The insignificant role of social determinants of and the relationship between life skills and health literacy

Some surprising empirical results of an intervention study of the LiST- project with german students aged 15+

Zeynep Islertas; Inga Kloß; Uwe H. Bittlingmayer; Diana Sahrai; Jürgen Gerdes; Fereschta Sahrai

Galway, 18.06.2015

General Research Question

Is there a theoretical link and an empirical correlation between life skills, health literacy and social determinants?

Theoretical Assumptions

- ○ In many studies a close relationship between the social background and the availability of life skills is postulated *(Botvin/Tortu 1988; Botvin 1998; Hurrelmann 2006)*: socially underprivileged students should dispose of more limited life skills;

- ○ Furthermore, it is conceptually plausible to think of health literacy is a special part of life skills;

- ○ Therefore, socially underprivileged students should dispose of more limited health literacy.

The LiST Project

- LiST-project is a study about the evidence of a school-based life skills-intervention;

- In this context we explore life skills and health literacy of students in 22 schools, using a standardized questionnaire

Data and Background

- longitudinal intervention study

- Intervention: school based life skills promotion programme

- pre/post-follow up design

- 423 cases (1st & 2nd wave) of German students aged 15 and older

- 5 Special needs schools,

- 12 secondary modern schools and 5 middle schools

Instruments Life Skills Scales

- 5 different dimensions of Life Skills (1st & 2nd wave), measured by psychometric scales:

- Selfconfidence (7 items; BIbP)

- General self efficacy (8 items; Jerusalem/Schwarzer 1999)

- Self-esteem (11 items; according to Schütz/Sellin 2006)

- Social competencies (12 items; Kähnert 2002)

- Problem solving competencies (12 items; Sahrai/Bittlingmayer 2009)

Life Skills Scale

| How difficult are these tasks for you?	very easy	rather easily	rather hard	very hard
to complain un the case of being treated unfairly				
to ask your teacher something that you didn't understand during class				
to say something nice to your friend				
to ask someone for help when you have a problem				
to talk in front of your own class				
to say no to your parents, when they ask you to do something that you don't want to				
to ask someone for a favor				
to comfort someone when they are upset				
to represent a different point of view/opinion that your friends				

Health Literacy Scale

	On a scale from very easy to very difficult, how easy would you say it is to:	Very easy	Fairly easy	Fairly difficult	Very difficult	DK (SPONTANEOUS)
12	…judge if the information about illness in the media is reliable? *(Instructions: TV, Internet or other media)*	1	2	3	4	5
28	…judge if the information on health risks in the media is reliable? *(Instructions: TV, Internet or other media)*	1	2	3	4	5
29	…decide if you should have a flu vaccination?	1	2	3	4	5
31	…decide how you can protect yourself from illness based on information in the media?	1	2	3	4	5
39	…understand information in the media on how to get healthier? *(Instructions: Internet, newspapers,magazines)*	1	2	3	4	5
41	…judge how where you live affects your health and well-being? *(Instructions: Your community, your neighbourhood)*	1	2	3	4	5
43	…judge which everyday behaviour is related to your health? *(Instructions: Drinking and eating habits, exercise etc.)*	1	2	3	4	5
46	…influence your living conditions that affect your health and well being? *(Instructions: Drinking and eating habits, exercise etc.)*	1	2	3	4	5

Independent Variables for life skills and health literacy:

○ Age

○ Gender

○ social background (educational achievement and occupational status of parents)

○ migration background (nationality, own migration history, language at home, nationality of parents)

