university of
groningen

Targeting **persistent cases** of bullying with network diagnostics

Gijs Huitsing

g.e.huitsing@rug.nl
www.rug.nl/staff/g.e.huitsing

University at Buffalo
Alberti Center
for Bullying Abuse Prevention

Today's program

1. Welcome and introducing ourselves

2. The problem of persistent victimization

3. Bullying from a social network perspective

4. Facilitating recognition of victims with social network diagnostics

1 Welcome and Introduction

2020

Congratulations to Dr. Gijs Huitsing ↗, recipient of the 2020 Early Career Award!

2019

Congratulations to Dr. Chunyan Yang, ↗ recipient of the 2019 Early Career Award!

2018

Congratulations to Dr. Stephanie Godleski ↗, recipient of the 2018 Early Career Award!

2017

Congratulations to Dr. Jun Sung Hong ↗, recipient of the 2017 Early Career Award!

2016

Congratulation to Dr. Lyndsay Jenkins ↗, recipient of the 2016 Early Career Award!

2015

Congratulations to Dr. Chad A. Rose ↗, recipient of the 2015 Early Career Award!

2014

Congratulations to Dr. Jennifer Greif Green ↗, recipient of the 2014 Early Career Award!

2013

Congratulations to Dr. Paul Poteat ↗, recipient of the 2013 Early Career Award!

2012

Congratulations to Dr. Maria Ttofi ↗, recipient of the 2012 Early Career Award!

2021 Early Career Award Recipient

This award recognizes **Ann Farrell, PhD,** an individual who has made exemplary scholarly contributions to the field of bullying abuse prevention and conducted research that has the potential to influence practice and policy.

1 Welcome and Introduction
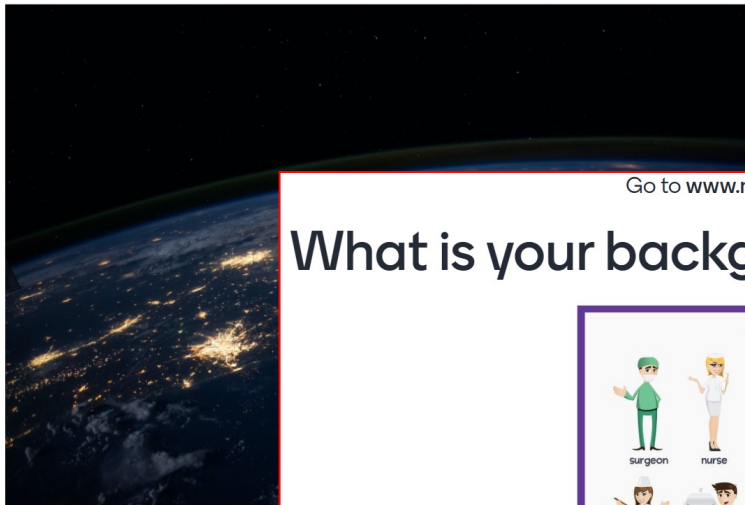
1 Welcome and Introduction

1 Welcome and

1 Welcome and Introduction

Go to www.menti.com and use the code **4919 1493**

Where are you from?

Mentimeter

Go to www.menti.com and use the code **4919 1493**

What is your backgound?

Mentimeter

Occupations in English

surgeon nurse doctor businessman secretary painter detective

chef waiter bartender pilot flight attendant teacher astronaut

architect handyman construction worker bellhop police officer boxer mailman

Hear this vocabulary pronounced and get free vocabulary puzzles at OysterEnglish.com

Who is in my group?

- Fundamental for smooth group formation
- Rooted in contact theory (Allport) & stages of group formation (Tuckman)
- "Unknown makes unloved"
- Facilitating 'forming' and 'norming' phase

- Breakout groups: *Please tell about a hidden talent of yourself (you're proud of) that may be unknown to others* (5 min.)
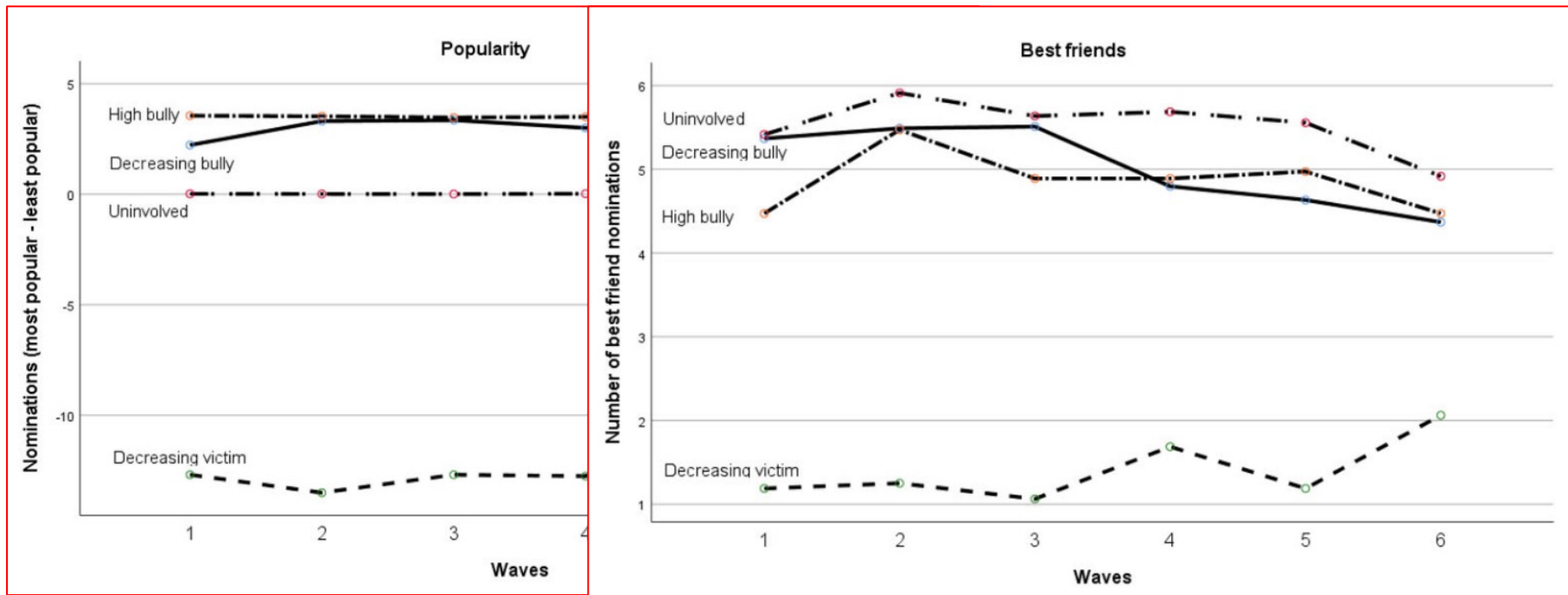*Are there others in your group that share this talent?*

Integrated in GRiPP

› Relative social position stable and determined at the start of first 2 years of secondary education

(Elsje de Vries)

