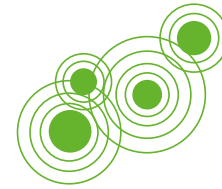




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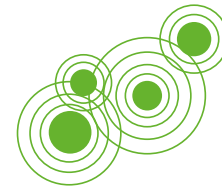
Department of Psychology



**International
Conference
on Well-being
in Education Systems**

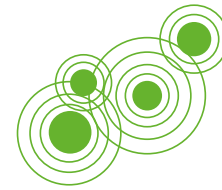
Positive Psychology Interventions: Are they effective for increasing well-being?

Fabian Gander



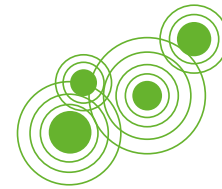
Main questions

- What are positive psychology interventions?
- Are they effective for increasing well-being?
- When and for whom do they work best?
- How do they work?



What are positive psychology interventions?

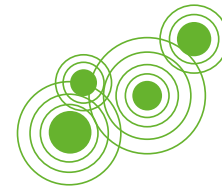
- *Positive psychology interventions* are:
“...treatment methods or intentional activities that aim to cultivate positive feelings, behaviors, or cognitions.” (Sin & Lyubomirsky, 2009; p. 468)
 - *Positive psychology interventions* are **not**:
“...programs, interventions, or treatments aimed at fixing, remedying, or healing something that is pathological or deficient .” (Sin & Lyubomirsky, 2009; ibid.)
- *strategies to improve well-being (hedonic and or eudemonic)*



What are positive psychology interventions? Example: *Three good things-Exercise*

«Every night for one week, set aside 10 minutes before you go to bed. Use that time to write down three things that went really well on that day and why they went well. The three things you list can be relatively small in importance (“My husband picked up my favorite ice cream for dessert on the way home from work today”) or relatively large in importance (“My sister just gave birth to a healthy baby boy”)»

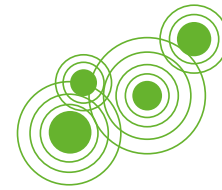
(abbreviated; after Seligman, Steen, Park, & Peterson, 2005)



What are positive psychology interventions?

Different types

- One-fits-all approaches, e.g.:
 - Three good things
 - Gratitude letter
 - Counting kindness, etc.
- Individualized approaches (based on participants' characteristics), e.g.:
 - Using signature strengths in a new way

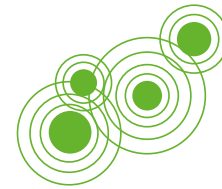


Effectiveness of positive psychology interventions

Pioneering works of Michael Fordyce (1977, 1983)

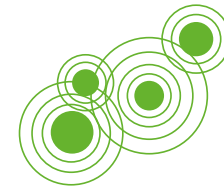
Basic assumption:

- How do happy people differ from unhappy people?
→ *14 Fundamentals*
- Can unhappy people adapt the behaviors of happy people in order to get happier?
 - Fordyce showed in several studies that students in a “happiness program” based on the 14 fundamentals get happier
- **Well-being can be deliberately improved**



Fordyce's 14 Fundamentals

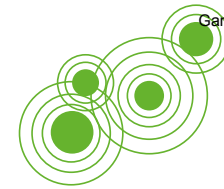
1. Be more active and keep busy
2. Spend more time socializing
3. Be productive at meaningful work
4. Get better organized and plan things out
5. Stop worrying
6. Lower your expectations and aspirations
7. Develop positive, optimistic thinking
8. Get present-oriented
9. Work on a healthy personality
10. Develop an outgoing, social personality
11. Be yourself
12. Eliminate negative feelings and problems
13. Close relationships
14. Think about your own happiness



