substance use

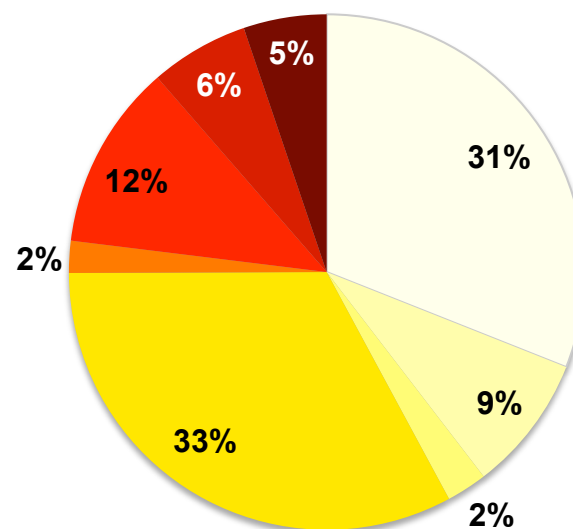
int and ext and sub



The story of the Psychosocial Diagnostics

EPFR (vocational training schools)

	ERFR
N	4083
age	19.2
male	64%
female	36%



□ no problems

□ int and ext

□ internalizing problems

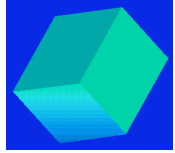
□ int and sub

□ externalizing problems

□ ext and sub

□ substance use

□ int and ext and sub



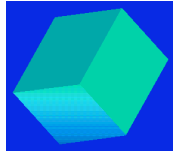
Well being of youths

An evaluation over 12'000 adolescents

(Freiburger Studie zu Jugendlichen und jungen Erwachsenen, ZRG 2010)

shows us:

- **70% - 80% are well**
- **20% - 30% have problems**
(anxiety, depressivity or both)

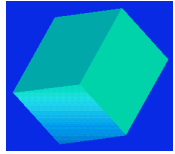


Social background: weight of the single items

	β	r
- Number of moves (>2; >5)	.45	.71
- number of changes of school (>2; >5)*	.32	.55
- living with one parent	.25	.48
- number of repeated school years (one or more)*	.23	.38
- separation / divorce of parents	.19	.53
- reprimand / school exclusion (one or more time)	.11	.35
- dropped out of apprenticeship*	.11	.11
- time spent in (care, custody, psychiatry)	.09	.38
- father unknown or deceased	.09	.22
- mother unknown or deceased	.06	.12

Legend: β =Beta-value r=nonparametric correlation; N>11800 from 8 samples

* 5 samples (N \approx 4000)

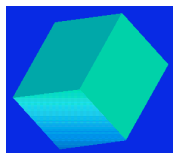


Social background: Index

Questions concerning family situation, school/performance and changes/institutions are summed up (range 1-14)

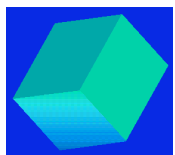
Three groups are composed:

- 1-4: high social background
- 5-6: middle social background
- 7-14: **poor** social background



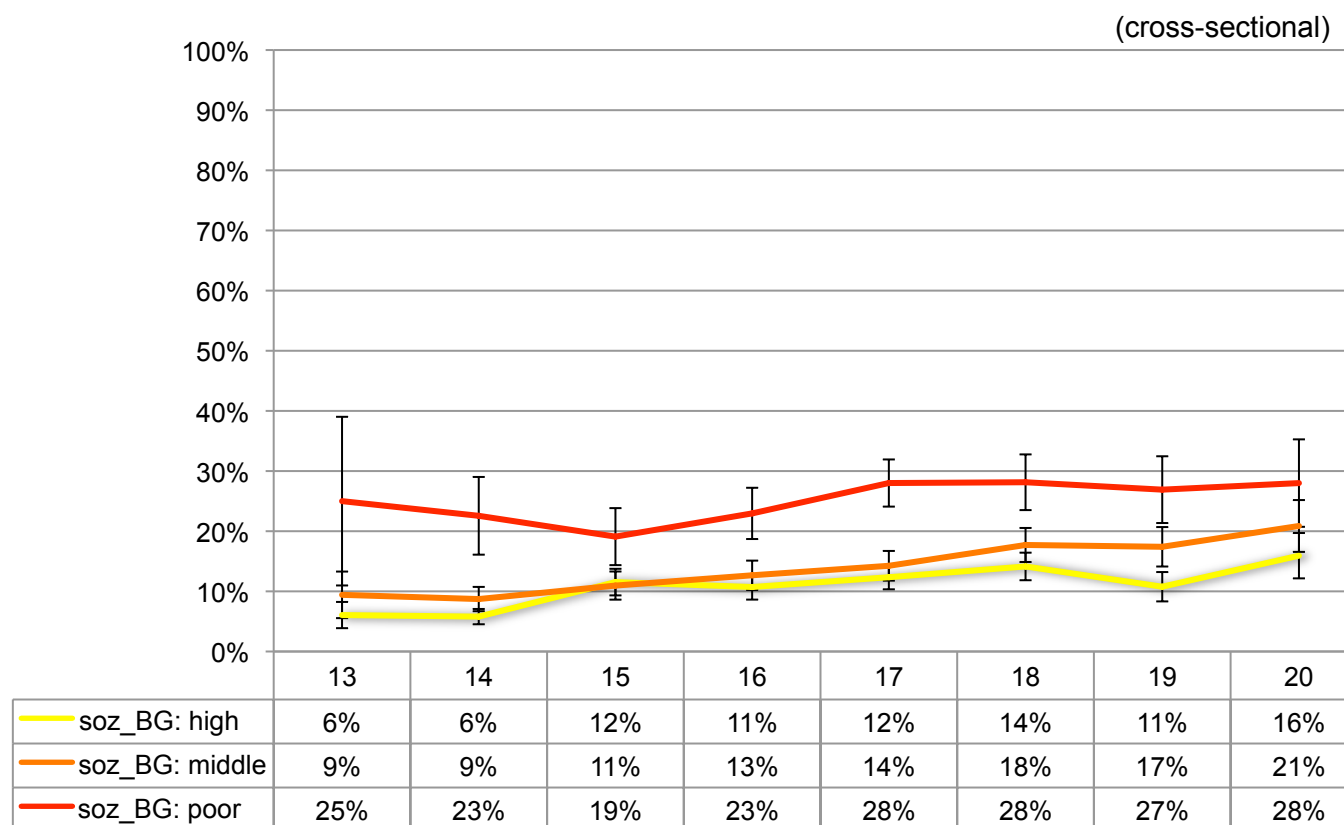
Social background: distribution of the Items

Social background	high	middle	poor
- Number of moves >5 times	0%	3%	37%
- number of changes of school >5 times	0%	3%	19%
- living with one parent	13%	43%	71%
- number of repeated school years	14%	39%	62%
- separation / divorce of parents	5%	35%	70%
- reprimand / school exclusion (one or more time)	2%	8%	33%
- dropped out of apprenticeship	9%	11%	18%
- time spent in (care, custody, psychiatry)	1%	7%	36%
- father unknown or deceased	1%	5%	15%
- mother unknown or deceased	1%	2%	6%