Today's program

1. Welcome and introducing ourselves

2. The problem of persistent victimization

3. Bullying from a social network perspective

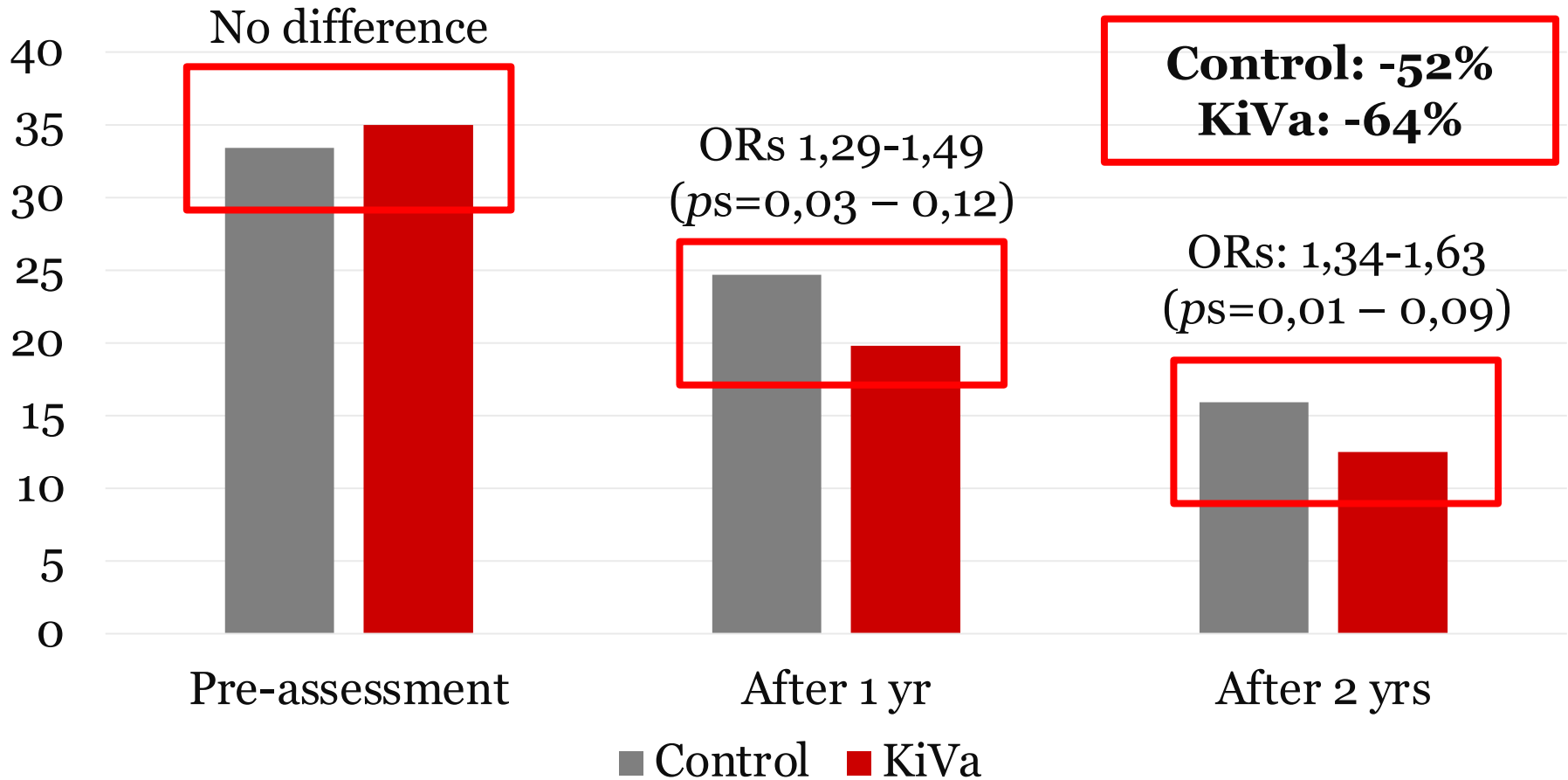4. Facilitating recognition of victims with social network diagnostics

First the good news

- Implementation of in NL

→ Training for teachers, manualized theme lessons, indicated actions, monitoring, meetings and education

- RCT in 2012-2014, thereafter national rollout (N=400/6000 schools, 7%)
  - 66 intervention / 33 control schools
  - Grade 3/4 in 2012-2013, 4/5 in 2013-2014

Percentage of victims

No difference

ORs 1,29-1,49
(ps=0,03 − 0,12)

**Control: -52%
KiVa: -64%**

ORs: 1,34-1,63
(ps=0,01 − 0,09)

Pre-assessment   After 1 yr   After 2 yrs

■ Control ■ KiVa

Cost-benefit analysis

› Expected revenues > Costs KiVa

› €1 KiVa → **€4,04 – €6,71**

› Conservative estimation
  • Only lifetime income reduction of victims
  • Maximum effort schools

Cost-benefit Analysis of the KiVa Anti-bullying Program in the Netherlands

Gijs Huitsing[1,2] · Simone Iris Barends[1] · Joran Lokkerbol[3]

Abstract
This study performs a cost-benefit analysis of the implementation of the KiVa anti-bullying program in the Netherlands. Specifically, it addressed whether the expected benefits of KiVa for victims in terms of lifetime income are greater than the costs that are made for implementing the program. The KiVa intervention was examined in a randomized controlled trial in the Netherlands in 2012–2014 in 98 Dutch primary schools (target grades US-level 3–4, 8 to 9 years old). A model-based approach was applied to the effects for the expected income for prevented victims, which is a long-term outcome that can be quantified. The estimated costs and benefits of implementing KiVa were used to estimate the return-on-investment (ROI) that indicated the expected benefits per euro invested. Investing in KiVa in the Netherlands generated an ROI of €4.04–€6.72, indicating that it is good value for money to invest in KiVa. The chosen estimates in this study were deemed conservative; on the cost side, it was assumed that schools maximally implement KiVa (thus, maximum costs), and on the benefit side, only the expected income effect for victims was included to the model. Quantifying and incorporating other outcomes (i.e., depression, anxiety, psychiatric problems, not only for victims but also for bullies, bystanders, parents, teachers) may further increase the ROI for this intervention.

Keywords Anti-bullying program · Bullying victimization · Cost-benefit · KiVa · Prevention · Return-on-investment
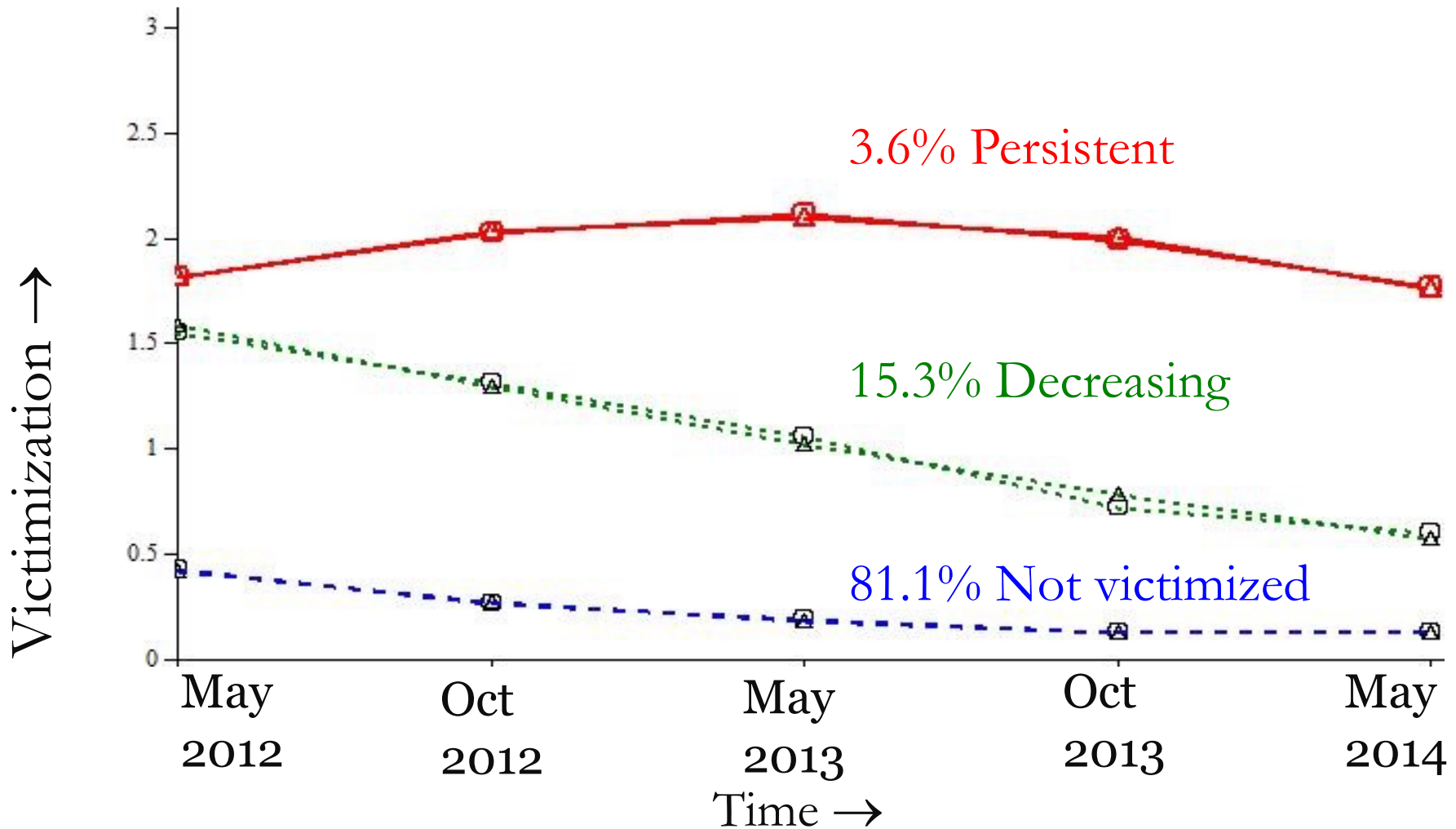
Long-term effects