Effectiveness of positive psychology interventions

Two independent meta-analyses

- Sin & Lyubomirsky (2009)
 - Analyzed 51 interventions on a broad array of topics (including gratitude, hope, kindness, mindfulness, goal attainment, etc.)
 - Conclusion: Positive interventions are effective for increasing well-being ($d = .61$) and reducing depressive symptoms ($d = .65$)
- Bolier, Haverman, Westerhof, Riper, Smit & Bohlmeijer (2013)
 - Analyzed 39 interventions using stricter inclusion criteria
 - Conclusion: Positive interventions are effective for increasing hedonic ($d = .34$) and eudemonic well-being ($d = .20$) and reducing depressive symptoms ($d = .23$)



Online positive psychology interventions

- First large online, randomized, placebo-controlled intervention by Seligman, Steen, Park, and Peterson (2005):
- Tested 5 interventions conducted once or for one week
- Compared with a placebo control exercise (“Early memories”)
- Assessment of happiness and depressive symptoms before and after the intervention, as well at follow-ups at 1 week, 1 month, 3 months, and 6 months after the intervention
- 3 of the interventions increased happiness and alleviated depressive symptoms compared to the placebo control group **for up to six months**:
 - Three good things
 - Gratitude visit
 - Using signature strengths in a new way



Replication of Seligman et al. (2005)

Three objectives:

1. **Replicating** the findings of Seligman et al. (2005)

- Identical interventions and design
- German-speaking sample
- Participants were not informed on a potential beneficial effect on well-being

