Group Development and health in Schools – A pilot study

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1. Background.

An earlier intervention project

- Group development Interventions in Swedish High Schools

In a study of an intervention project in schools (Jacobsson and Wramsten Wilmar, 2009), promising results was shown regarding group development when the groups were facilitated by trained psychologists

An Earlier Intervention Project
- The Consultation Process

- All the groups had a budget of 20 hours of consultation each, plus a GDQ-measurement before and after the project. The average amount of meetings during the project was 6 – 8, and meeting time was 2 – 3 hours.

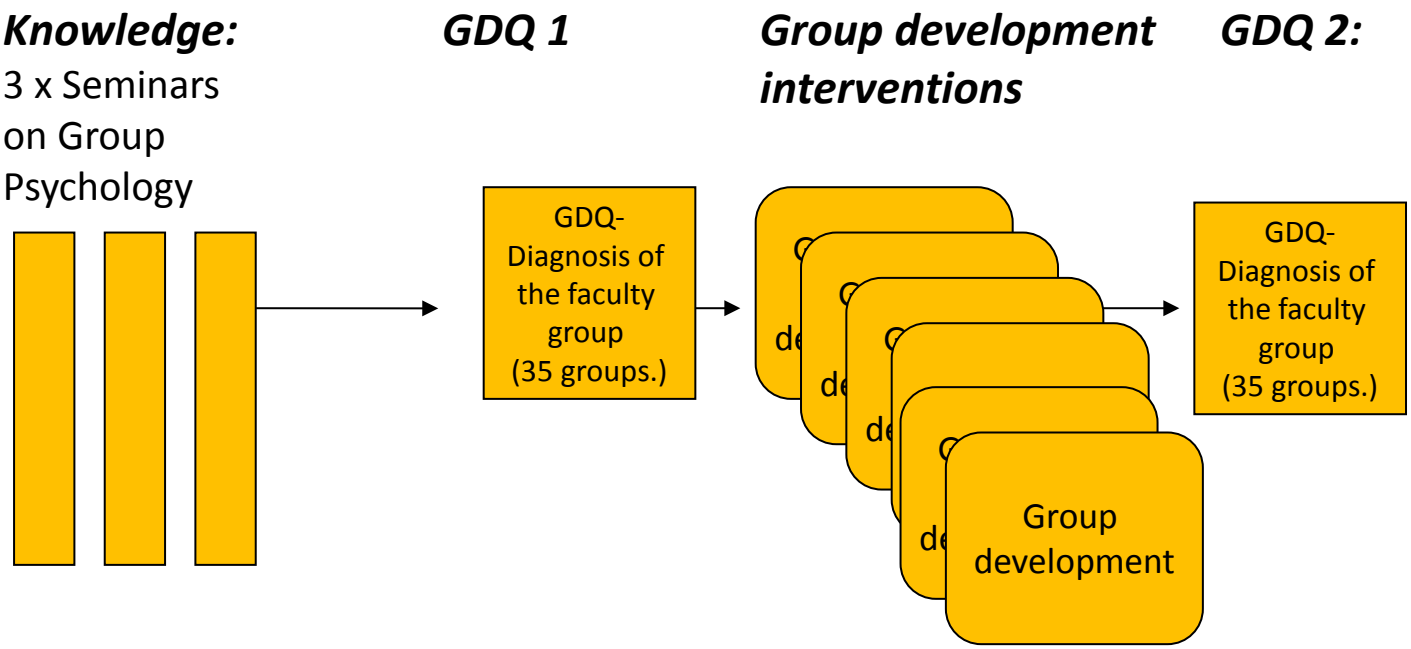
- The consultation started and ended with a GDQ-survey. At the start the team was invíted to take part in identifiyng it´s own growth needs and make an action plan.

- Further on, process consultation was given with the purpose to support and streghten the teams' ability to cooperate effectively

- Examples of focal areas was goal-setting, role clarification, decision-making, sub-grouping, leadership actions.