Percentage victims

1) KiVa-effect

2) Control schools

3) Remaining effect
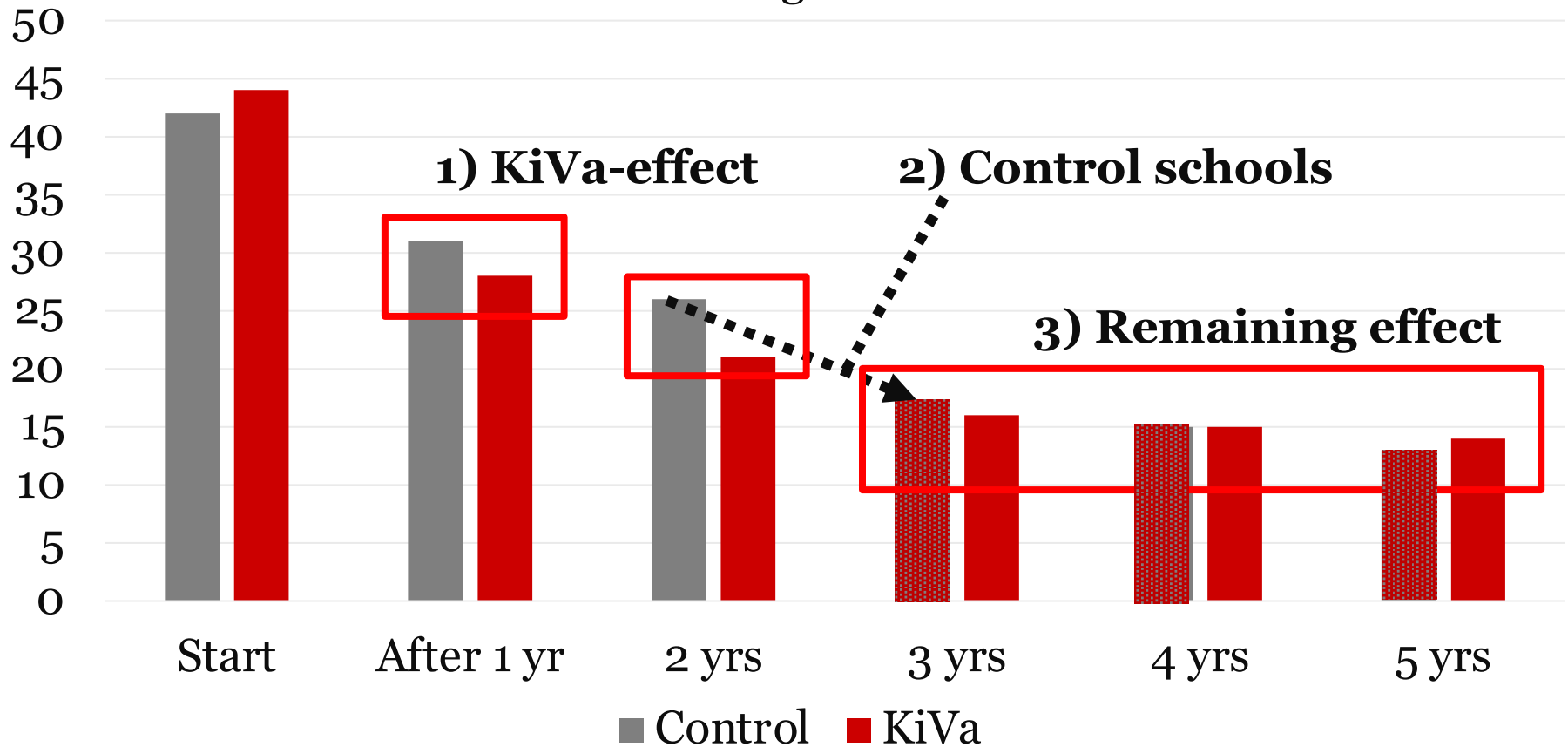
Effective for most children   … but some remain victimized

'Persistent victims'
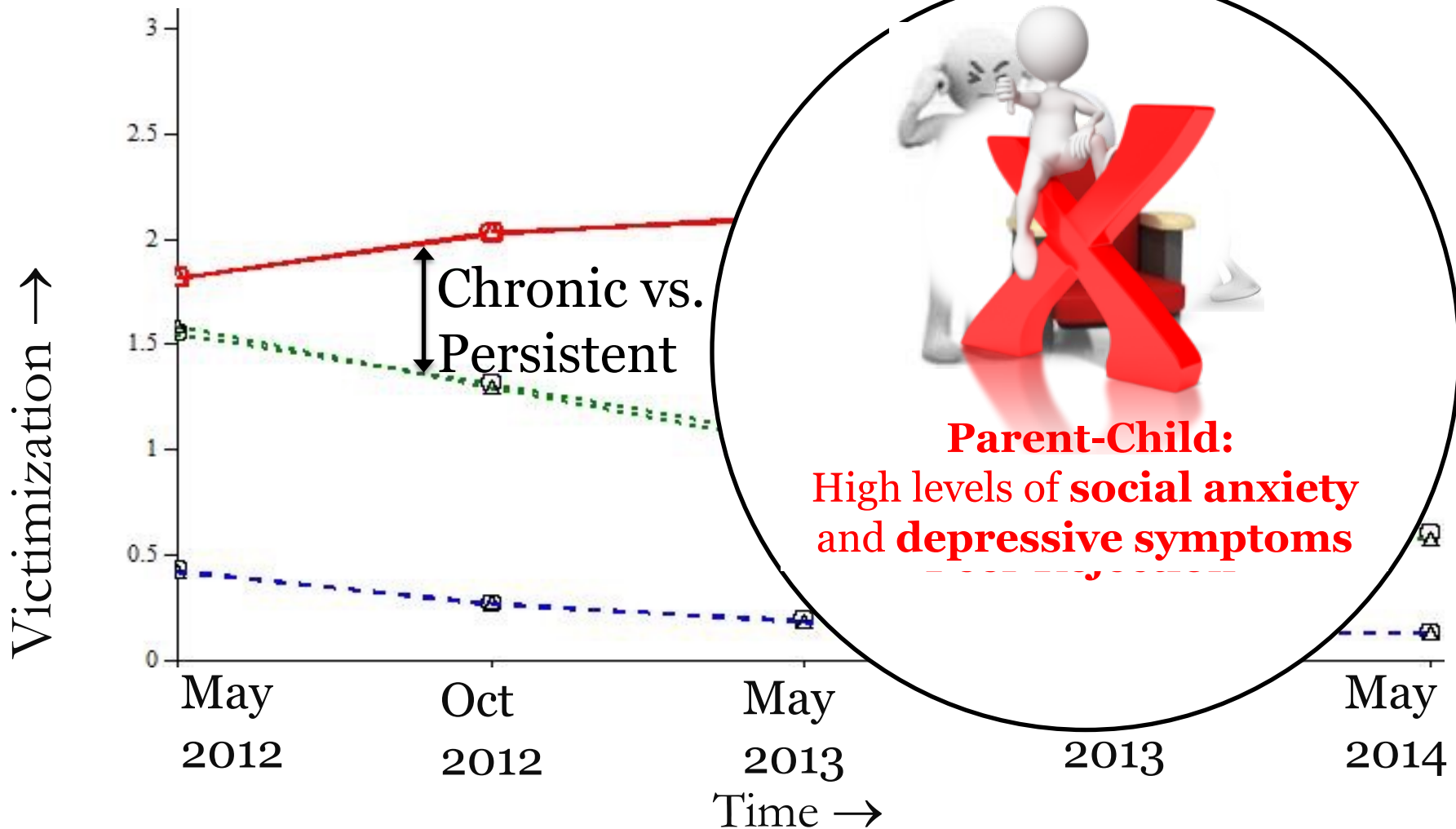(Tessa Kaufman, PhD)