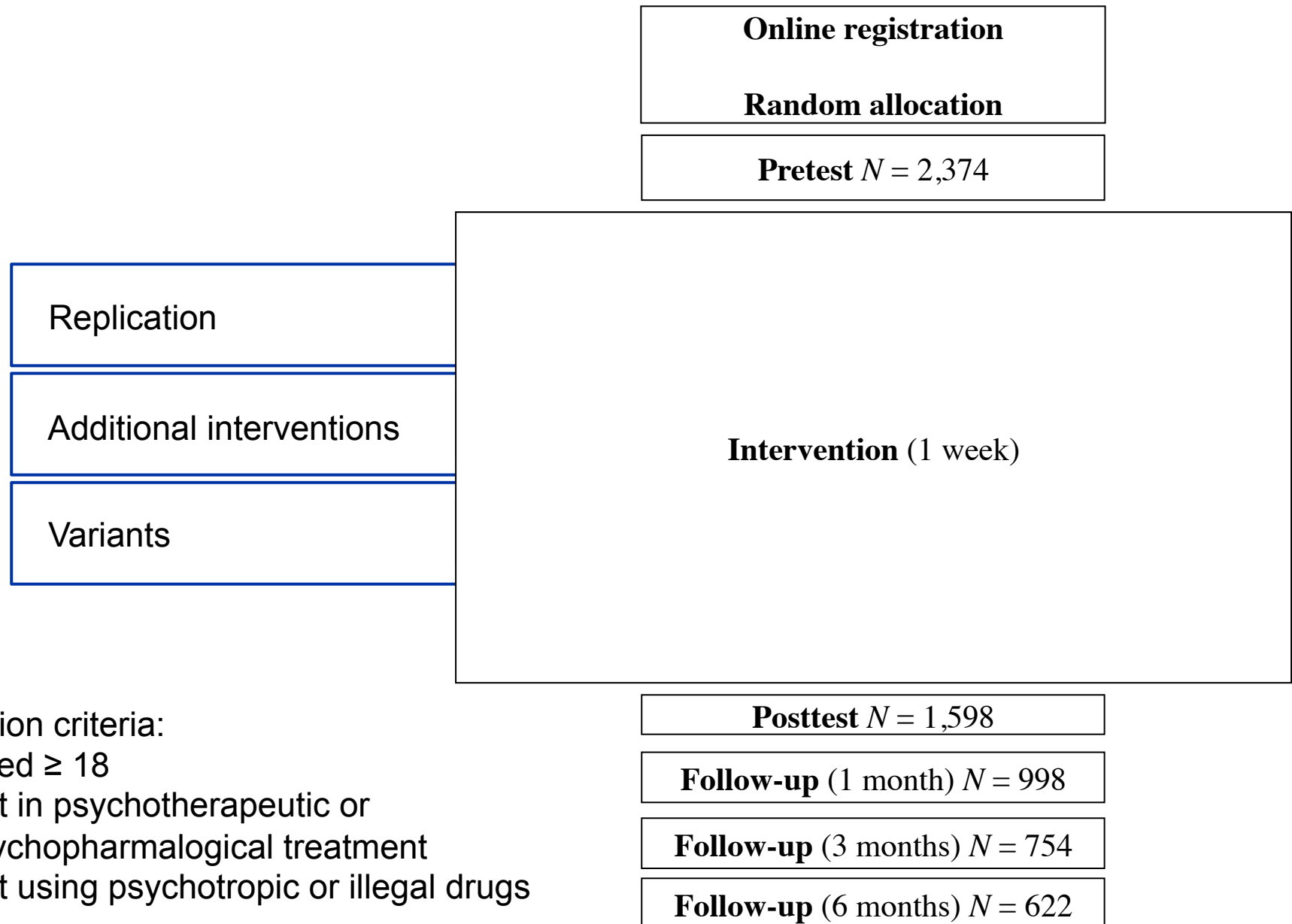
2. Testing **additional interventions**

- Counting kindness (Otake, Shimai, Tanaka-Matsumi, Otsui, & Fredrickson, 2006)
- Gift of time (Peterson, 2006)
- One door closes, another door opens (Rashid & Anjum, 2008)

3. Testing **variants** of existing interventions

- Extending the duration of the *three good things*-intervention to 2 weeks
- Combining *gratitude visit* & *three good things* (one week each)
- Replacing *three **good** things* with *three **funny** things* (for one week)

Replication of Seligman et al. (2005): Design

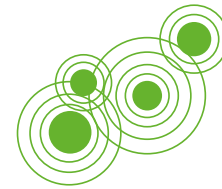


Replication of Seligman et al. (2005): Results

Gander, Proyer, Wyss, & Ruch, 2013



Note. An effect is displayed if the comparison between pretest and the respective time period differed from the placebo control group.



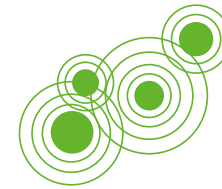
When and for whom do interventions work best?

When / under which conditions? (Bolier et al., 2013; Sin & Lyubomirsky, 2009)

- Delivery type: Individual therapy > group-administered > self-administered
- Duration: Stronger effects for longer programs (...unless it gets boring)

For whom? (Bolier et al., 2013; Sin & Lyubomirsky, 2009)

- Age: Older people (fewer dropouts & stronger effects)
 - Well-being: (slightly) depressed people
 - Intelligence: More intelligent people (Proyer, Gander, Wellenzohn, & Ruch, 2016)
 - Personality: inconsistent findings
- All effects of participants' characteristics are small and do not argue against conducting interventions with any specific participant group
- A recent study (November 6th) on potential person moderators in adolescents found *no effects* when testing a broad range of moderators including demographics, seasonality, personality, baseline characteristics, activity fit, and effort (Wang et al., 2017)



How do interventions work?

- Still widely unknown
- There are first empirical hints for the involvement of components such as:
 - **Positive emotions**
(Fredrickson et al., 2008; Gander, Proyer, & Ruch, 2017; Wellenzohn, Proyer, & Ruch, 2017)
 - **Positive cognitions**
(Gander, Proyer, & Ruch, 2017)
 - **Attentional shift**
(Wellenzohn, Proyer, & Ruch, 2017)



Positive emotions

Two conditions:

- 3 good things
- Placebo control (writing about path to work)