○ school type
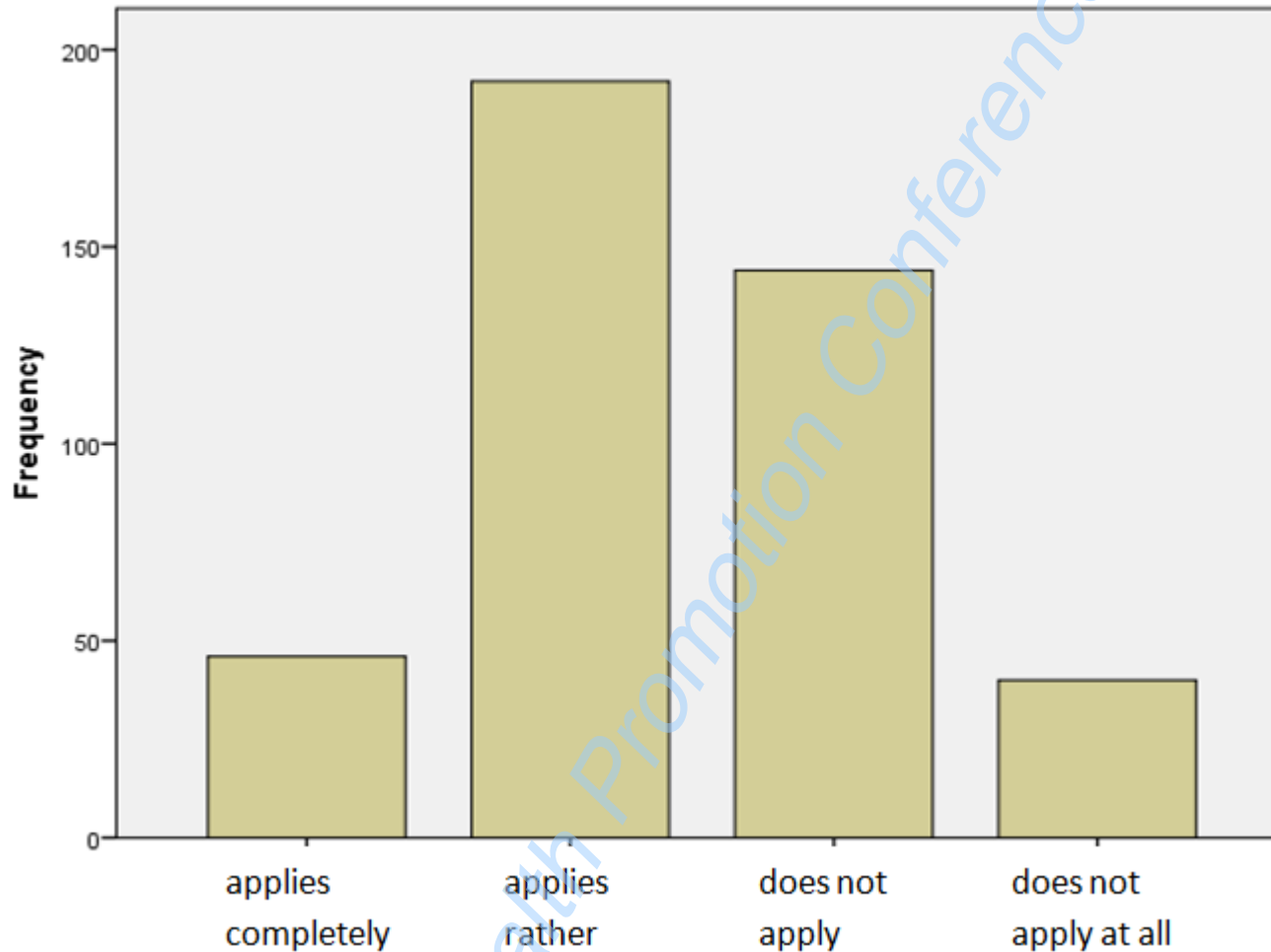school performance (self reported grade in maths, German language, English language, sports)