Victimization trajectories in KiVa-schools

Victimization trajectories in KiVa-schools

Social problems

3.6% Persistent

15.3% Decreasing

Victims vs. Non-victims

81.1% Not victimized

Victimization →

Time →

May 2012 · Oct 2012 · May 2013 · Oct 2013 · May 2014

Victimization trajectories in KiVa-schools

Chronic vs. Persistent
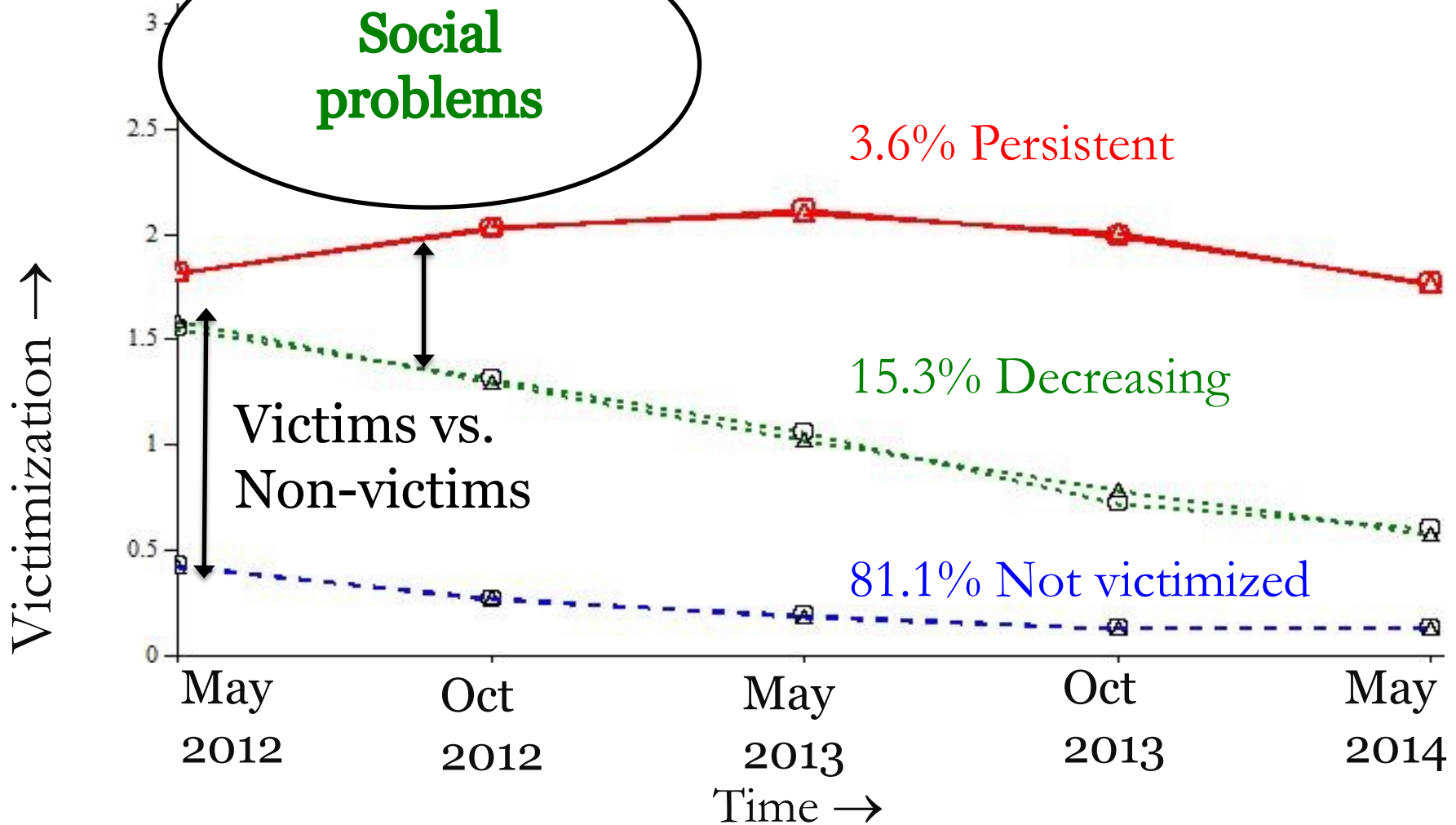
Parent-Child:
High levels of **social anxiety** and **depressive symptoms**

... some remain victimized

'Persistent victims'

Potential consequences?

From the victims' perspective

› **Before and after**
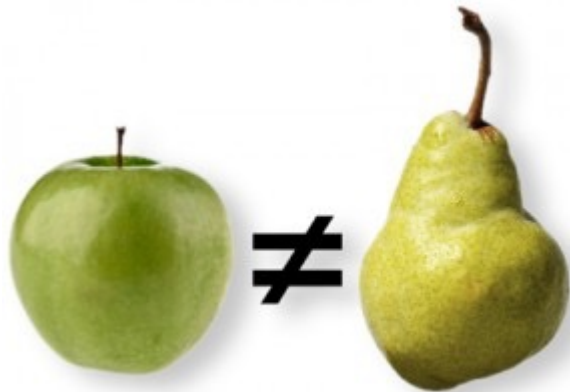- Me and the others
  (*social comparison theory*)

› **Being the only one**
- Others are helped …
- 'It must be me"
  (*attribution theory)*

From peers' perspective

Being the 'social misfit' (*person-group dissimilarity model*)

Less support: victims usually defend each other

After implemening KiVa, less others to share their plight (*similarity theory*)
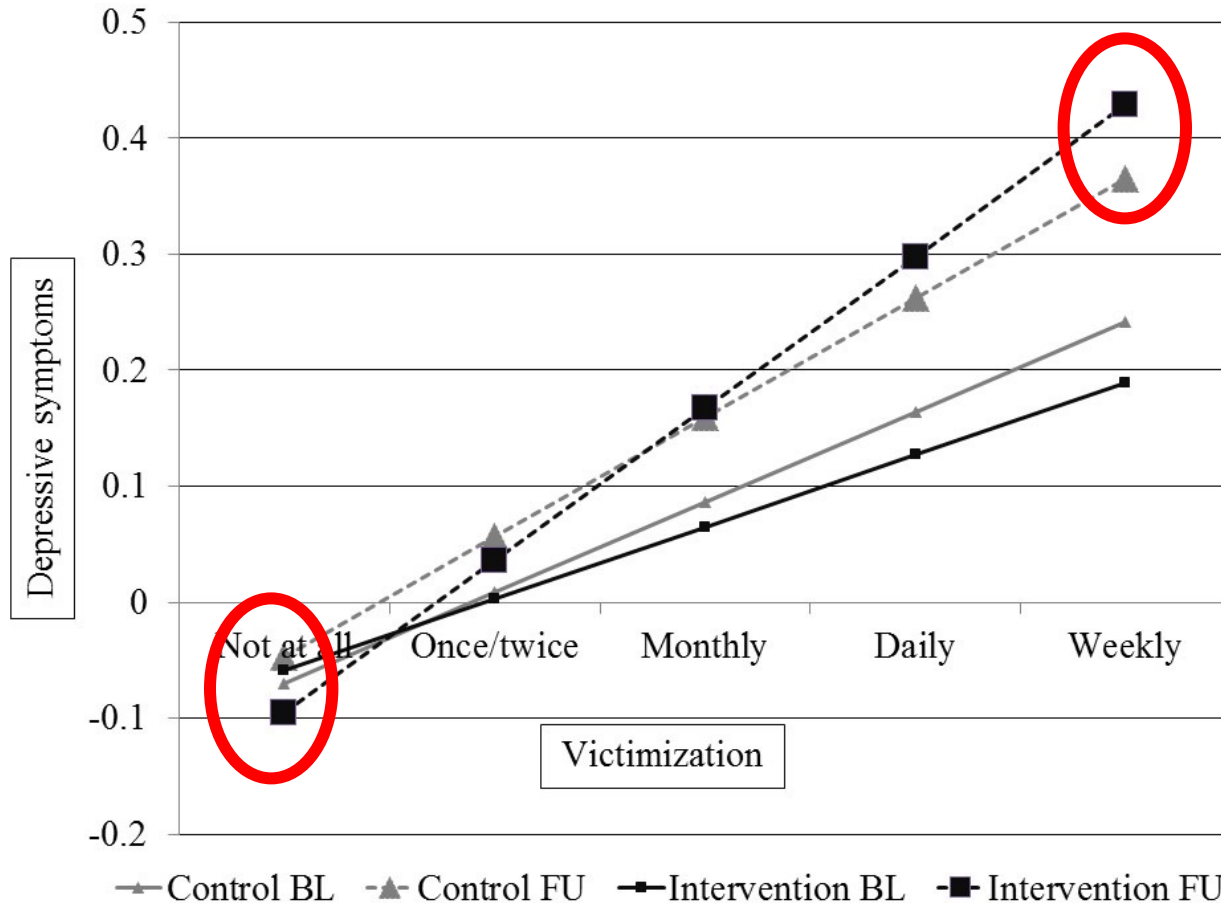
Healthy context paradox

Paradoxically, the success of an anti-bullying intervention would create a social environment that strongly emphasizes reduction of victimization, and, therefore, the success is detrimental for some children who are remaining (or new) victims.
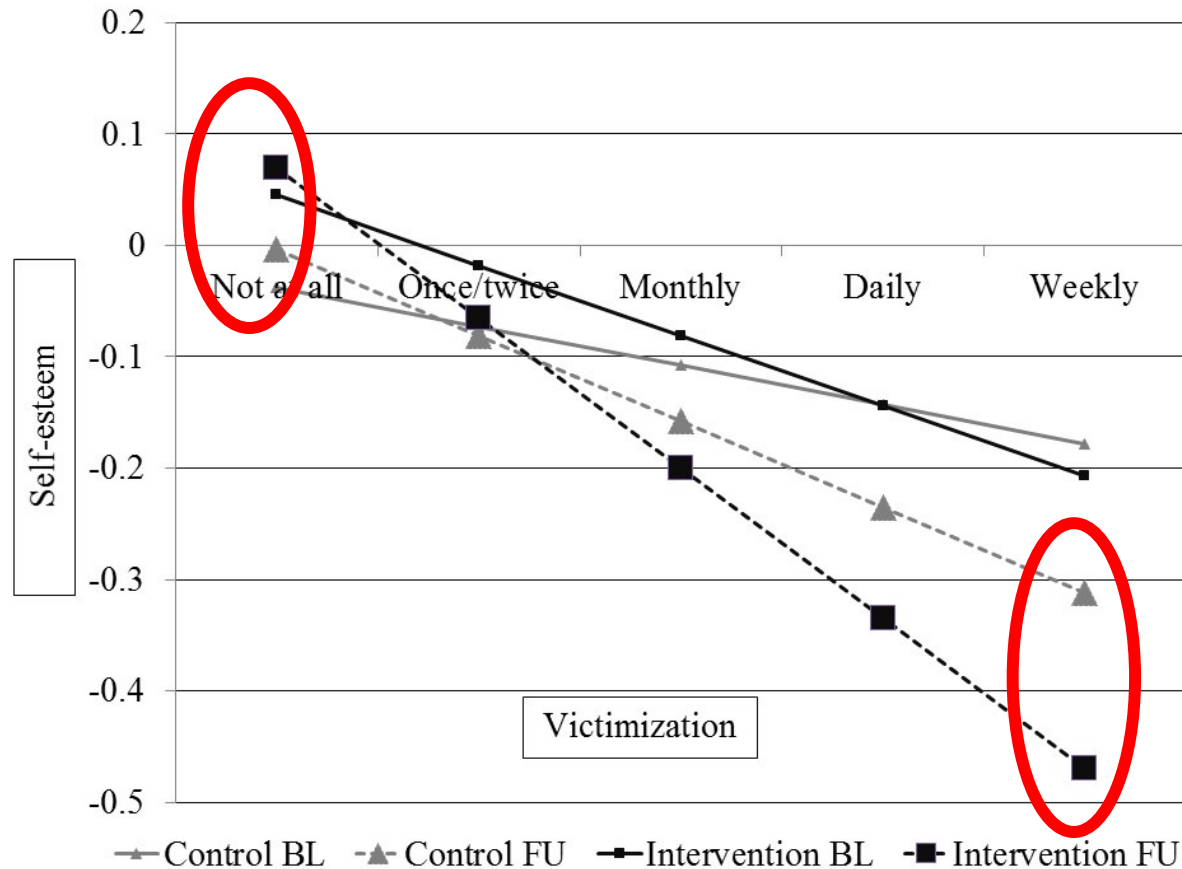
Victims' depressive symptoms:
KiVa vs. control schools