An earlier intervention project

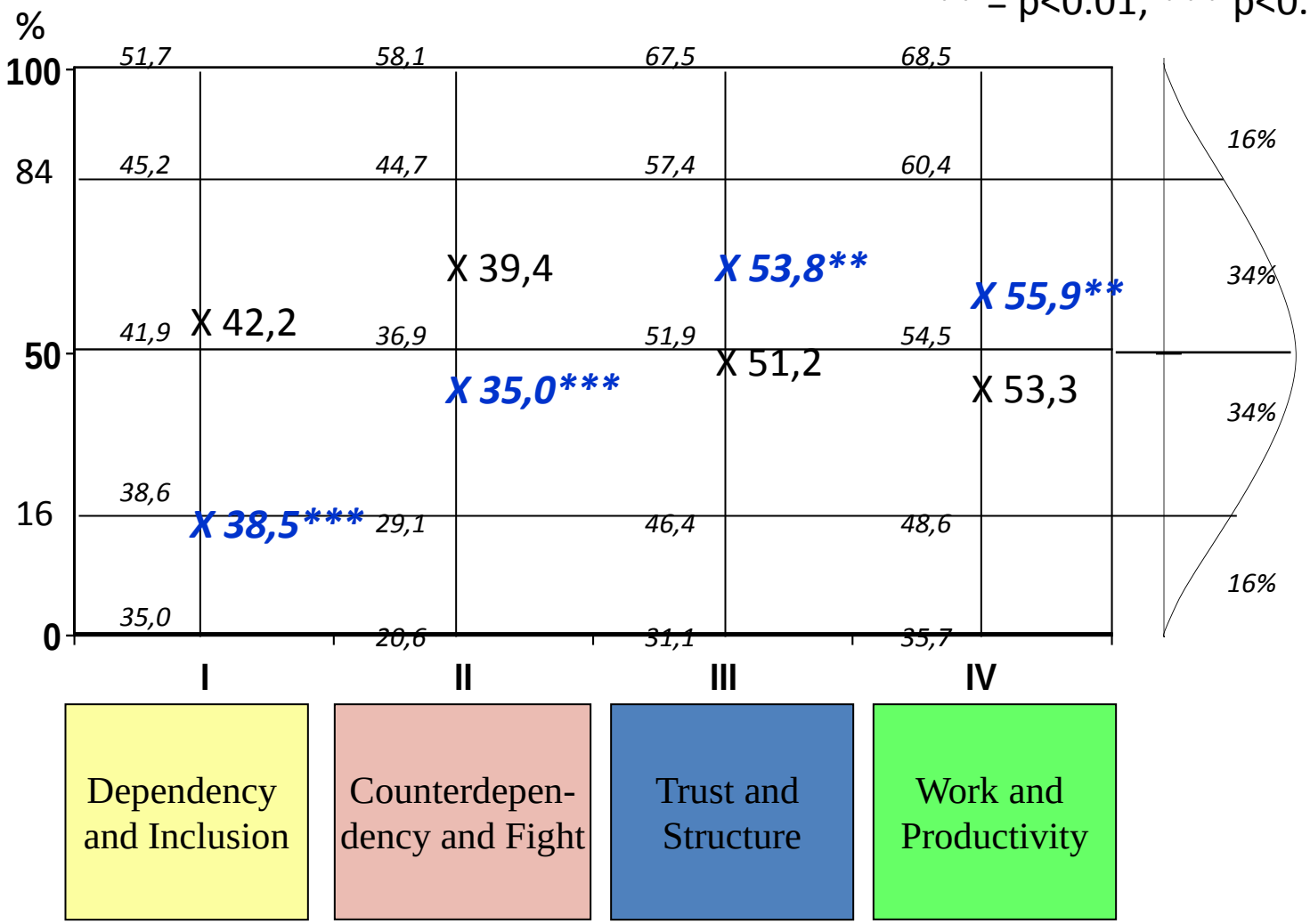
The design of the project



An earlier intervention project – Results

Mean Values on GDQ-SE2 Scales, Aggregted dato on 28 Teacher Teams Compared to Norm Data for Swedish Teams (n = 101 teams) – Before and ***After*** Intervention

** = p<0.01; *** p<0.001



An earlier intervention project – Results

Teacher Teams GDQ 1 and ***GDQ 2*** - Percentage of teams in each stage

Classified according to Wheelan (1994), n = 28 teams

STAGE I	**STAGE 2**
25,0 ***0,0***	28,6 ***25,0*** **Stage 1 & 2 =** 53,6 **–** ***25,0***
STAGE 3	**STAGE 4**
35,7 ***39,0***	10,7 ***36,0*** **Stage 3 & 4 =** 46,4 **–** ***75,0***

An earlier intervention project - Results

- **Among the 28 teams**, the following results was observed when comparing GDQ stages before and after team development:
  - **16 teams did develop stagewise**, 10 of them made a jump to the next stage, 4 of them moved two stages and 2 of them moved three stages.
  - 7 teams did not develop as intended, they were in the same stage as before. Together with 3 stage IV teams, it was 10 teams.
  - 2 teams moved in the ”wrong” direction, both from stage III to stage II. Both lost most of it’s mebers.

2. The Malmö, Rosengård, Project – a Pilot Study

Earlier research on Groups and Health

Most studies on Group development and different correlates fokus on group performance.