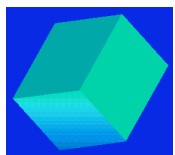


SB and depressive symptoms

Depressive symptoms



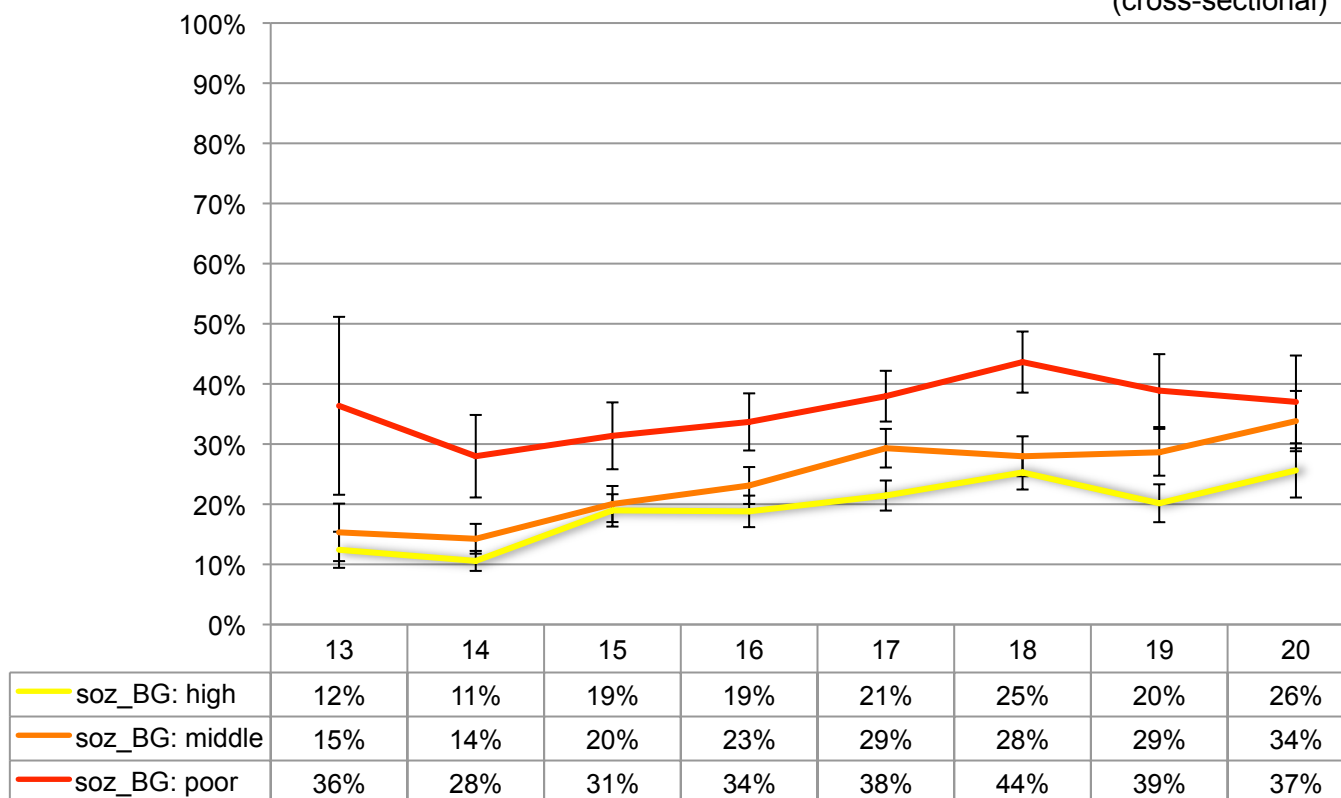
Scale: CES-D (ADS-K; Hautzinger & Bailer, 1993)
Threshold: male: 17; female: 22; range: 0-45



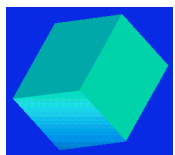
SB and anxiety

Anxiety

(cross-sectional)

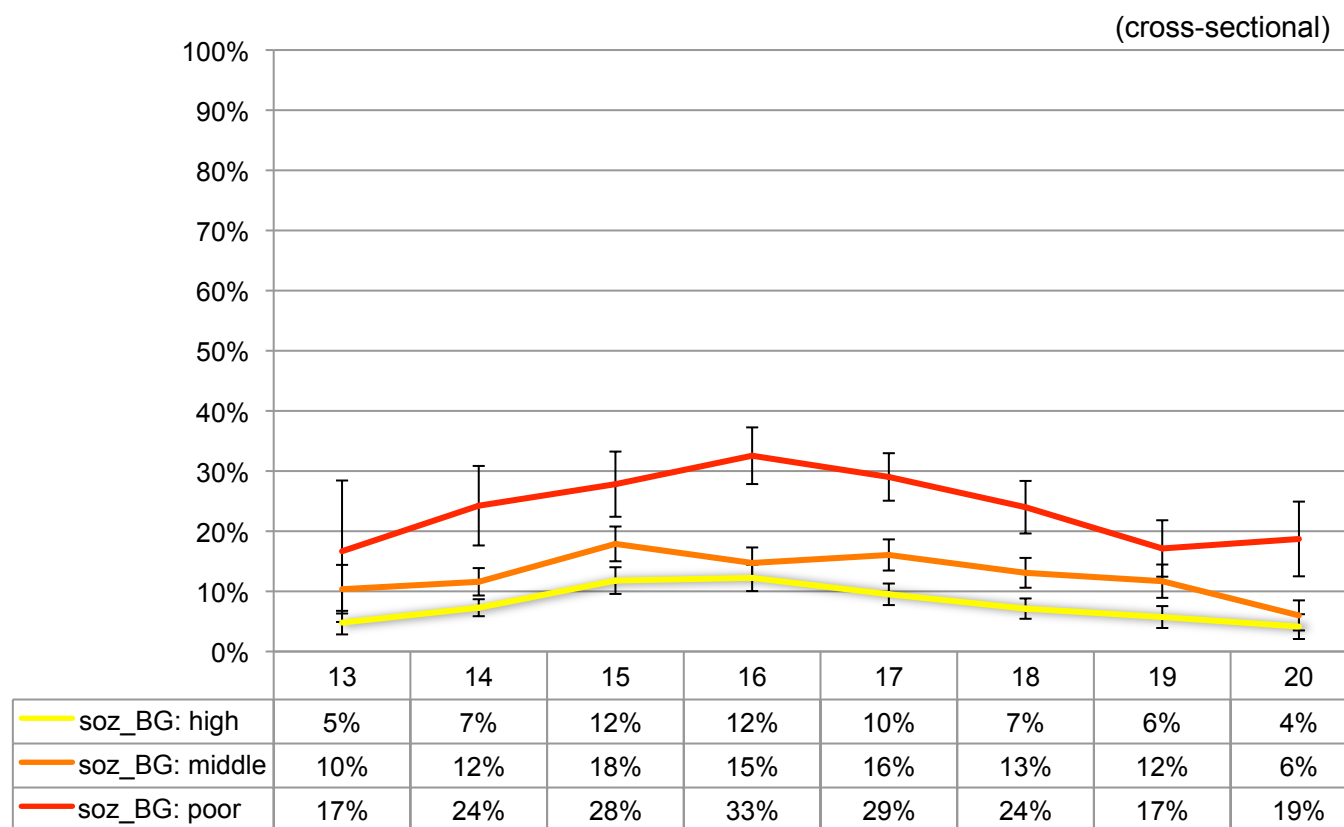


Scale: STAI trait (german version; Laux et al., 1981)
Threshold: male: 43; female: 46; range: 20-80