Victims' self-esteem:
KiVa vs. controlschools

Conclusion persistent victimization

› Overall well-being improves for children in KiVa-schools who are no longer victimized

› However ... victims relatively worse off:

- A supportive school context is an unfavorable environment for remaining/new victims

- Children at risk when being *marginalized*, *having psychological problems* or *problems at home*: Others do not want to associate with them

2 Persistent victimization

- Breakout groups: *Share your experiences on persistent victimization* (5 min.)

- *Example questions:*
  - Is persistent victimization recognizable in your research or daily practice?
  - What are potential solutions?

Today's program

1. Welcome and introducing ourselves

2. The problem of persistent victimization

3. Bullying from a social network perspective

4. Facilitating recognition of victims with social network diagnostics

What is a network?

A *graph* with…

- A set of actors or *nodes* (children, companies, internet pages)…

- Who are connected through *ties* (friendships, trade exchange, links).

Specific relations

› Undirected

- e.g., romantic relations, business relationship

› Directed
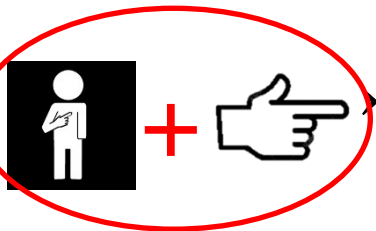
- e.g., friendship nomination, bullying/victimization

Reporters' perspective

› Self-reports
  • "How often have you been victimized?"
  • "How often have you bullied others?"

› Peer-reports
  • "Which classmates are victimized?"
  • "Which classmates are bullying others?"

› Network-reports (*ego* or *complete* networks)
  • "By which classmates are you victimized"
  • "Which classmates do you bully yourself?"

Many relations

› By which classmates are you victimized?

› Which classmates defend you when you are victimized?

› Which classmates are your best friends?
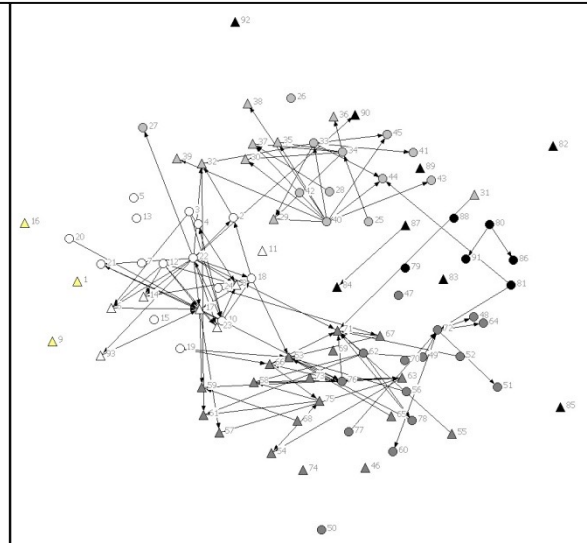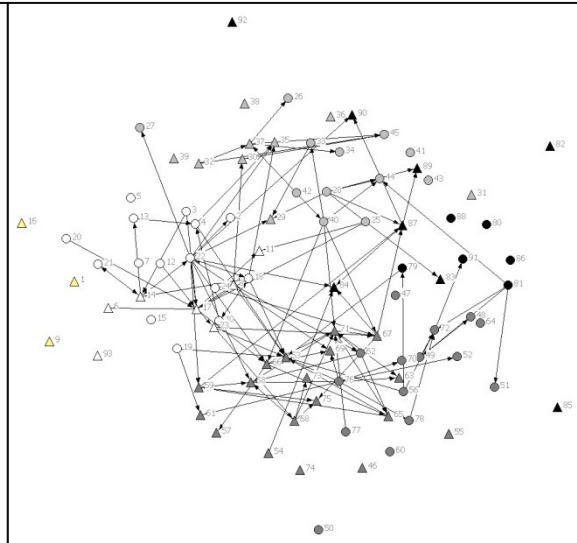
› Which classmates do you dislike?

May 2012 → Oct 2012 → May 2013

Bullying

Defending

Bully h

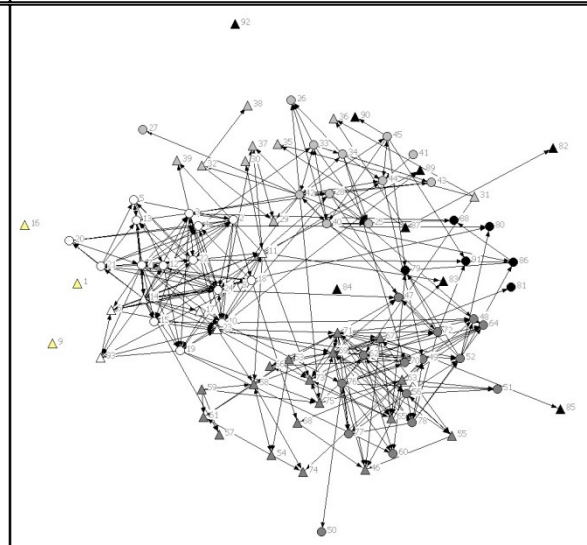Victim i

Defender j
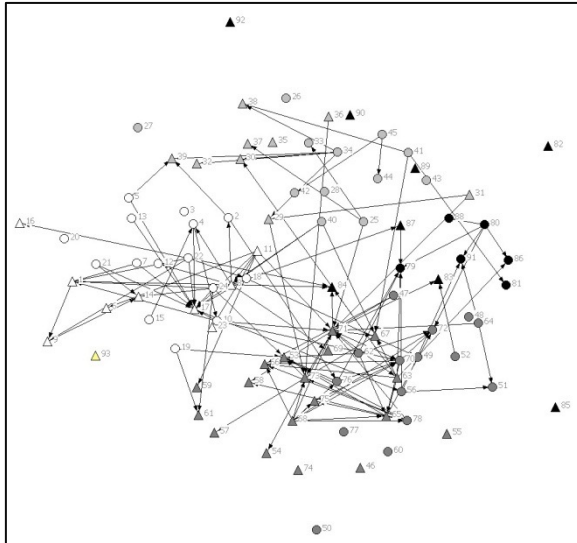
Nominations for:
- - - ▶ Bullying
——▶ Defending
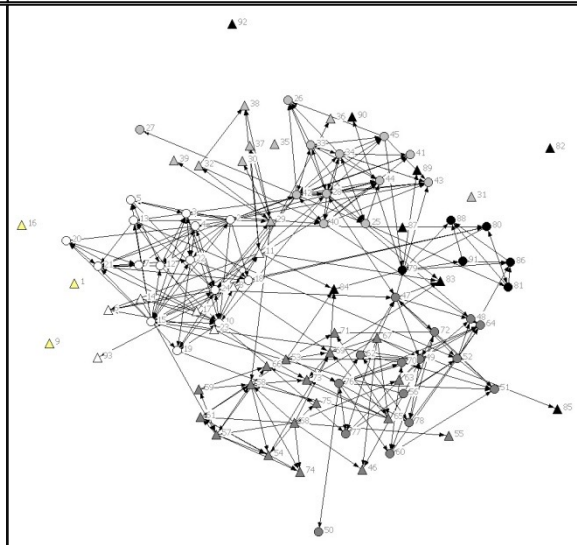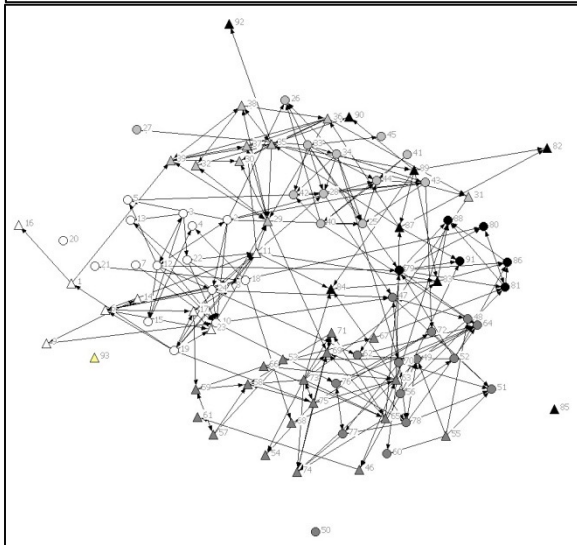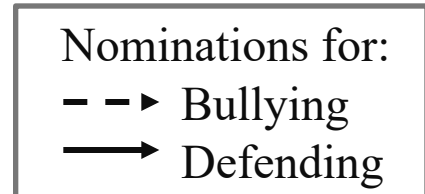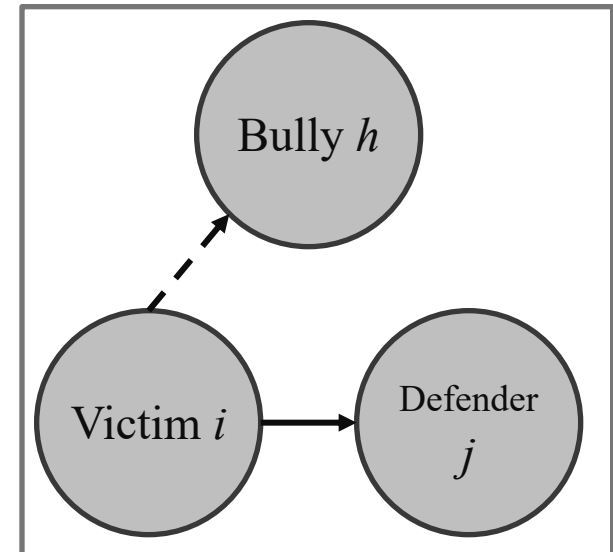
Defending among victims