For instance, teams that has reached higher stages of development according to GDQ has for instance shown:

– To have higher performing students in schools (Wheelan & Kesselring, 2005)

– To have more surviving patients in intensive care units (Wheelan, Burchill & Tillin, 2003)

Earlier research on Groups and Health

Our basic assumption:

The work group is an important work condition for individual members.

In the present study we have chosen to investigate four health-related aspects that according to earlier research are influenced by work conditions:

- ***Work satisfaction***,
- ***Emotional exhaustion/Burnout,***
- ***Perceived stress,*** and
- ***Feelings of mastery***

Earlier research on Groups and Health

- The link between team work and health is a neglected one in research. To our knowledge, the only research is on team climate and health, using Team Climate Inventory, TCI, (Anderson & West, 1996) has been made by Kivimäki and colleagues (Kivimäki et al., 2001; Kivimäki et a., 2007) regarding team work and health among health care workers. ***The quality of the team work seems to be of great importance in this research.***

- TCI has a focus on innovativeness in teams. However, the model describes ***support for innovation*** as one of four factors, the other three, ***vision***, ***participatory safety*** and ***task orientation***, has a great overlap with characteristics of effective team work in general. In that sense, TCI has also an overlap with scale 4 in GDQ, which describes stage IV, or effective teamwork. Thus, links between team work and health found by means of TCI could probably be replicated by means of GDQ.

Hypotheses

Work satisfaction is an aspect of employee well-being (Wright & Cropanzano, 2000) and is to some extend with regard to work conditions corresponding to characteristics of more or less developed groups. For instance, Robertson (Roberson, 1990) found a relation between goal clarity, which is an aspect of effective team work, and work satisfaction. Parker et.al (Parker et al., 2003), found in their meta-analytic review a positive correlation of 0,48 between a general appreciation of one's work group and work satisfaction. The link between Team climate, as an aggregated concept like it's used in TCI, and work satisfaction has also been shown in earlier research (Gil, Alcover, & Peiró, 2005; Proudfoot et al., 2007). On the basis of this literature, we formulated our first hypothesis.

Hypothesis 1: Group development and work satisfaction is positive correlated, the more mature group work, the more group members are satisfied with their own work in general.

Emotional exhaustion and **perceived stress**, the key component of burnout, was for a long time used as a concept specific to the human services. However, highly similar patterns with regard to antecedents to exhaustion has been showed when comparing trades such as human services, industry, and transport (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Burke and Greenglass(Burke & Greenglass, 1995) found in a longitudinal study of predictors of burnout among human service workers that both the role stressor conflict and ambiguity and social support were predictors of emotional exhaustions. A lack of feedback is consistently related to burnout according to Maslach, Schaufeli and Leiter (Maslach, Schaufeli, & Leiter, 2001). A high participation in decision making is another key feature of mature groups. The opposite, low degrees of participation is associated with burnout (Maslach et al., 2001). Similar results are shown regarding perceived stress.

Hypothesis 2 a: Group development and emotional exhaustion is negatively correlated, the more mature group work, the less signs of emotional exhaustion among group members.

Hypothesis 2 b: Group development and perceived stress is negatively correlated, the more mature group work, the less signs of emotional exhaustion among group members.

Feelings of mastery in the work is, as shown by Jacobsson et al (C. Jacobsson, Pousette, & Thylefors, 2001), correlated with prerequisites of mature groups. The condition of mastering one´s own work is positively correlated with colleague support, goal clarity and positive feedback and negatively correlated to co-ordination problems among co-workers.

Hypothesis 3: Group development and feelings of mastery is positively correlated, the more mature work group, the more feelings of mastery in work among group members.

Measures

Group Development

Group Development Questionnaire, GDQ, (Wheelan & Hochberger, 1996) was used for assessing group development or maturity of the groups. On the basis of the IMGD, the 60-item GDQ contains four scales that correspond to the first four stages of group development. Each scale contains 15 items and each item has a Lickert type response scale from 1 to 5, were 1 is never true of this group and 5 is always true of this group. Therefore, the minimum score on each scale is 15 and the maximum score is 75. This study was conducted with the Swedish translation of GDQ, GDQ SE3, which is the third revised version. Psychometrical properties (Cronbach´s alpha) for GDQ SE3 scale I is 0.77, for scale II, III and IV the values are 0.90, 0.81 and 0.87 respectively (C. Jacobsson & Persson, 2011).