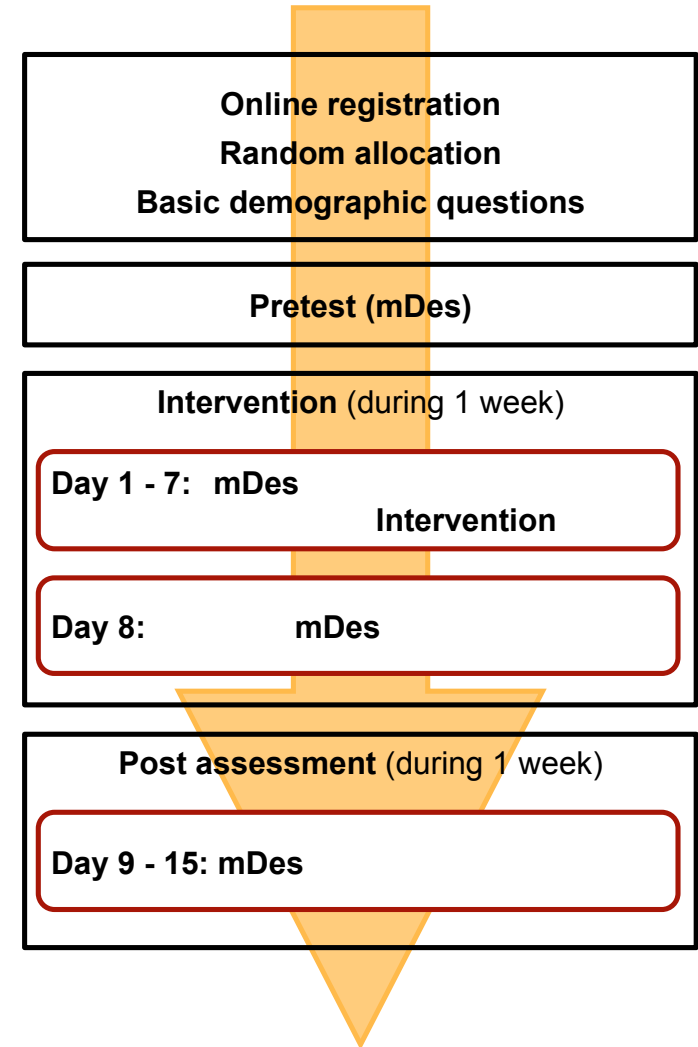
Method:

- $N = 124$
- Daily positive emotions during 14 days
- Well-being at pretest and at 2 weeks follow-up

Results: In the 3 good things condition:

- More positive emotion words used
 - More positive emotions experienced
 - Increase in well-being
- Use of positive emotions words / experienced positive emotions predicts increases in well-being

(Gander, Proyer, & Ruch, 2017)