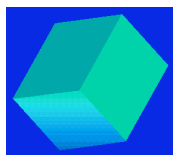
SB and delinquency

Delinquency



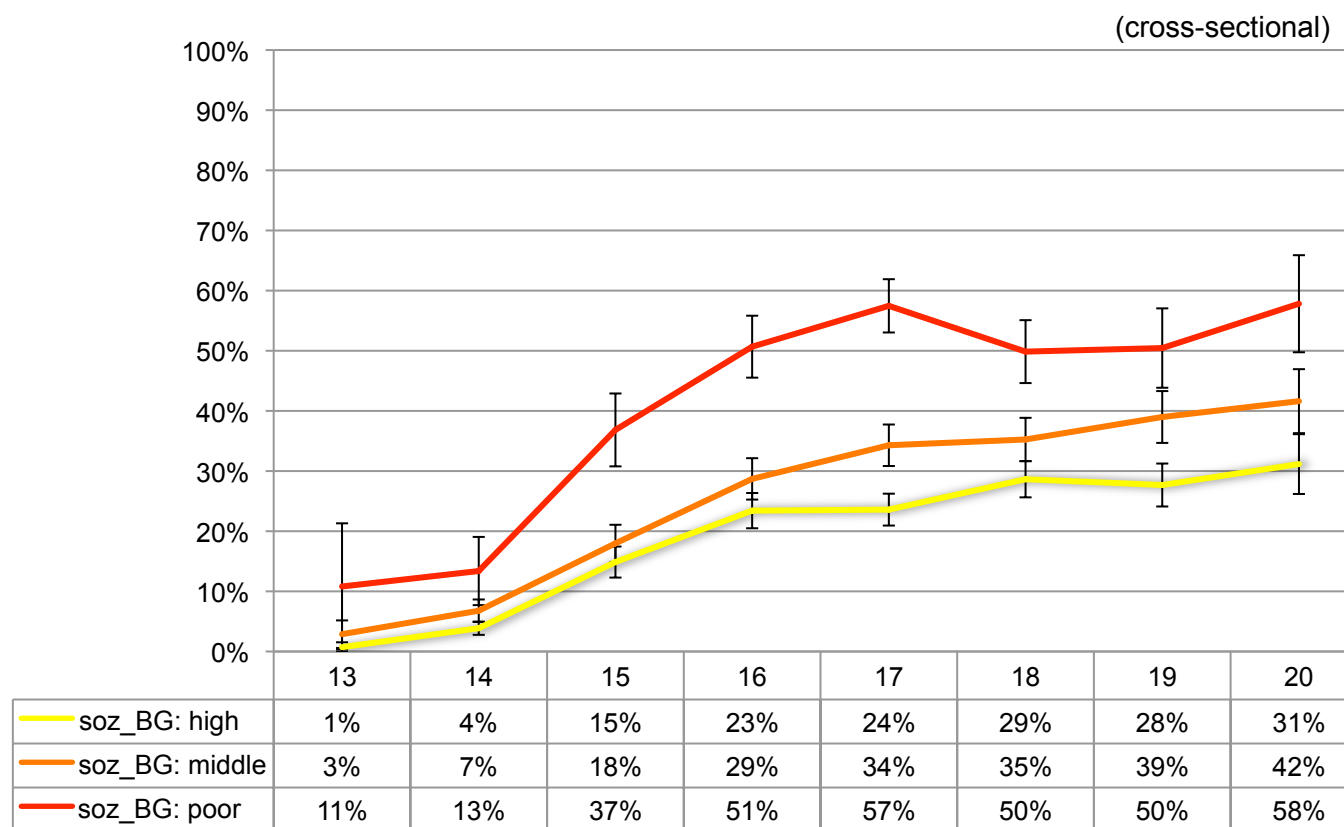
Scale: constructed for *supra-f*; items from Loeber et al., (1989)