Emotional exhaustion and **Perceived Stress**

Emotional exhaustion was measured by means of Copenhagen Burnout Inventory, Subscale Personal Burnout (Kristensen, Borritz, Villadsen, & Christensen, 2005). However, after having a response-psychological test panel using the scale it was reduced from 6 to 5 items (C Jacobsson & Pousette, 2012). Sample items are “How often do you feel tired?” and “How often are you emotionally exhausted?”, the scale goes from 1 (never) to 5 (always) and Cronbach’s alpha was 0,88.

Perceived stress was measured by a single item starting with a definition of the phenomena (being restless, tense, nervous etc.), following by a question if the respondent felt any of this. the scale goes from 1 (not at all) to 5 (very much).

Work satisfaction

Work satisfaction was measured with a three-item scale of overall job satisfaction (Wanous & Lawler, 1972), used in an earlier study by Jacobsson and Pousette (2012). Sample items are “based on an overall assessment, how satisfied are you with your current work situation” and “How well do your company meet your expectations for how you want it in your work?”. The scale goes from 1 (not at all) to 10 (to the highest degree), Cronbach’s alpha was 0,91.

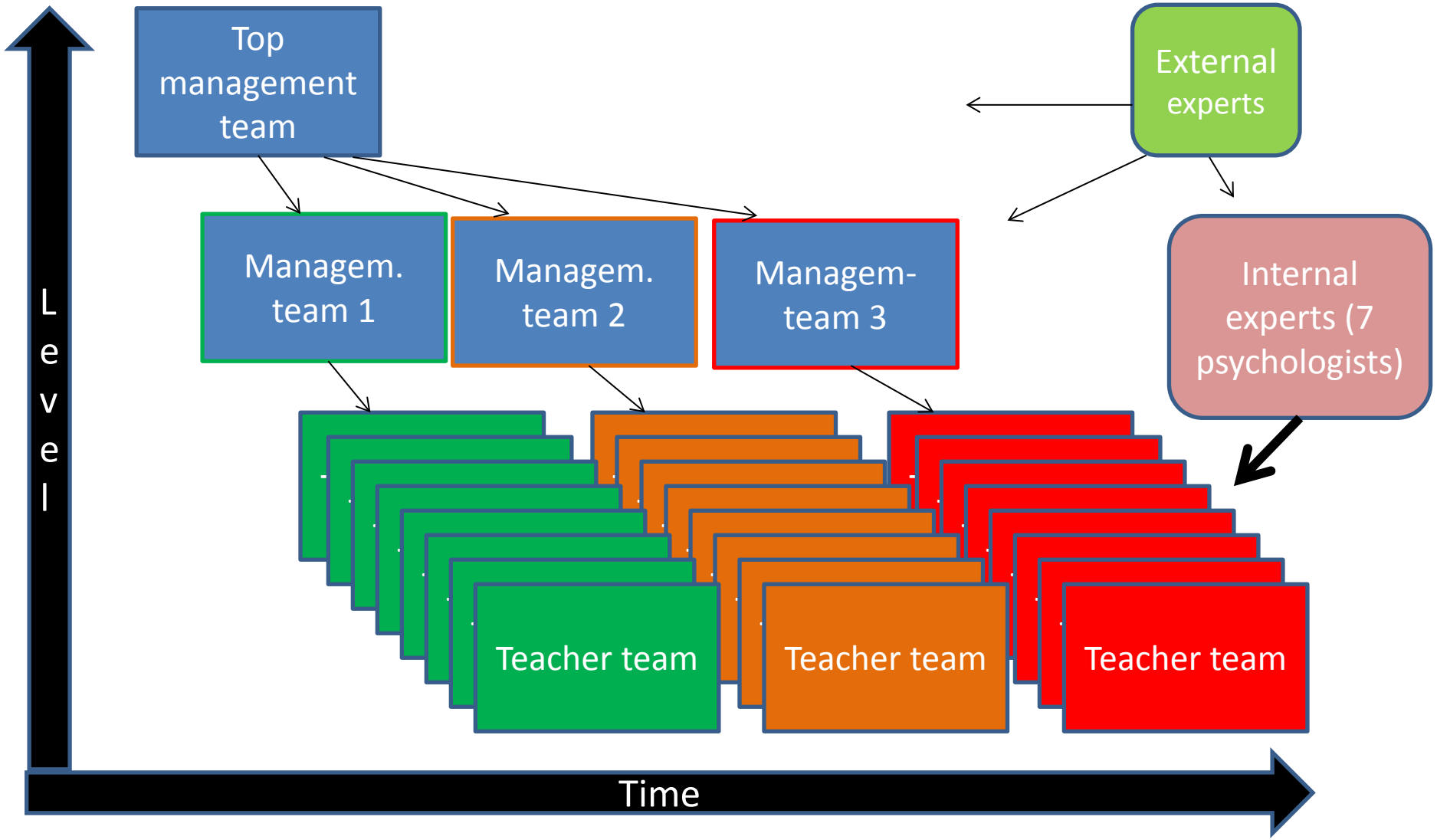
Feelings of Mastery

Feelings of mastery was measured by a three item scale on how well participants could handle problems that occurred in their work (C. Jacobsson et al., 2001). The items were: How often does the following happen: (a) I feel that I am mastering my work situation; (b) I feel that I am engaged in my work; (c) It’s easy for me to overcome obstacles that occurs in my work. Cronbach’s alpha was 0.70.