Time 1

Time 2
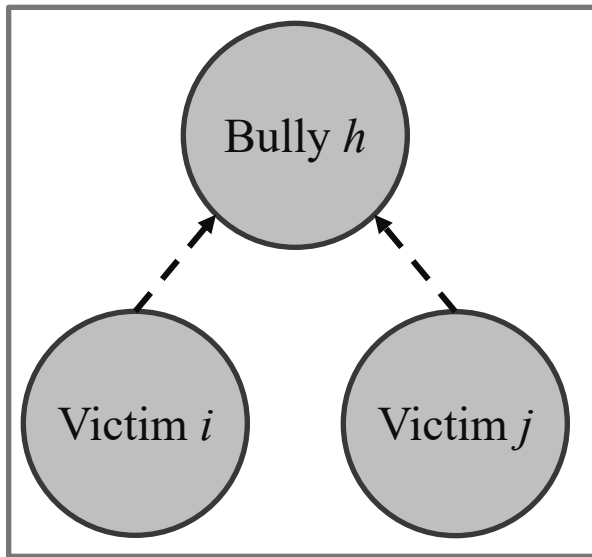
Social support /
Victim selection
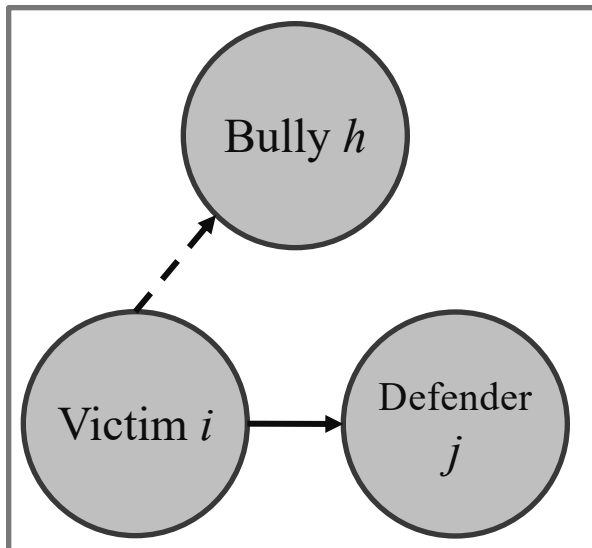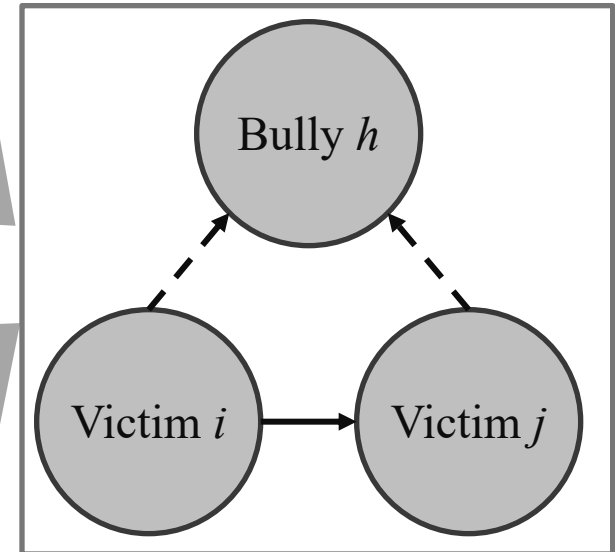
Retaliation /
Victim "Influence"

Nominations for:
- - - ▶ Bullying
——▶ Defending
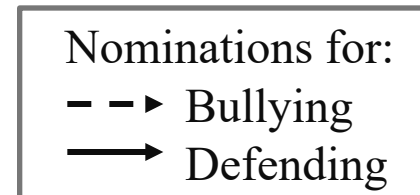
Expanding the models (ethnicity, gender)
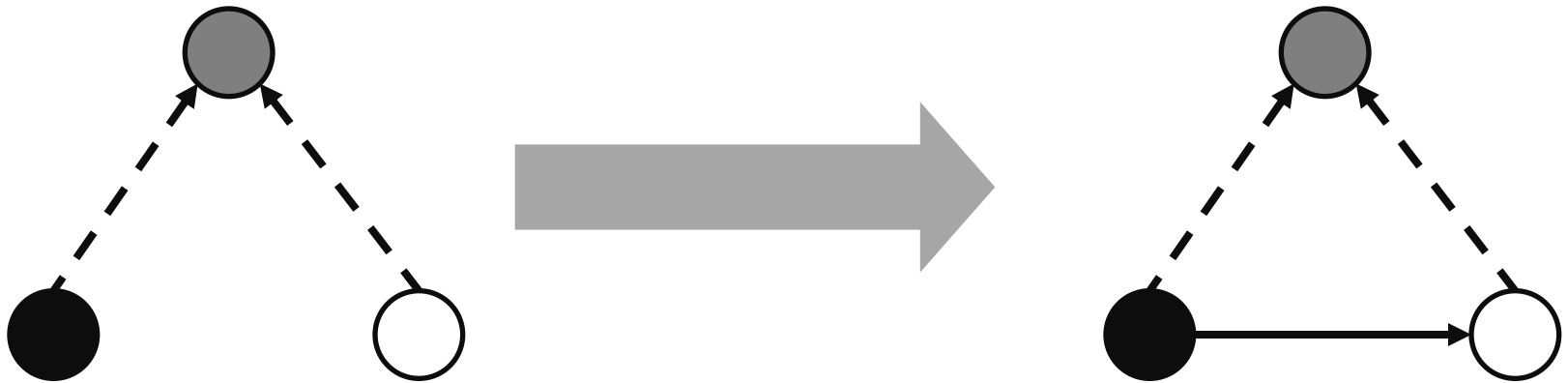
- Marianne Hooijsma, PhD:
  - Defending did *not* increase for victims sharing bullies
  - Defending did increase for <u>bullies</u> targeting same victims
  - *Cross-ethnic defending* increased for <u>same-gender</u>, <u>same-classroom peers</u>, and '<u>shared bullies</u>'

3 Bullying and social networks

- Breakout groups: *What do you think of this social network approach to bullying?*

- *Can you come up with network research questions concerning your own research of practice, or do you have suggestions for new research questions in bullying using a network approach?* (5 min.)

Today's program

1. Welcome and introducing ourselves

2. The problem of persistent victimization

3. Bullying from a social network perspective

4. Facilitating recognition of victims with social network diagnostics

Providing feedback to teachers

- **Feedback** about social relationships
  - Facilitate recognition of vulnerable children and (persistent) victims
  - Stimulate teacher interventions
- Based on **student questionnaire**, because how students feel at school (not how teachers think things are going).
- Reports at **group level**, because the KiVa-approach is on empowering the group

Some disclaimers

- Children are informed about the teacher feedback in a child-friendly film

- The report is for the school. Teachers are advised not to share information with parents or children.