Threshold: male: 4; female: 2; range 0-11

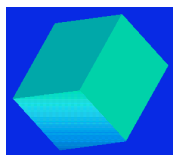


SB and tobacco use

Problematic tobacco use



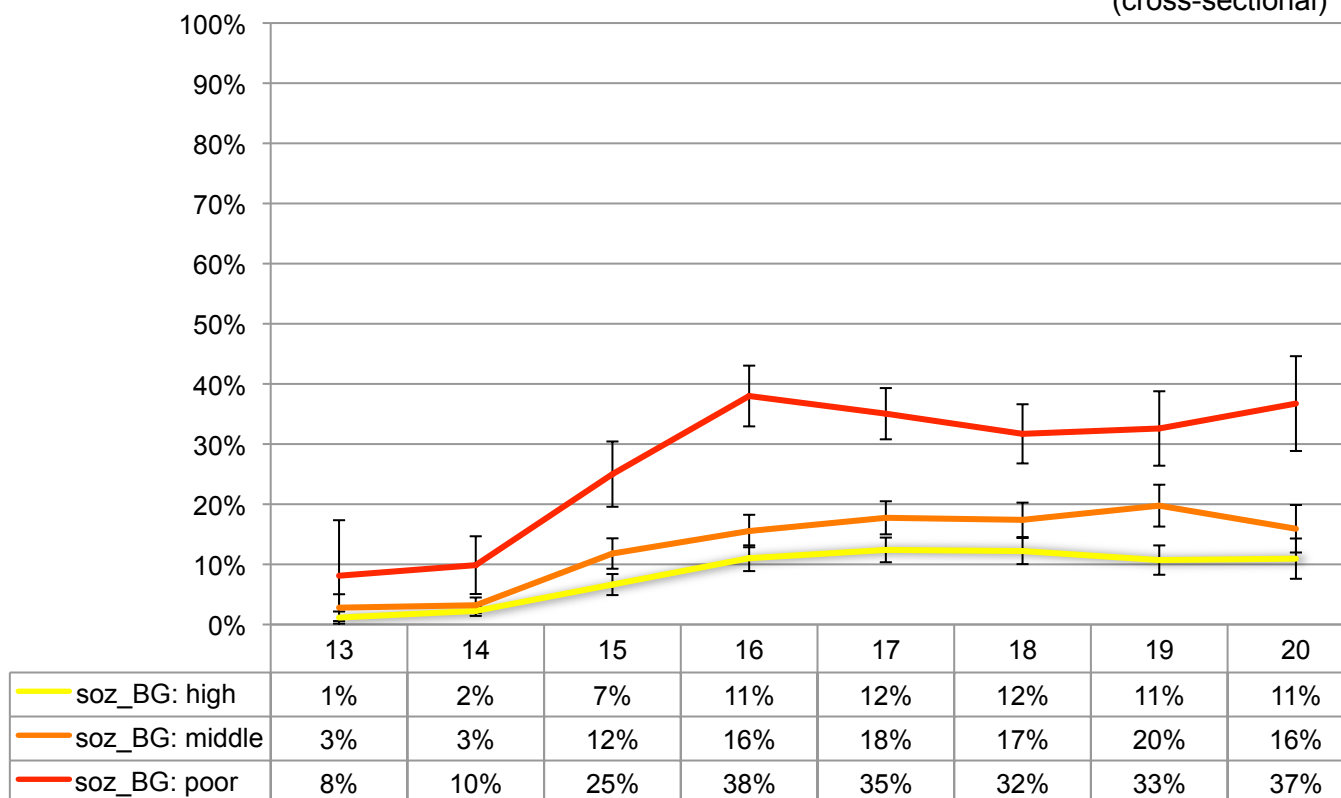
Threshold: more than 5 cigarettes a day



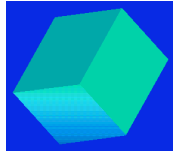
SB and cannabis use

Problematic cannabis use

(cross-sectional)



Threshold: more than 2 times a month

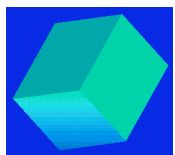


What we mean with „to be at risk“?

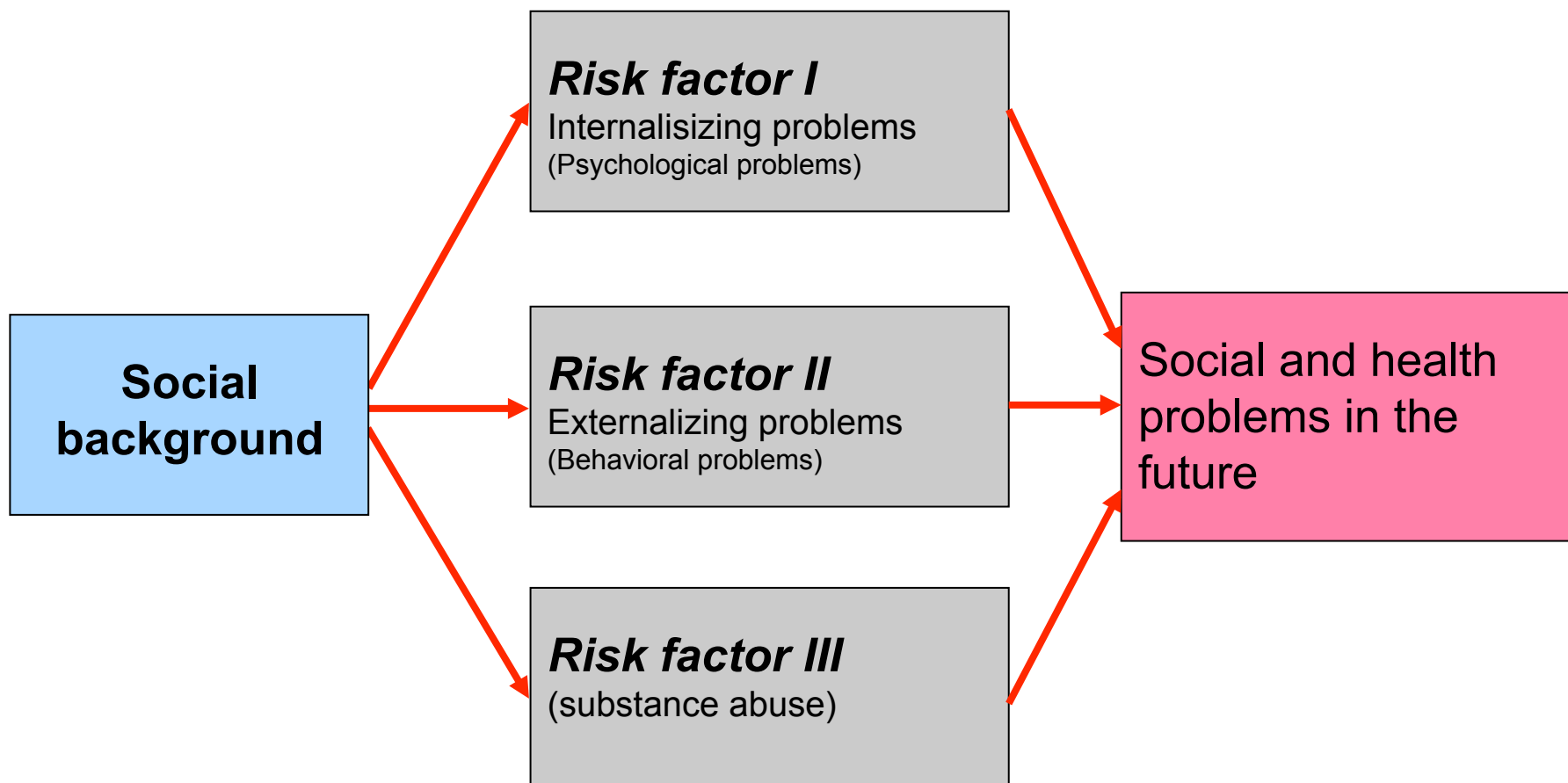
What we mean with risk?

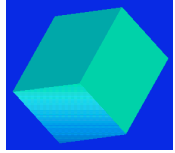
to be at risk = cumulation of risks?

The question is: can we measure risks ?



A model, which explains health problems in youths and young adults

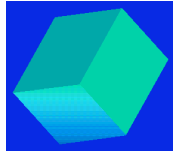




How to measure „to be at risk“ ?