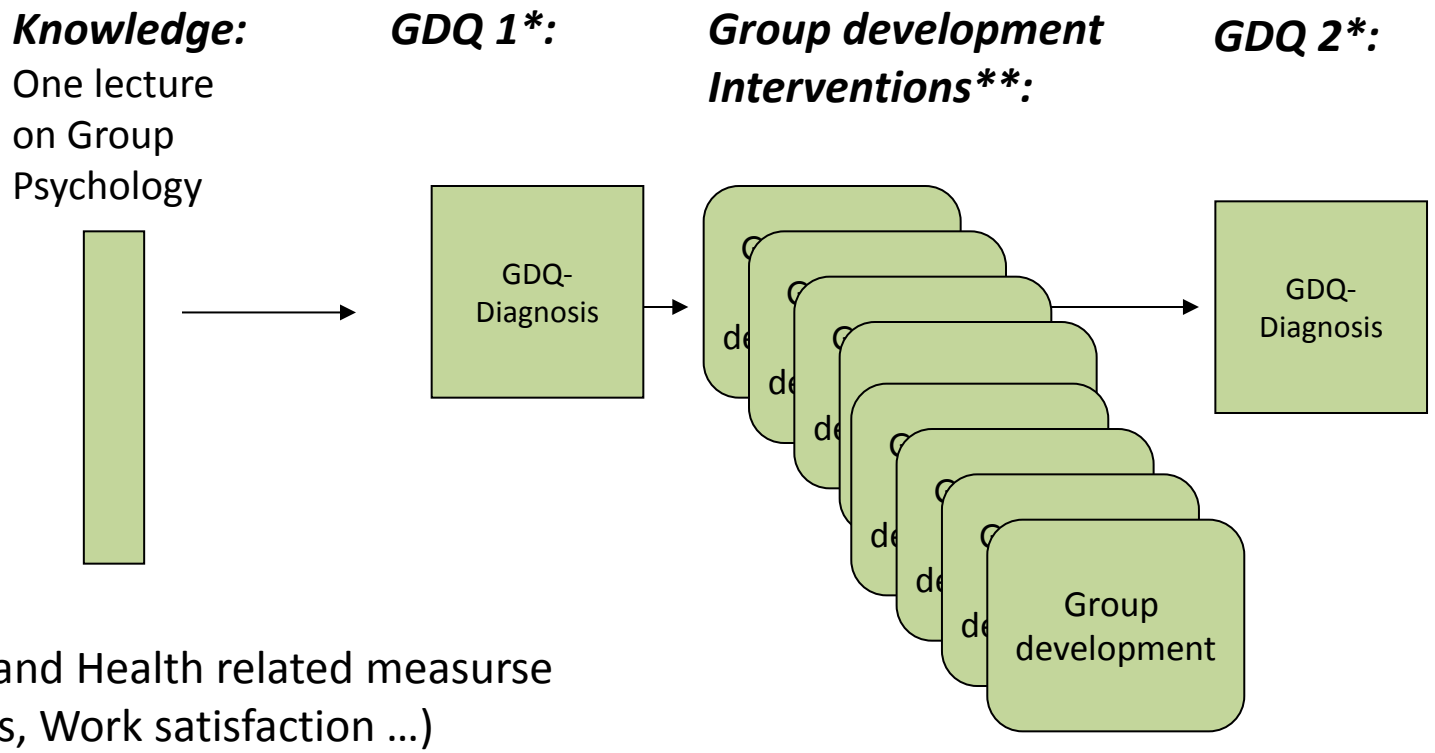
The Malmö, Rosengård, Project

- A project finansed by ESF, European Union.
- Running time, august 2011 to june 2013
- 118 groups in schools and pre-schools, divided in two halfs, first half (51 groups) year one and second the next year.
- Aprox. 900 teachers
- 7 psychologists consulting the 118 groups, one project leader, Elisabet Graci.
- External experts supervising internal consultants and working with the management teams

The Design of the Project; Time and Organizational Level



The design of the project, Process



About 6 – 7 month

* GDQ and Health related measurse (Stress, Work satisfaction …)