Key findings „Self Confidence"
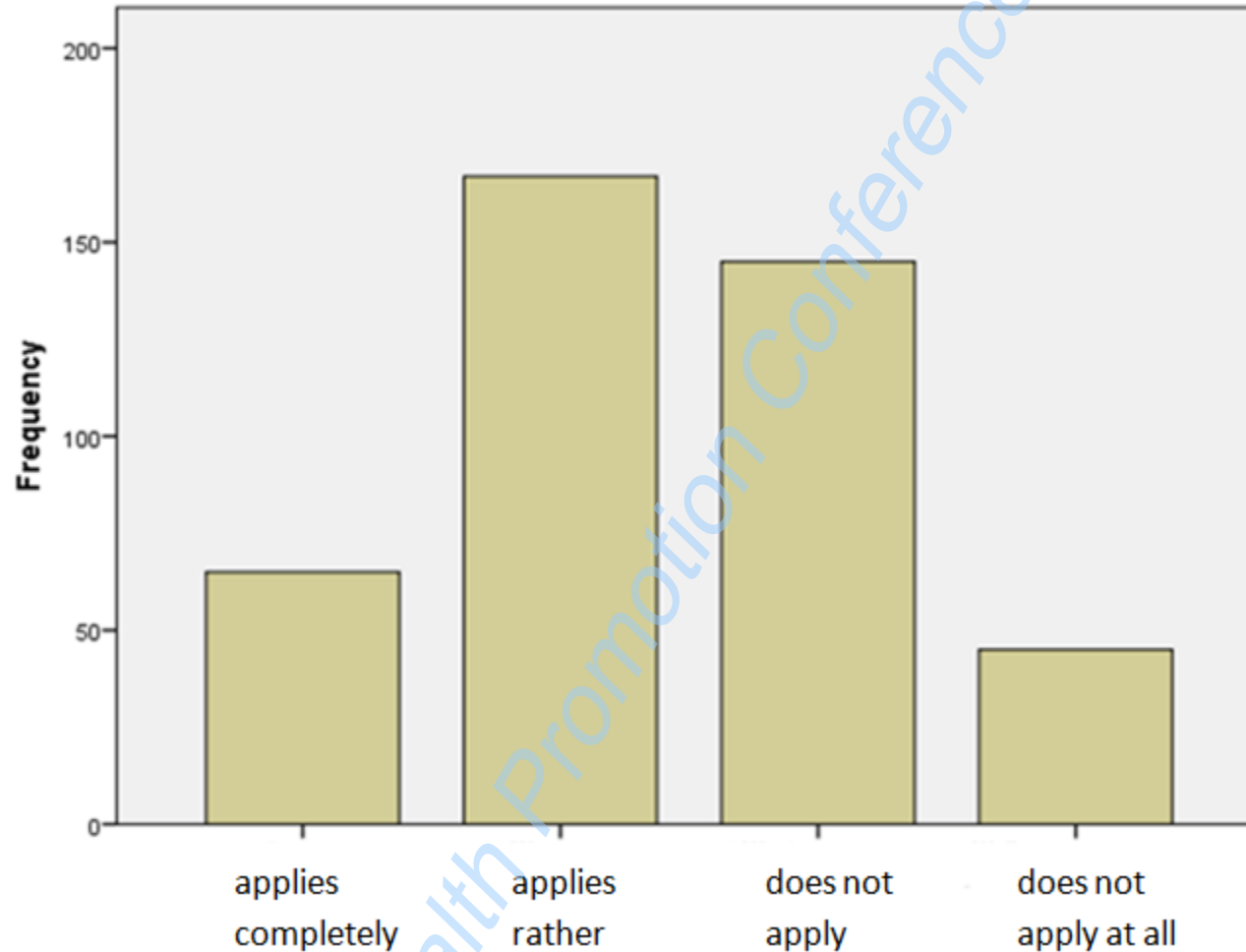
Question:

It doesn't matter for me when people talks about me behind my back

Health Promotion Conference 2015. Health Literacy: Research, Policy & Practice

Key Findings „Self Confidence"

Question:
Sometimes i am little bit reserved even though it would be better to be more eloquent

# Self- efficacy and social determinants

	Alter (rek)	**Gender**	Staats-angehöri g-keit	birthplace	birthplace parents	Language at home	Occupatio nal status parents
Faktor self-efficacy	n.s.	**0.000**[***]	n.s.	n.s.	n.s.	n.s.	0.010[*]

	Educational achievement mother	Educational achievement father	School type	Math grade	German language grade	English language grade	Sport grade
Faktor self-efficacy	n.s.	0.067[(+)]	0.10[(+)]	0.010[*]	n.s.	0.10[(+)]	0.024[*]