What is the question

To detect youths at risks (sensitivity / specificity)



Internalizing problems

Depression (ADL-short version; Hautzinger & Bailer, 1993)

Items: 15

Scale: 0-20 (sum)

Reliability: $\alpha = .89$

Threshold: male: **17** (<20 years: **T-value** > 60; mean \pm sd: 3.12-15.62)

female: **22** (<20 years: **T-value** > 60; mean \pm sd: 2.99-20.37)

anxiety (STAI trait; Laux, Glanzmann, Schaffner und Spielberger, 1981)

Items: 20

Scale : 20-80 (sum)

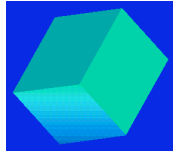
Reliability : $\alpha = .90$

Threshold: male : **43** (15-29 years: **T-value** > 60; mean \pm sd: 26.23-42.75)

female : **46** (15-29 years: **T-value** > 60; mean \pm sd: 26.82-46.48)

Internalizing problems

Present = Depression and / or anxiety are over the threshold



Externalizing problems

Aggressive-dissocial behaviour (abbreviated Version of the YSR; Achenbach, 1991)

Items: 4

Scale: 0-60 (sum; estimated value of the original scale)

Reliability: $\alpha = .64 / .63$ (12-15 years / 16-25 years)

Threshold: male: **<30** (11-18 years: T-value > 70; mean±sd: D: 6.3-23.5; USA: 7.7-26.9)

female: **<29** (11-18 years: T-value > 70; mean±sd: D: 4.5-20.3; USA: 8.2-27.2)

Alternative

Delinquency - Norm breaking behaviour (own construction for *supra-f* according to Loeber, Stouthamer-Loeber, Van Kammen and Farrington, 1989)

Items: 11

Scale: 0-11 (sum)

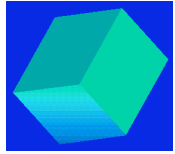
Reliability: $\alpha = .83 / .81$ (12-15 years / 16-25 years)

Threshold: male: **2** (mean+1/2 sd; mean±sd: 12-15 years: 0.00-4.00; 16-25 years: 0.00-3.57)

female: **1** (mean+1/2 sd; mean±sd: 12-15 years: 0.00-2.01; 16-25 years: 0.00-1.58)

Externalizing problems

Present = aggressive-antisocial respectively delinquent behaviour over the threshold



Substance use

Tobacco

Items: 1 (1=no use; 2=<1 cig/day; 3=1-5 cig/day; 4=6-10 cig/day; 5=11-20 cig/day; 6=>20 cig/day)
Threshold: 4 (problematic use)

Alkocol

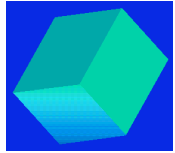
Items: 4 (1=never; 2=<1 / month; 3=1 / month; 4=1 / week; 5=several times / week; 6=every day)
Reliability: $\alpha = .89 / .78$ (12-15 years/ 16-25 years)
Threshold: 5 (problematic use)

Cannabis

Items: 1 (1=never; 2=1-2 / month; 3=3-9 / month; 4=>9 / month; 5=every day)
Threshold: 3 (problematic use)

Substance use

Present = 2 of 3 substances over the threshold



Psychosocial diagnostics

No problems: no risk

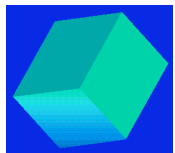
Internalizing problems:	none
Externalizing problems:	none
Substance use:	none
Social background:	high - middle - poor (irrelevant)

risk: middle

Internalizing problems :	}	just one problem
Externalizing problems :		
Substance use :		
Social background :	high - middle	

risk: high

Internalizing problems :	}	two one problem
Externalizing problems :		
Substance use :		
Social background :	poor + at least one problem	



Paths for decisions of the psychosocial diagnostics

example 1

risks:

none

Social background:

high

Internalizing problems:

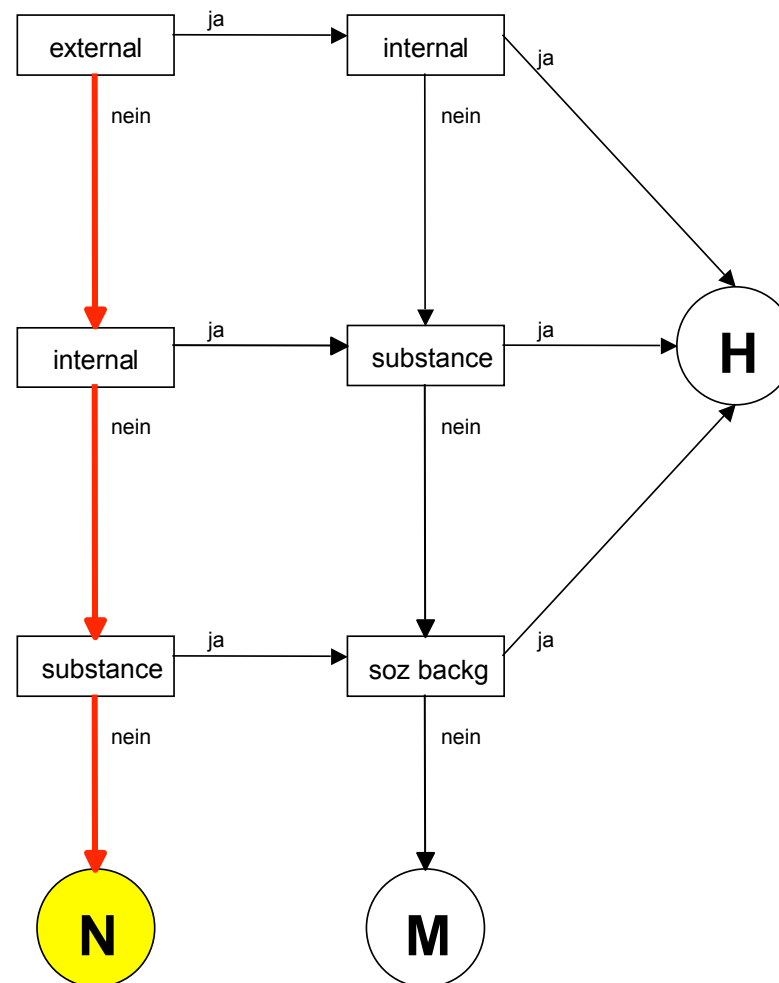
none

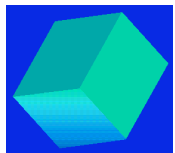
Externalizing problems:

none

Problematic substance use:

none





Paths for decisions of the psychosocial diagnostics

example 2

risk:

middle

Social background :