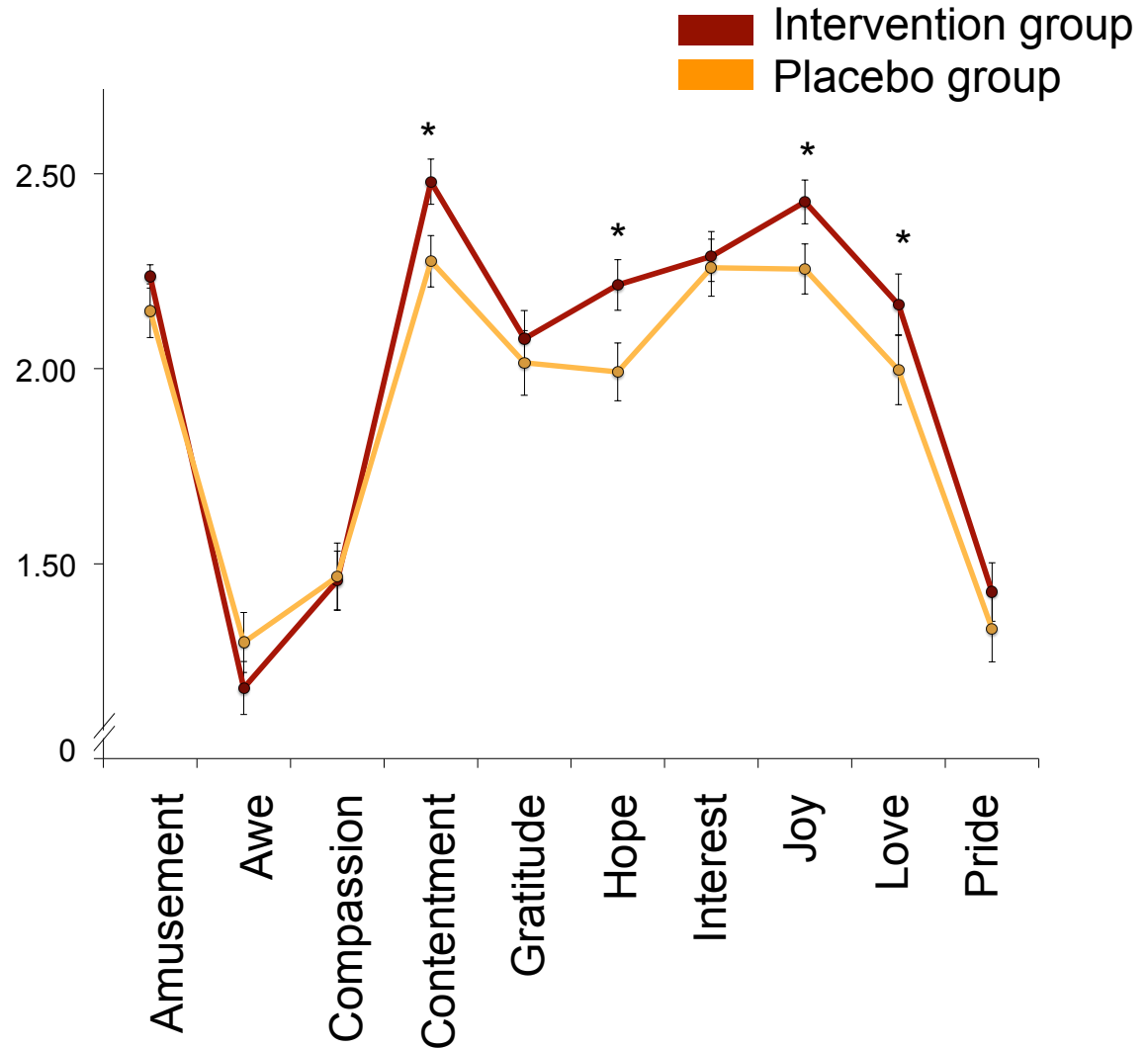


Positive emotions

Emotions elicited:

- Contentment
- Joy
- Hope
- Love

→ Increase in well-being
is explained best by
increases in joy and
contentment



Positive emotions / cognitions

(Gander, Proyer, & Ruch, 2017)

Four conditions:

- **Positive emotions:**
„Do something pleasurable for 10 minutes and write it down“
- **Positive emotions & cognitions:**
„Write down (as neutral as possible) what pleasurable things you have experienced today and try to re-experience these moments as vividly as possible“
- **Positive cognitions:**
„Write down (as neutral as possible) what pleasurable things you have experienced today and think about what you could learn“
- **Placebo control** (early childhood memories)

Method:

- $N = 509$ adults
- Well-being assessed at pretest, posttest, and at follow-ups 2, 4, and 12 weeks after the intervention

Results:

- Increase in well-being only in the conditions with a cognitive component

Positive emotions / attentional focus

(Wellenzohn, Proyer, & Ruch, 2016)

Four conditions:

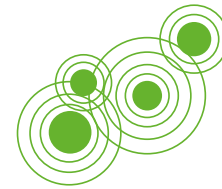
- **Positive emotions & attentional focus:**
„Write down three funny things that happened today“
- **Positive emotions:**
„Write down three funny things that happened one week ago “
- **Attentional focus:**
„Count the funny things you are experiencing during the day “
- **Placebo control** (early childhood memories)

Method:

- $N = 695$ adults
- Well-being assessed at pretest, posttest, and at follow-ups 2, 4, and 12 weeks after the intervention

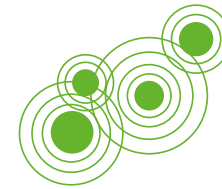
Results:

- Increase in well-being in all three conditions
- Attentional shift reported to a larger extent in present and future variants
- Experience of positive emotions reported to a larger extent in present and past variants