** To some degree standardized Interventions; Feedback on GDQ and making an action plan; the goal matrix; …

Results, GDQ 1/ first measurement

Groups	n	%
Pre-school	28	55
School, grade 1-9	20	39
Other	3	6
Total	51	100

N members (M= 5,2)	N groups	%
3	15	29,4
4	6	11,8
5	11	21,6
6	7	13,7
7	4	7,8
8	5	9,8
9	2	3,9
11	1	2,0
Total	51	100,0

Results

Age of the groups (M= 28,6)	n	%
0 - 1 months	12	24
2 - 5 months	3	6
6 - 11 months	3	6
12 - 23 months	13	25
24 months or more	20	39
Total	51	100

Does the group has a leader?	n	%
Yes	26	51
No	14	27
Not sure who it is	4	8
Missing data	7	14
Total	51	100

Aggregated data, 51 groups

GDQ – Group profile

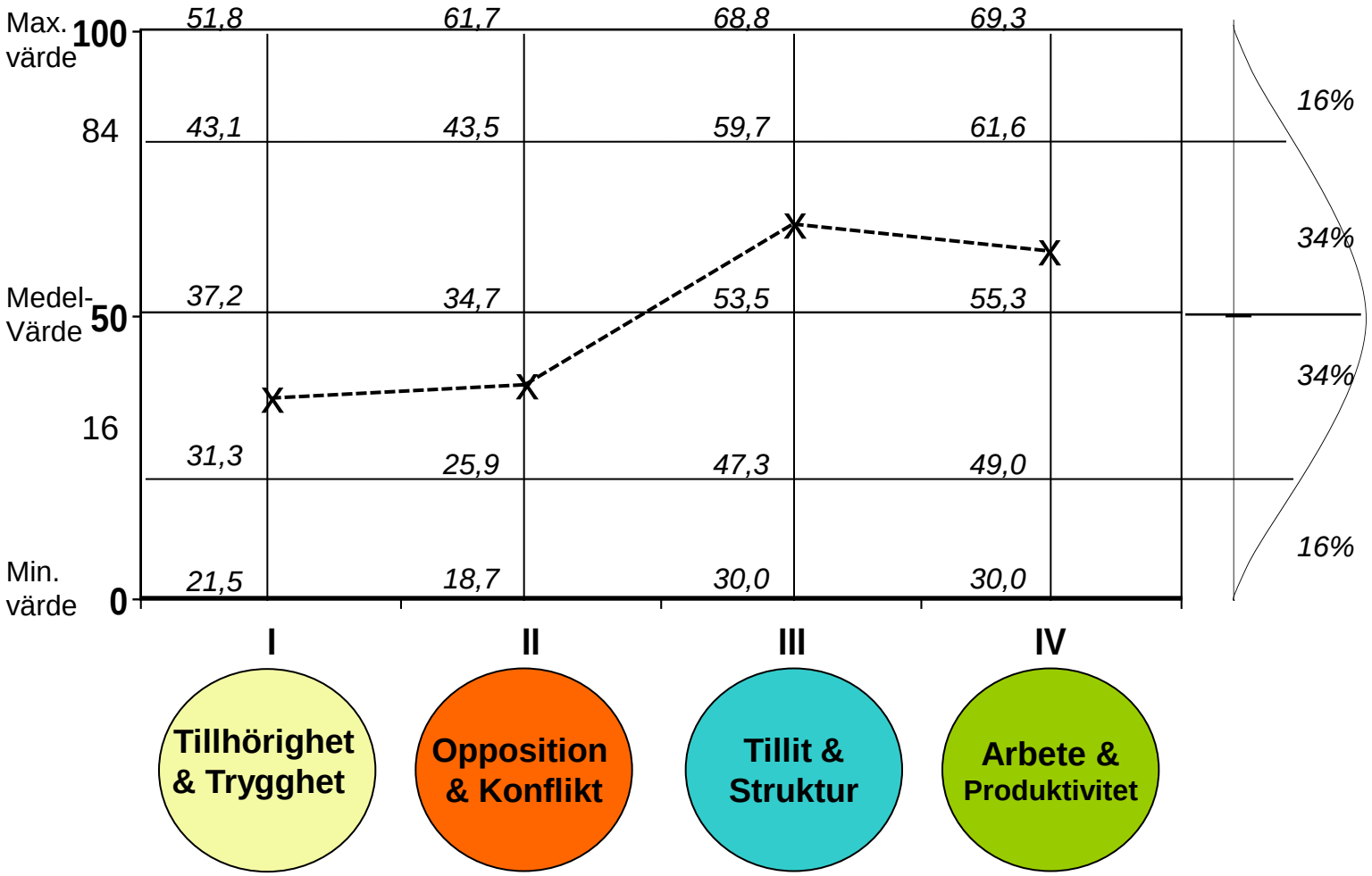
Rosengård, HT 11	
Effectiveness: 76,7%	PM = 3,4
	N = 51 grupper