high

Internalizing problems

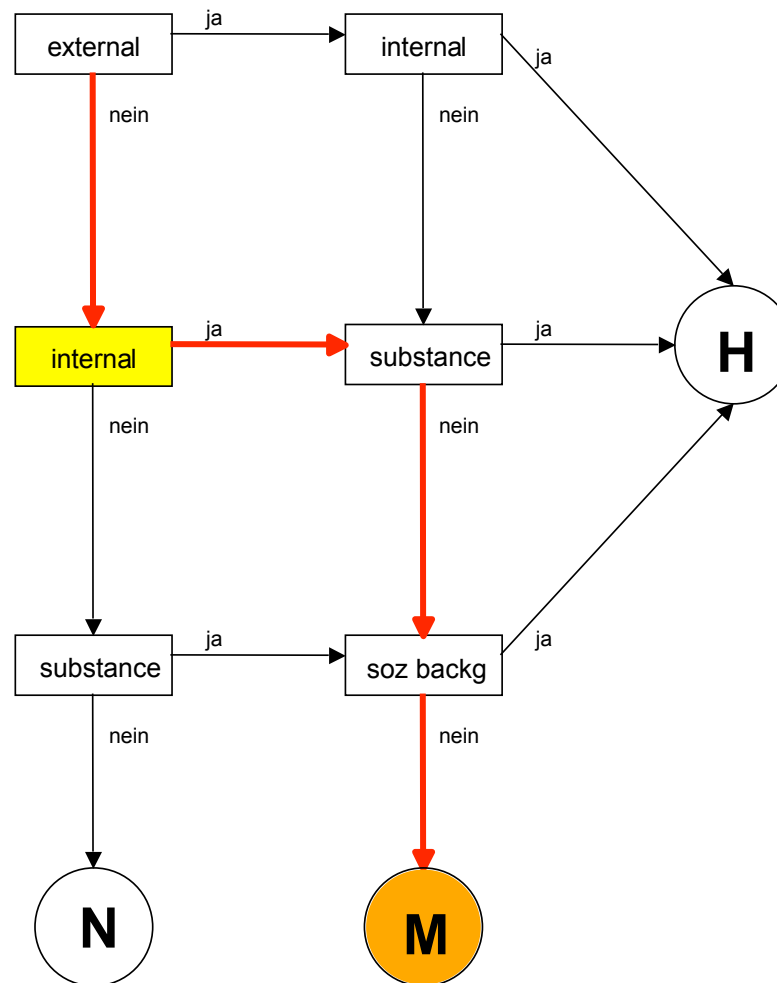
yes (anxiety)

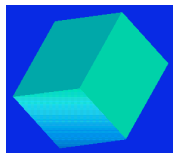
Externalizing problems :

none

Problematic substance use:

none





Paths for decisions of the psychosocial diagnostics

example 3

risk:

high

Social background :

poor

Internalizing problems :

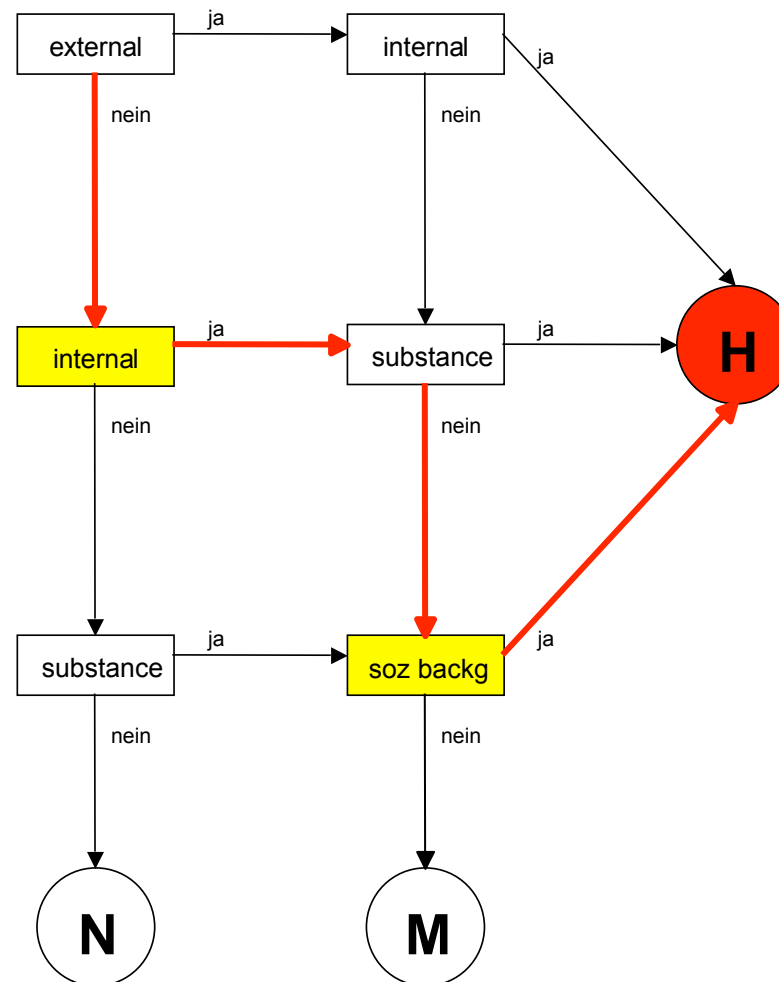
yes (Depression)

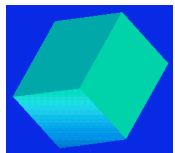
Externalizing problems :

none

Problematic substance use:

none





Paths for decisions of the psychosocial diagnostics

example 4

risk:

high

Social background :

middle

Internalizing problems :

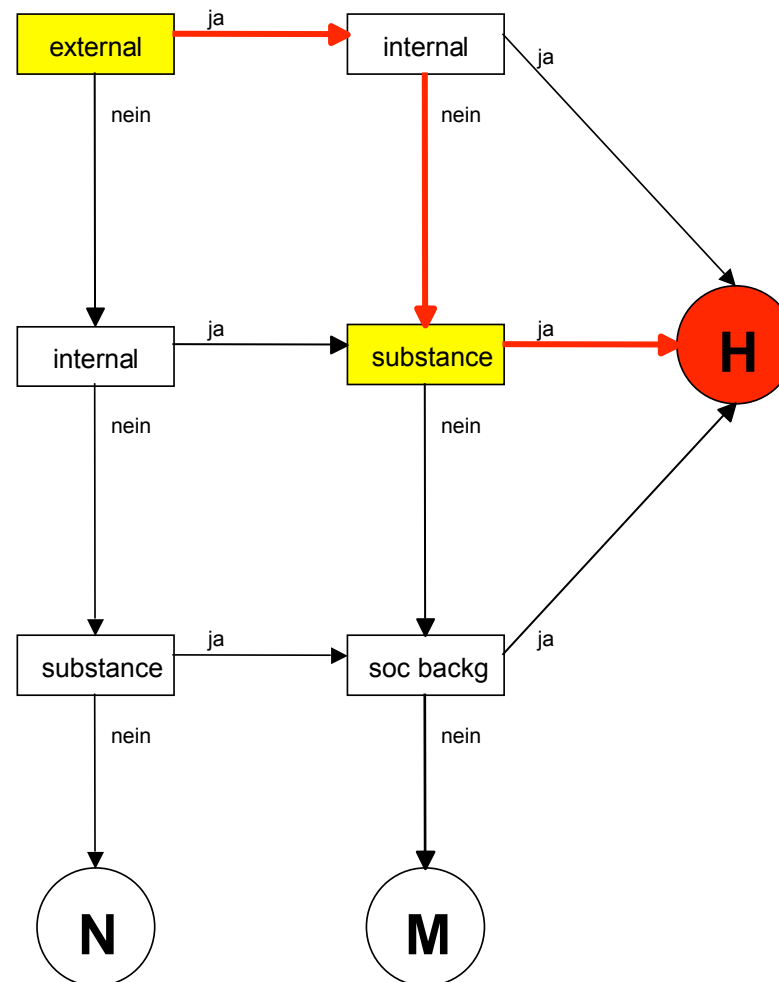
none

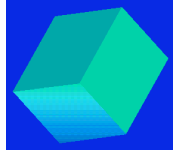
Externalizing problems :

yes (aggression)