- Teachers should also be careful with sharing (concrete) information from the report ("The report shows …")

Content of the monitor

- The monitor information is part of broader observation and signaling: It is one of the tools

Monitoring tool (students)
Network information

Self-report	Peer nominations
Victimization experiences	Bullying, victimization ties
Well-being and safety	Social preference
	Social reputation

Qualitative information

Conversations with students/parents	Observations
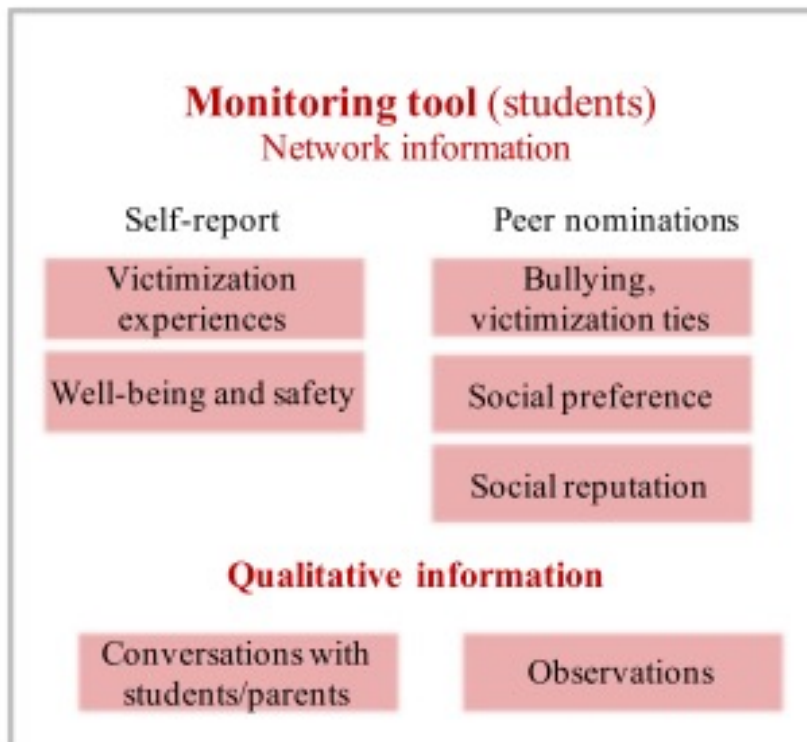
Time for discussing an example classroom

Table 1 Hypothetical diagnostics of the aggregated number of classmates who nominated a student per measure, and self-reports of victimization and school well-being

	Received network nominations							Self-report	
	Bullying	Social preference			Social reputation			Victimization	Well-being
Student	1 Bully	2 Best friend	3 Liked	4 Disliked	5 Popular	6 Leader	7 Prosocial	8 Yes/no	9 Level
Class average	0.36	2.65	6.31	2.69	3.46	2.73	2.81	–	–
Girls									
Liz		*0*	*0*	8	1	2	1		
Anna	*3*	5	*10*	2	*8*	8	2		
Meg		3	6	1	8	2	7		
Cho		3	7	2	4	9	7		
Jazz		5	8	2	5		9		
Debby		6	8	2	6	5	*10*		
Roxanne		3	7	2	1				
Sarah		2	7	1	2	1			Low
Sophie		*0*	2	4	1	1	2	Yes	Very low
Nyen	*1*		6			1	2		
Emma		*11*		3	2	2	2		
Olivia		*10*		2	2	3	3		
Boys									
Jacob		*3*		2	1	1	1		
Mason		6		2	2	2	2		Low
William				1	1	1	4		
Jayden						9	3		
Isaac	2				7	2			
Ethan	2				8	2	1		Very low
Elijah	2				8	1	3		
David					1	2			
Thomas					2	1			Low
Kylo					2	2	2		
Hakeem					6	2	2		
Zayn					7	2	3		
Mikael			7	2	6	1	1		
Zyaire	2		6	2	1	2		Yes	

Columns 1–7 show the numbers of classmates that name a student as a bully (column 1), a best friend (column 2), liked (column 3), disliked (column 4), popular (column 5), a leader (column 6), or prosocial (column 7). For example, Anna is named by three classmates as a bully. Columns 8–9 show worrisome levels of self-reported victimization (yes–no) and school well-being (low–very low). Numbers in italics refer to low or high scores: those who are nominated by > 2 classmates as a bully, by < 1 classmate as a friend, are liked by < 20% or > 35% of the classmates, and are nominated by > 20% of the classmates as rejected, most popular, a good leader, or prosocial

Callout annotations:
- Sophie reports being victimized
- And has a very low well-being at school
- Anna is mentioned by 3 classmates as their bully
- Nobody mentions Liz as friend
- Liz is disliked by 8 classmates
- Jayden is seen as a good leader

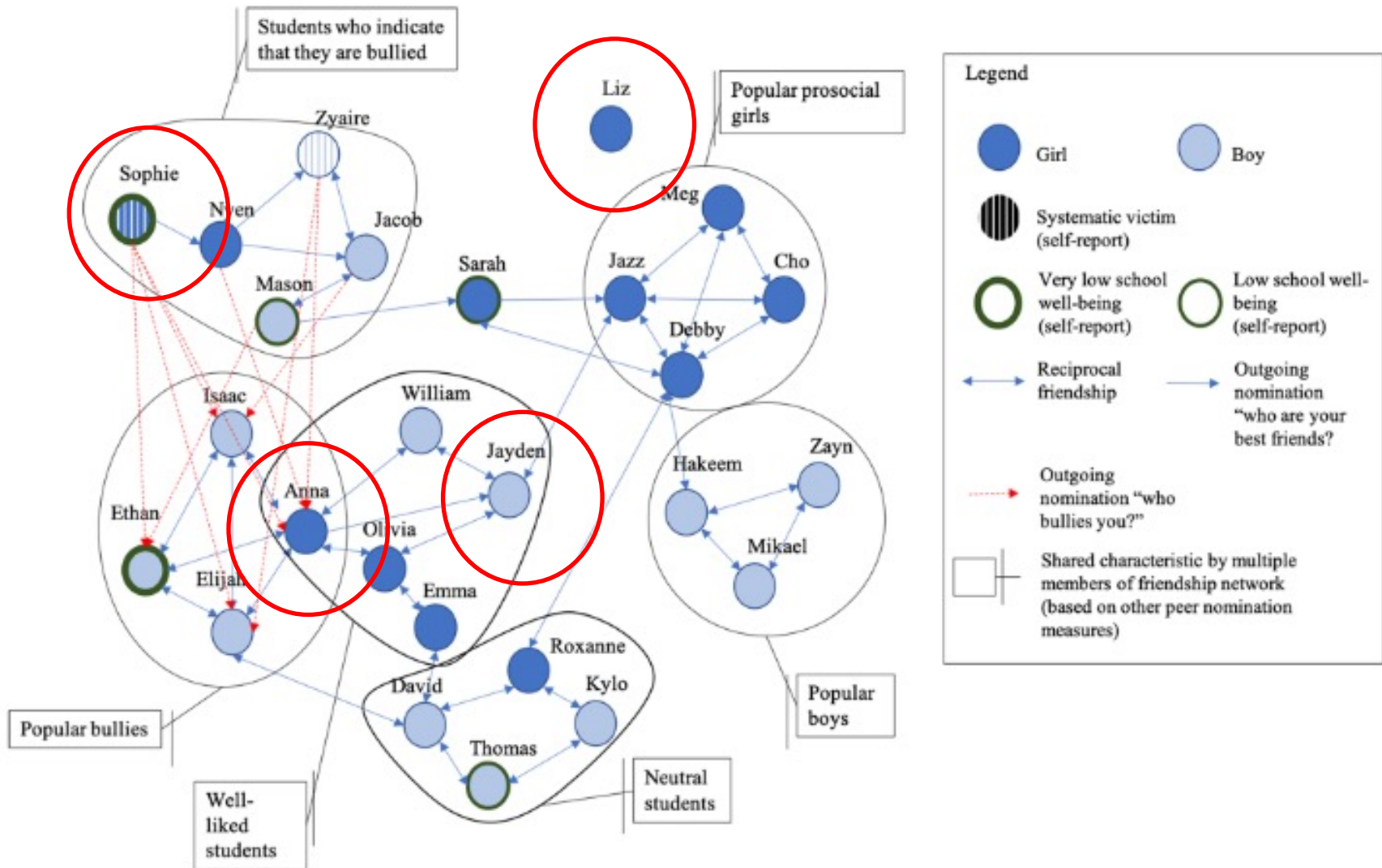Fig. 1 Friendship network in a fictional classroom using hypothetical data

4. A solution?

- Breakout groups: *What would be a solution for this classroom?*

- *What is your analysis, and what intervention strategies do you propose to help the children in this classroom?* (5 min.)