GDQ scale	**I**	**II**	**III**	**IV**
Mean	34,6	31,8	56,7	57,5
Range	20,3 - 52,8	16,0 - 55,8	43,8 - 74,0	42,8 - 71,3
Range difference	32,5	39,8	31,2	28,5

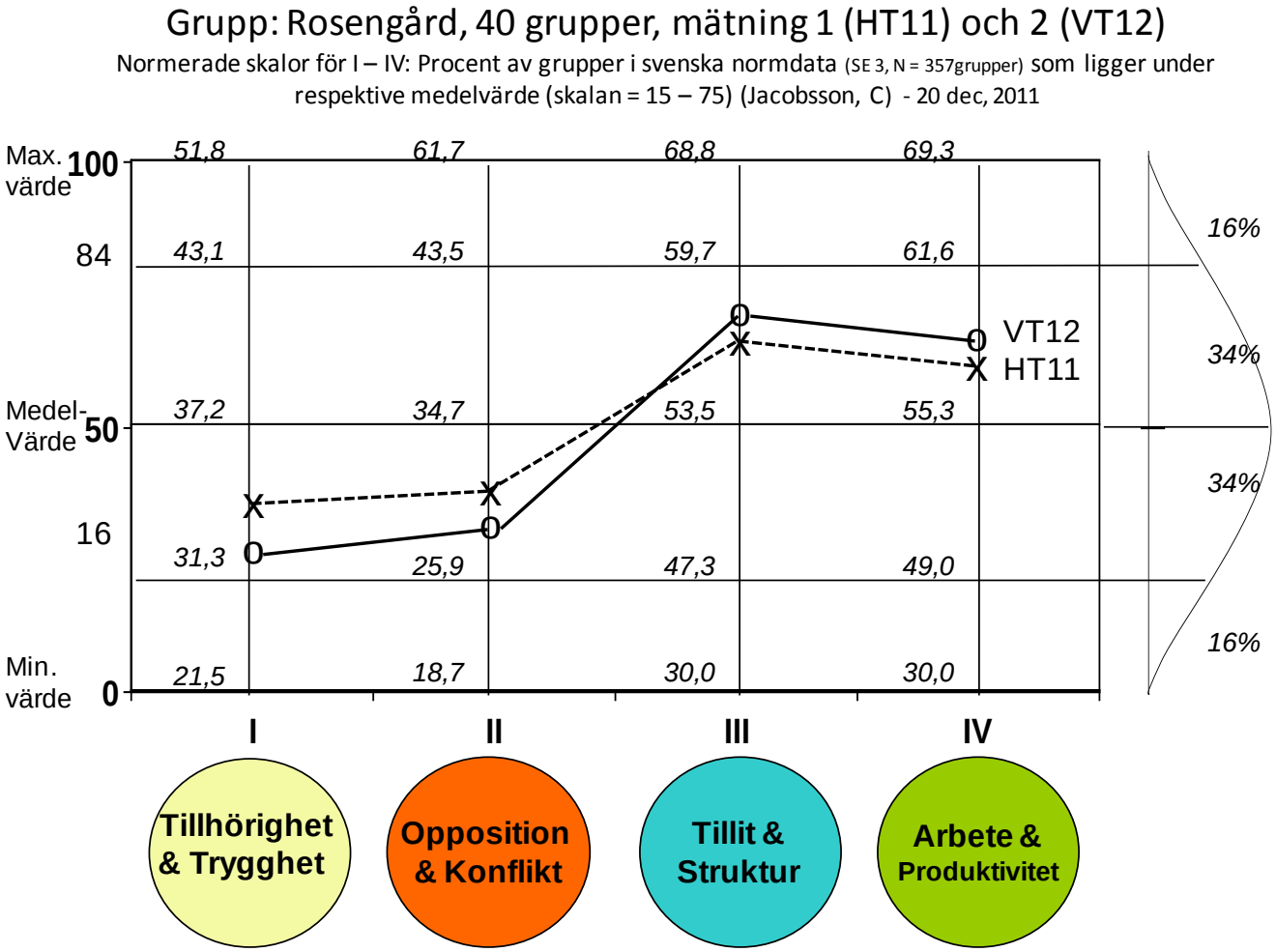
Aggregated data, 51 groups

Grupp: Rosengård, 51 grupper, mätning 1

Normerade skalor för I – IV: Procent av grupper i svenska normdata (SE 3, N = 357grupper) som ligger under respektive medelvärde (skalan = 15 – 75) (Jacobsson, C) - 20 dec, 2011