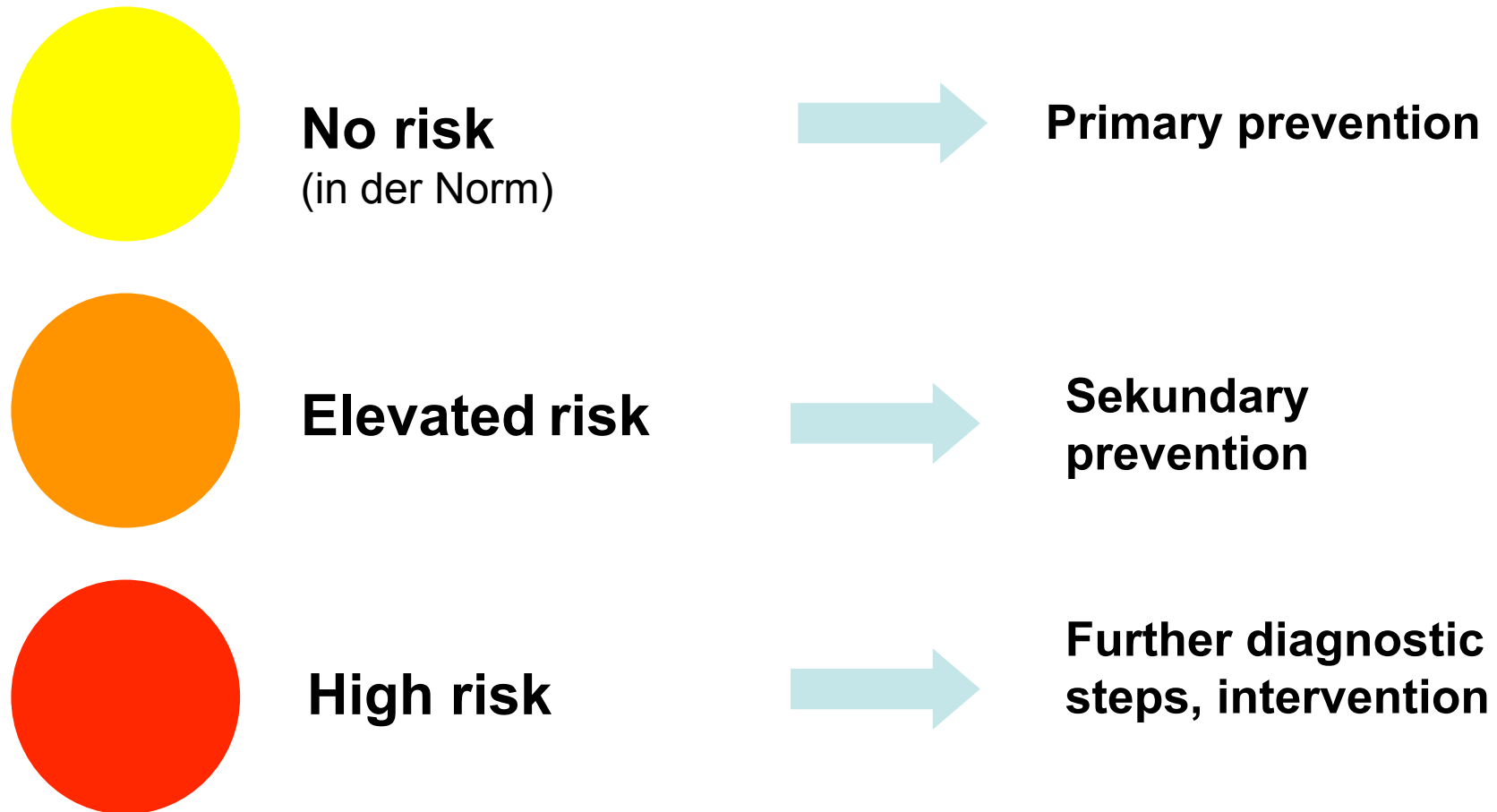
Problematic substance use:

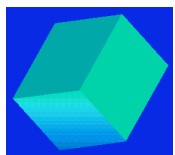
yes (tobacco, cannabis)





Die multidimensionale Gefährdungsdiagnostik





online presentation of the results (1)



Zentrum für Rehabilitations- und Gesundheitspsychologie
Centre pour la Psychologie de la Réhabilitation et de la Santé
Center of Rehabilitation and Health Psychology

[Logout](#)

19.04.2010 (13:01)

Feed-back (T1) de: PD

masculin, : 1992

Diagnostic psychosozial

Ver 2.1.0

Risque : **moyen**

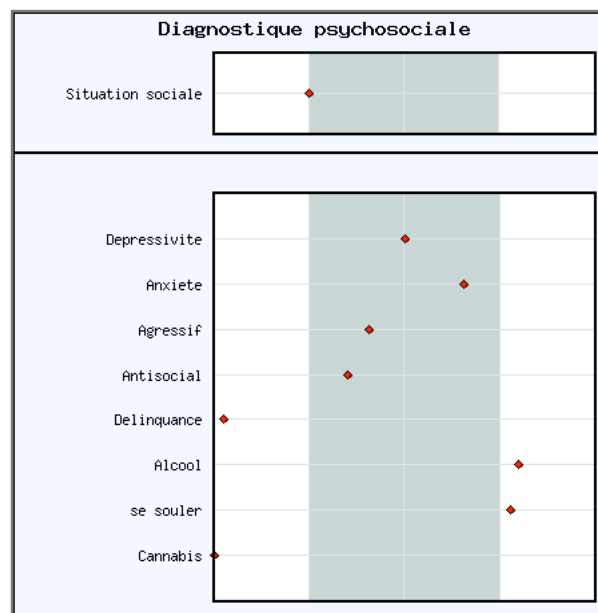
Situation sociale : **haute**

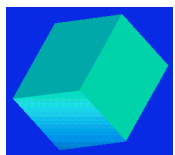
Problèmes internalisés : **aucun**

Problèmes externalisés : **aucun**

Consommation problématique de substances : **présent**

récolté le 2010-01-21 16:48:18





online presentation of the results (2)

	Valeur	Norme	Echelle
Dépressivité :	11	4-17	0-45
Anxiété :	40	26-43	20-80
Comportement agressif :	10	5-20	0-38
Comportement antisocial :	4	2-11	0-22
Délinquance :	0	0-4	0-11

	Age 1er fois	Dépendance	Valeur	Seuil	Echelle
Tabac :	16 ans	--	0	--	0-XX
Alcool :	15 ans	--	plusieurs fois par semaine	plusieurs fois/semaine	jamais-tous les jours
se soûler :	--	--	plusieurs fois par mois	plusieurs fois/mois	jamais-tous les jours

	Age 1er fois	Dépendance	Jours/mois	Seuil	Echelle
Cannabis: --	--	--	0	>2 jours/mois	0-31

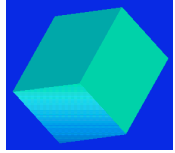
Personne N°:

Send

Reset

[Réponses aux questions](#)

[A la page initiale: diagnostic psychosocial](#)



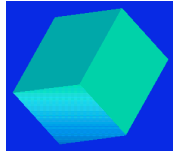
Test criteria

Objective is a test that measures an individual's characteristics in a way that is independent of rater bias.