Above all 5 life skills dimensions there are correlations, but very weak:

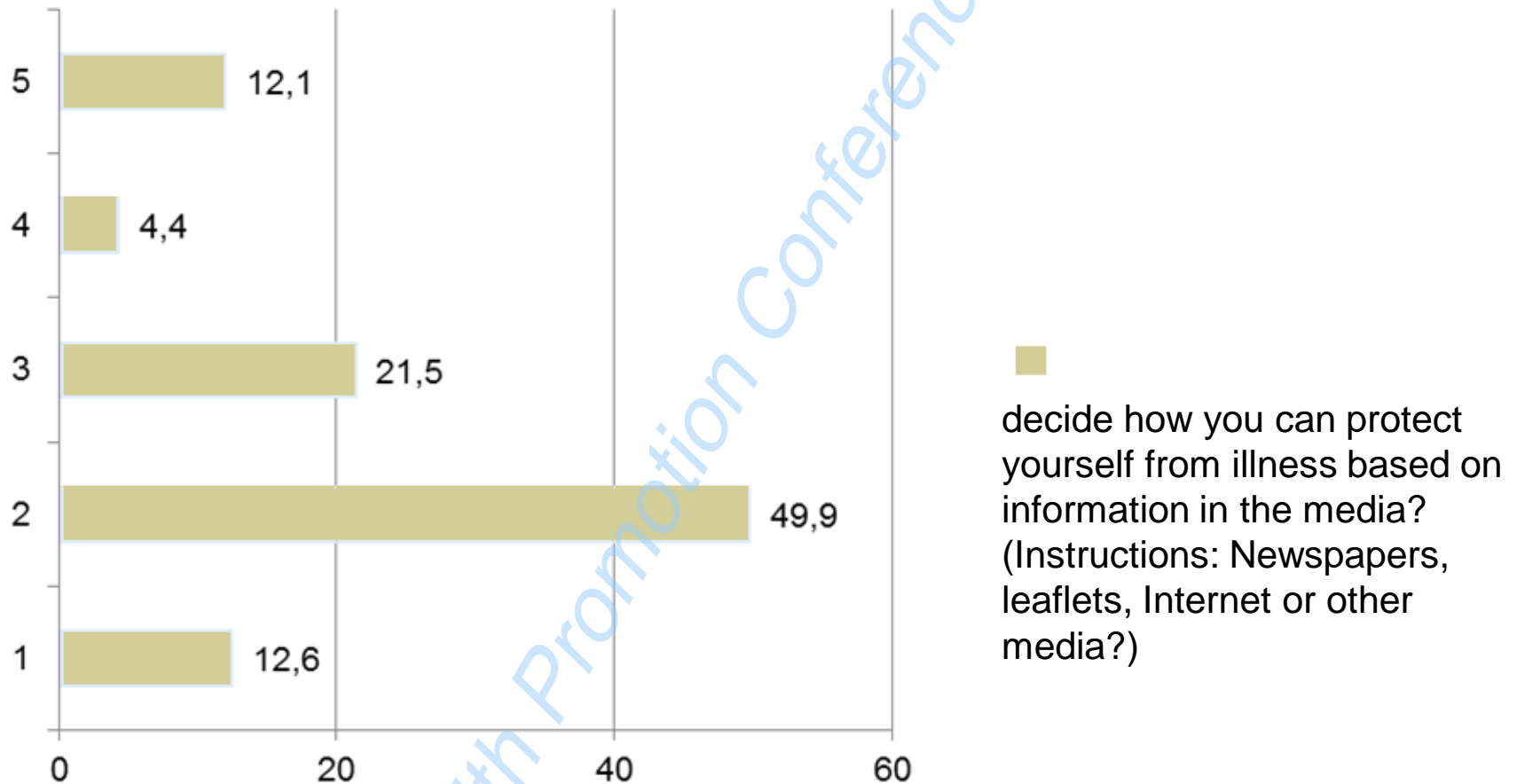# most of all there are gender effects and there is – to a lesser extent – an effect of the math' grade