Aggregated data, 40 groups
- GDQ 1 (HT11) and GDQ 2 (VT12)



Group Development and Health

Group level correlations between GDQ I – IV and health related aspects, 51 groups

	GDQ 1	GDQ 2	GDQ 3	GDQ 4
Work satisfaction	-,20	-,22	,34*	,46**
Burnout/ Emotional exhaust.	,32*	,43**	-,39**	-,40**
Perceived stress	,28 *	,33*	-,33*	-,32*
Feelings of mastery	-,38**	-,39**	,42**	,41**

**Correlation is significant at the 0.01 level (1-tailed);

*Correlation is significant at the 0.05 level (1-tailed); [1] Correlations has a tendency at the 0.10 level (1-tailed)

Conclusions

This pilot study, analyzing results from 51 groups, shows clear Indications of a relationship between group development and Group members health. The more developed group, the:

- ***More work satisfaction***
- ***Less emotional exhaustion/Burnout***
- ***Less perceived stress***
- ***More feelings of mastery***

3. An Intervention Model in Use; The Goal Matrix

What is a goal in psychology?

Individuals inner images or representations of preferred states, where states can be a result (end-state goal), an event or a process. (Austin and Vancouver, 1996, Psychological Bulletin)

Conclusion nr 1: Process or result (end-state goal)? - **A question of time**

Magical thinking about groups–

It doesn't become a group just because we call it a group!

Three things are needed:

- *Bounderies between in and out of the group*
  - *Members of the group and their roles has to be destinguished*
- *Stability over time*
  - *Fairly stable over time regarding members, at least the first 6 months.*
- *Members who understand the purpose of the group*
  - *Members who know why they are a group, shares an understanding of this, and takes responibility.*

(Hackman & Wageman, 2005)

Systems Theory

- Agazarian; Theory of living human systems
  - Methods for systems development
    - **Boundering**, *organizing* information within the system or between systems
    - **Vectoring**, *directing* information toward goals
    - **Subgrouping**, *correcting* information between systems (individuals, groups etc.). The process of differentiating and integrating differences and similarities

Conclusion nr 2; The importance of contextualizing – there is a **place** for everything

TIME & PLACE

Goals depending on the time and place for evaluation

Time - three categories of goals: Now, later and maybe later?

- **Goals to maintain** (process-goal), continuos goals, standards, norms, ground roles
- **Goals to reach/fulfill** (future results), Goals to reach in the future, often focus on clarity, challange, measurability etc
- **Goals to strive for** (vision), giving direction but less focus on fullfillment or mesurability

Place - two focal areas: inside or outside?

- **The inner perspective**, is about the group itself. What is important in order to work well together and for team members satisfaction?
- **The outer perspective**, is about what is expected of the group to be dilivered to others. The stake holders, costumers, clients.

Goal-taxonomi for work groups – Purpose, members, stakeholders and goals of the group

(Christian Jacobsson)

A. The purpose of the group is: …..

Space	**Time**	**Process goals** – Now/all the time	**Future results** – Later	**Visions** – Maybe later
B. Internal focus: *Who are members & what role do they have?*		1. ***Ground rules***	3. ***Developmental goals***	5. ***Guiding stars***
C. External focus: *Who has an interest in our work/ for whom do we work?*		2. ***Standard of service***	4. ***Operative goals***	6. ***Vision***

Example from a management team, 6 members, education/labor market

A. ***The purpose of the group is****: Together lead, coordinate and develop the operations/business as a whole, being a link between strategic and operative level that gives structure and focus on the common questions*

Space / **Time**	**Process goals** – Now/all the time	**Future results** – Later	**Visions** – Maybe later
B. Internal focus: *1 general manager* *3 department managers* *2 support functions*	***1. Ground rules*** - Meeting discipline … - Follow the issues on the road – make sure they don't come back to us - Help each other to be role models in our leadership	3. ***Developmental goals*** - Increase the knowledge of each other and each part of the whole - Use the existing structure more, such as sort were matters belong	5. ***Guiding stars*** - Goal focused - Innovative - Challenging
C. External focus: *We work on behalf of politicians for the benefit of residents in general, but especially students, staff and collab. partners*	2. ***Standard of service*** - Development and results oriented - Have a good treatment - Collaboration oriented - Being present - …	4. ***Operative goals*** - Secure that the implementation plan is implemented - Clarify how the following will be implemented - Marketing - Empowerment/Med-arbetarskap	6. ***Vision*** - We are a leader in meeting future skills needs in a lifelong perspective

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