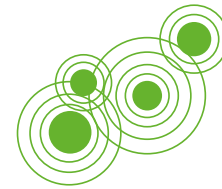
PPI in educational context

- Empirical studies on positive psychology interventions in schools are comparatively rare
- Often there are methodological difficulties:
 - No randomization
 - No placebo control comparison
 - Low treatment adherence
 - In most cases complete programs were examined → effectiveness of individual components cannot be identified



PPI in educational context

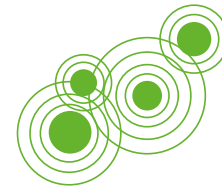
- Several school-based programs have been applied and validated (for an overview see Waters, 2011 and Shankland & Rosset, 2017)
- Diverse topics, including gratitude, hope, serenity, resilience, mindfulness, and character strengths
- Programs have been used with students ranging from 5 to 19 years
- Examples (Seligman et al., 2009):
 - Penn Resiliency Program (>20 years, >17 independent studies, > 2'000 children aged 8 to 15): Reduces and prevents anxiety and depression
 - Strath Haven Positive Psychology Curriculum (randomized, 349 students): increased social skills, school engagement, enjoyment, and achievement
- Overall, results are promising
 - Generally, positive effects on well-being are reported
 - No detrimental (and in some cases positive effects) on achievement were found



Recommendations for using PPIs in education

Shankland & Rosset, 2016:

- **Combine theory and practice**
Students should not just practice gratitude but also understand why and know about the (potential) beneficial effects of gratitude on themselves and others
- **Emphasize the malleability of the concepts** (especially when working with strengths-based approaches):
Individual strengths should also be cultivated, not just identified
- **Adapt intervention content and dosage to the target group**
Intervention selection should also be guided by students' preferences
- **Combine multiple interventions**
Single interventions can be combined to an intervention program