Key findings „Health Literacy"
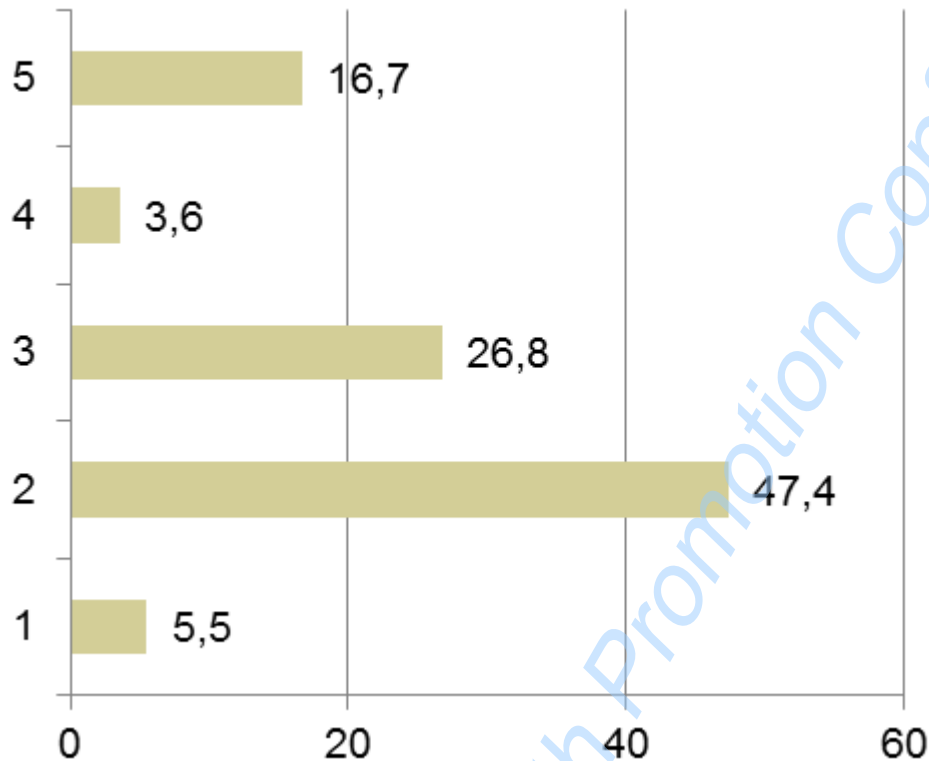
... judge if the information on health risks in the media is reliable?
(Instructions: TV, Internet or other media)

Key findings „Health Literacy"

decide how you can protect yourself from illness based on information in the media? (Instructions: Newspapers, leaflets, Internet or other media?)

Key findings „Health Literacy"

Reliability Statistics

Cronbachs Alpha	Cronbachs Alpha Based on Standardized Items	N of Items
.826	.825	8

Key findings „Health Literacy"

Independent Samples Test

		Levene's Test for Equality of Variances		t-te		
		F	Sig.	t	df	Sig. (2-tailed)
Literacy	Equal variances assumed	2.686	.102	.083	419	.934
	Equal variances not assumed			.083	417.385	.934

Gender & Health Literacy

Key findings „Health Literacy"

ANOVA

Scale Health Literacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2.453	2	1.227	1.228	.294
Within Groups	419.547	420	.999		
Total	422.000	422			

Schooltyp & Health Literacy

Key findings „Health Literacy"

ANOVA

Scale Health Literacy

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.132	4	1.283	1.287	.275
Within Groups	416.868	418	.997		
Total	422.000	422			

Birthplace from the parents & Health Literacy

Key findings

o The gender- specific effects are striking regarding life skills

o The performance in math is significant regarding life skills

o There are no social determinants at all regarding health literacy of students aged 15+

Discussion

- o Very little social determinants of health literacy
- o Neither gender, nor the social background of the students nor the migration deliever singificant correlations

- o What does that mean?

**Health Promotion Conference 2015. Health
Literacy: Research, Policy & Practice**