Reliability is the extent to which an experiment, test, or any measuring procedure yields the same result on repeated trials.

Validity refers to the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. While reliability is concerned with the accuracy of the actual measuring instrument or procedure, validity is concerned with the study's success at measuring what the researchers set out to measure.

The psychosocial diagnostics achieves all criteria. The criterion-related validity for the more than 16-year olds is not yet satisfying because of the lack of a clearly defined normal population for this age group.



Test criteria: criterion-related validity

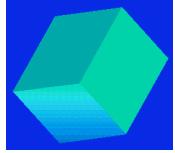
	risk	true	false	false	true			
age	criteria	positive	positive	negative	negative	sensitivity	specificity	RR
11-15	high	94	150	154	2921	.38	.95	9.88
	middle-low	140	606	180	2465	.56	.80	4.81
16-20	high	294	330	349	3056	.46	.90	7.80
	middle-low	414	1162	229	2224	.64	.66	3.46

RR = relative risk (x time more youth in the population at risk than in the normal population)

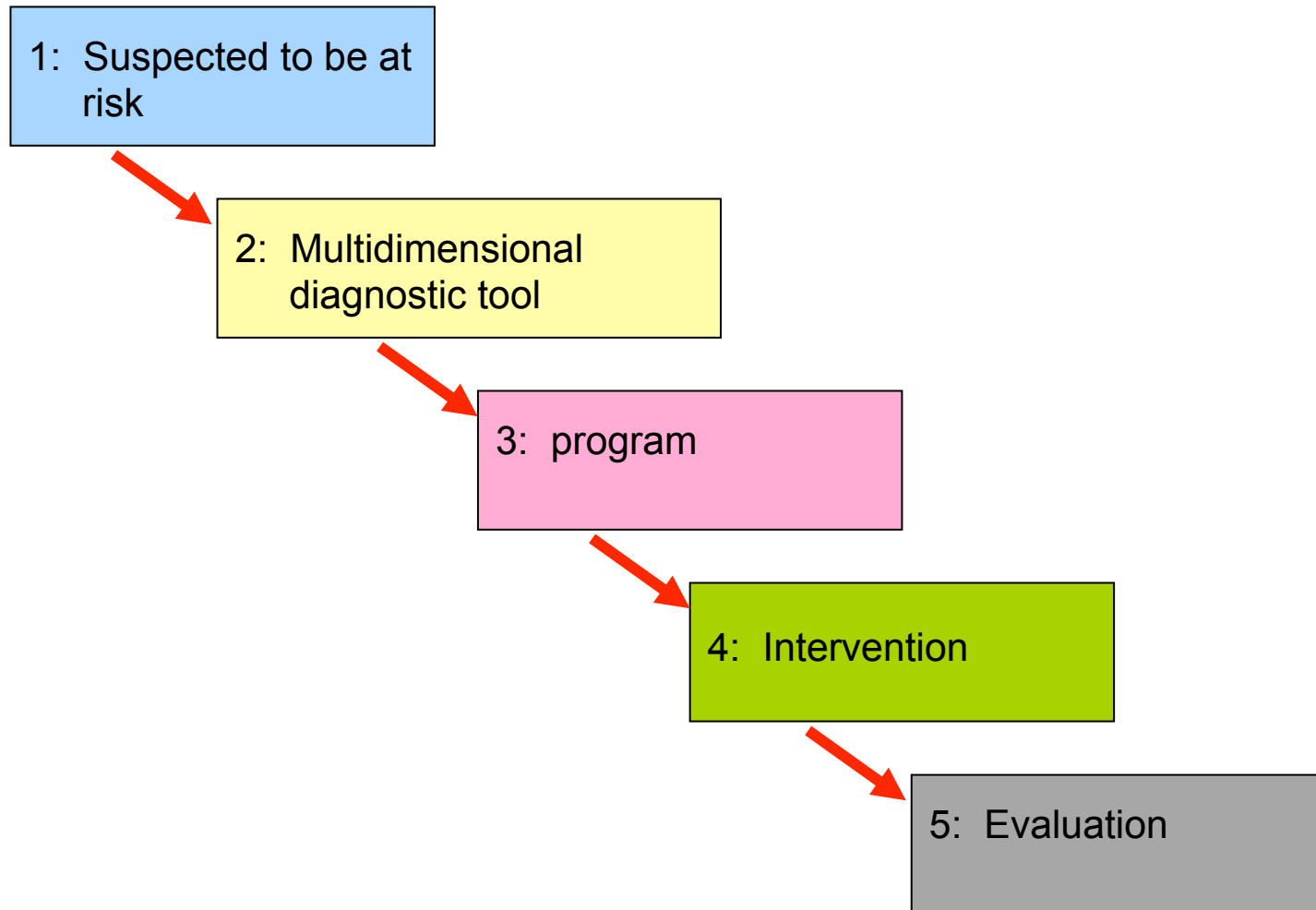
Criteria: youth is from a population at risk *supra-f* (normal population: students / vocational students)

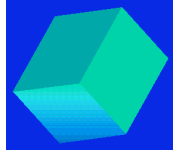
Sensitivity measures the proportion of actual positives, which are correctly identified as such (percentage of youths at risk)

Specificity measures the proportion of negatives, which are correctly identified (percentage of youths not at risk)



The five steps of secondary prevention

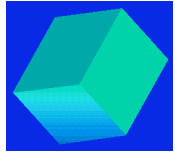




Centre for Rehabilitation and Health Psychology Research



Thank you for your attention!



Social background: Items

- Number of moves	0 = 0	1-2 = 1	3-5 = 2	6+ = 3
- number of changes of school	0 = 0	1-2 = 1	3-5 = 2	6+ = 3
- living with one parent	no = 0	ja = 1		
- number of repeated school years	0 = 0	1+ = 1		
- separation / divorce of parents	no = 0	ja = 1		
- reprimand / school exclusion	0 = 0	1+ = 1		
- dropped out of apprenticeship	0 = 0	1+ = 1		
- time spent in (care, custody, psychiatry)	no = 0	ja = 1		
- father unknown or deceased	no = 0	ja = 1		
- mother unknown or deceased	no = 0	ja = 1		