- Readable prints of the network feedback available at:

- https://www.rug.nl/staff/g.e.huitsing/AlbertiAppendix.pdf

Translate into actions

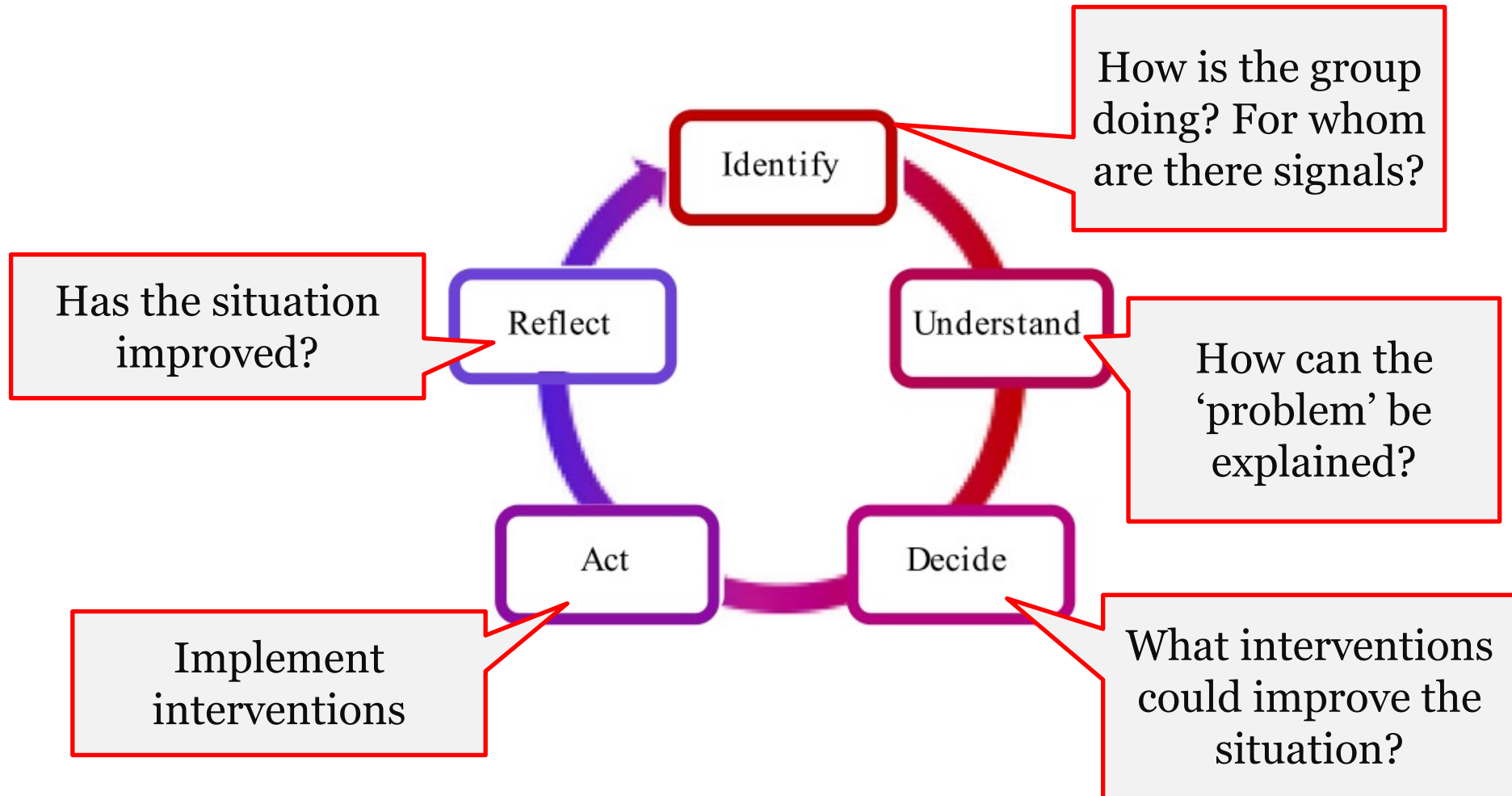- We are enthusiastic about this approach
- And so are teachers

- However, the only test of effectiveness showed no significant differences between regular KiVa schools and **KiVa+** schools (indeed, the ones with feedback)
- This suggests that it requires more than merely providing teachers with feedback.
  - Translating feedback into specific action plans, in particular for persistent victims

Our proposed solution: Intervention cycle

How is the group doing? For whom are there signals?

Has the situation improved?

How can the 'problem' be explained?

Implement interventions

What interventions could improve the situation?

› **We cannot be satisfied** with simple reductions of victimization.

› **Continuous effort**, awareness and commitment

› Continued use of KiVa: **Keep vacuuming!**

- Best machine is not enough
- Use systematically
- Also at 'difficult' spots

Thank you for attending, your contribution, and the early career award!

Next slides document the papers on which this presentation is based

g.e.huitsing@rug.nl
www.rug.nl/staff/g.e.huitsing

› Part 1 on 'social positions associated with bullying/ victimization in secondary education' was based on:

› de Vries, E., Kaufman, T. M. L., Veenstra, R., Laninga-Wijnen, L., & Huitsing, G. (2021). **Bullying and Victimization Trajectories in the First Years of Secondary Education**: Implications for Status and Affection. *Journal of Youth and Adolescence*, *50*, 1995–2006. https://doi.org/https://doi.org/10.1007/s10964-020-01385-w

› Part 2 on 'persistent victimization' was based on:

› Huitsing, G., Lodder, G. M. A., Oldenburg, B., Schacter, H. L., Salmivalli, C., Juvonen, J., & Veenstra, R. (2019). **The Healthy Context Paradox**: Victims' Adjustment During an Anti-Bullying Intervention. *Journal of Child and Family Studies*, *28*, 2499-2509. https://doi.org/10.1007/s10826-018-1194-1

› Kaufman, T. M. L., Kretschmer, T., Huitsing, G., & Veenstra, R. (2018). **Why Does a Universal Anti-Bullying Program Not Help All Children?** Explaining Persistent Victimization during an Intervention. *Prevention Science*, *19*, 822-832. https://doi.org/10.1007/s11121-018-0906-5

› Part 2 on 'the Dutch effects of KiVa' was based on:

› Huitsing, G., Lodder, G. M. A., Browne, W. J., Oldenburg, B., van der Ploeg, R., & Veenstra, R. (2020). **A Large-Scale Replication of the Effectiveness of the KiVa Antibullying Program**: A Randomized Controlled Trial in the Netherlands. *Prevention Science, 21,* 627-638. https://doi.org/10.1007/s11121-020-01116-4

› Huitsing, G., Barends, S., & Lokkerbol, J. (2020). **Cost-Benefit Analysis of the KiVa Anti-Bullying Program** in the Netherlands. *International Journal of Bullying Prevention, 2, 215-224.* https://doi.org/10.1007/s42380-019-00030-w

› ## Part 3 on 'social networks and bullying' was based on:

› Veenstra, R., & **Huitsing, G.** (2021). **Social network approaches to bullying and victimization**. In P. K. Smith & J. O'Higgins Norman (Eds.), *Handbook of Bullying. Volume 1: Characteristics, risks and outcomes*. New York, NY: Wiley-Blackwell.

› **Huitsing, G.**, Dijkstra, J. K., & Veenstra, R. (2019). Social Development and Group Processes: **A Social Network Application to Bullying and Network Interventions.** In E. S. Kunnen, N. M. P. de Ruiter, B. F. Jeronimus, & M. A. E. van der Gaag (Eds.), *Psychosocial Development in Adolescence: Insights from the Dynamic Systems Approach* (pp. 193–208). London/New York: Routledge (Studies in Adolescent Development).

› Part 3 on 'social networks and bullying' was further based on:

› Huitsing, G., Snijders, T. A. B., Van Duijn, M. A. J., & Veenstra, R. (2014). Victims, bullies, and their defenders: **A longitudinal study of the co-evolution of positive and negative networks**. _Development and Psychopathology_, 26, 645-659. https://doi.org/10.1017/S0954579414000297

› Rambaran, J. A., Dijkstra, J. K., & Veenstra, R. (2020). **Bullying as a group process in childhood**: A longitudinal social network analysis. _Child Development_, _91_, 1336–1352. https://doi.org/10.1111/cdev.13298

› Part 3 on the work of Marianna Hooijsma was based on:

› Hooijsma, M., Kisfalusi, D., Huitsing, G., Dijkstra, J. K., Flache, A., & Veenstra, R. (2021). **Crossing ethnic boundaries? A social network investigation of defending relationships in schools**. *Group Processes & Intergroup Relations*.
https://doi.org/10.1177/13684302211009318

› Hooijsma, M., Huitsing, G., Kisfalusi, D., Dijkstra, J. K., Flache, A., & Veenstra, R. (2020). **Multidimensional Similarity in Multiplex Networks**: Friendships Between Same- and Cross-Gender Bullies and Same- and Cross-Gender Victims. *Network Science*, *8*, 79–96.
https://doi.org/10.1017/nws.2020.1

› Part 4 on 'social network diagnostics' was based on:

› Kaufman, T. M. L., Huitsing, G., Bloemberg, R., & Veenstra, R. (2020). **The Systematic Application of Network Diagnostics** to Monitor and Tackle Bullying and Victimization in Schools. *International Journal of Bullying Prevention*. https://doi.org/10.1007/s42380-020-00064-5