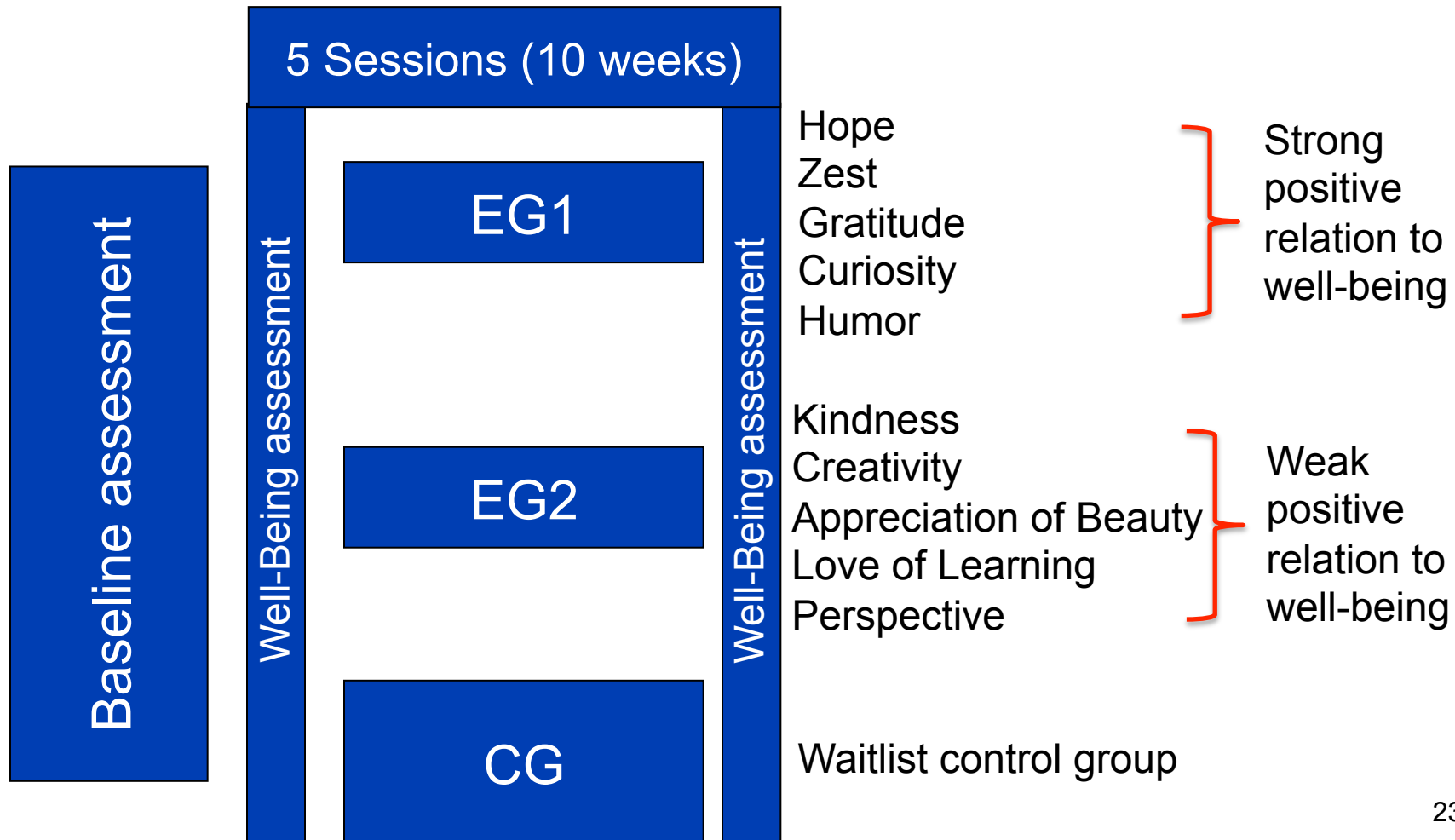


A possible individualized strengths-based program (not validated)

- Getting to know character strengths:
 - What are desirable characteristics of friends, parents, and fictional characters?
 - Learning about the VIA classification of strengths
- Identifying character strengths:
 - Applying the VIA classification to paragons and fictional characters
 - Identify character strengths in oneself (by completing the VIA-Youth Inventory)
 - Getting feedback of others (peers, parents, teachers) on own strengths
- Cultivating strengths:
 - Using top strengths in a new way
 - Learn from others how to foster underdeveloped strengths
 - Use interventions for specific strengths (gratitude visit, counting kindness, etc.)



Non-individualized Strengths Program: The Zurich Strengths Program (ZSP)





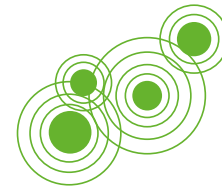
The ZSP

Procedure:

- Each session was dedicated to one strength
- One session consisted of
 - Theoretical information (especially prepared for the general population)
 - What is gratitude?
 - Research findings on gratitude
 - Group exercise
 - Discussions on when gratitude is shown in everyday behavior (but also exercises by humor and creativity trainers)
 - Home exercise
 - Writing a gratitude letter

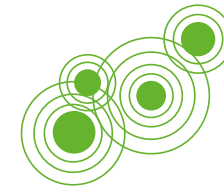
Results:

Participant who trained those strengths that are strongly related to well-being significantly improved their well-being



Summary

- There is a broad array of validated positive psychology interventions (Bolier et al., 2013; Sin & Lyubomirsky, 2009)
- Although it is not quite clear how and for whom they work best, the findings that they are effective in general are very robust
- There is not much reason to believe that they should not work in students
- Adaption to specific contexts and evaluation is strongly recommended



Research group



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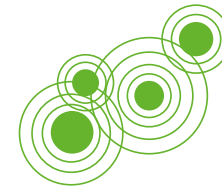
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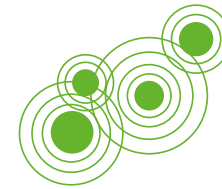
Swiss Positive Psychology Association

Schweizerische Gesellschaft für Positive Psychologie
Société Suisse de Psychologie Positive
Società Svizzera di Psicologia Positiva



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