

How effective is a short CSM-based online intervention on intended flu prevention behaviour?

Christel Salewski, Barbara Trusch & Manja Vollmann
Fernuniversität in Hagen

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1. Background

Flu



- contagious respiratory illness caused by viruses
- severe consequences (e.g., treatment costs, sick leaves, high mortality)
- no causal treatment

1. Background

Flu



=> central importance of primary prevention:

- active behaviours, such as handwashing
- avoidant behaviours, such as no handshaking
- annual flu shots

1. Background

Illness representations

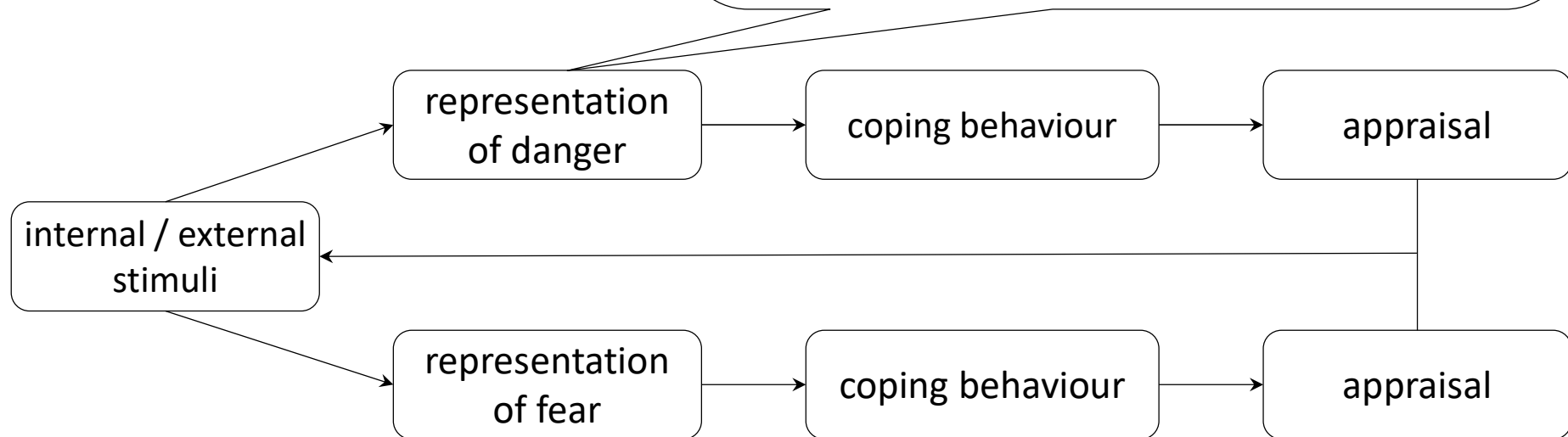
- beliefs about an illness or health threats (Hagger et al., 2017)
- important for patients and healthy people (Godoy-Izquierdo et al., 2007)
- core construct of the Common Sense Model (CSM) (Leventhal et al., 2003)

1. Background

CSM / illness representations

cognitive representations:

- perceived symptoms
- timeline (acute/chronic/cyclical)
- consequences
- causes
- personal, treatment and prevention control
- illness coherence



emotional representations:

- anxiety and fear
- anger
- sadness

1. Background

Illness representations and prevention

- relations between illness representations, behavioural intentions and illness-related behaviours in persons confronted with Influenza A
(Karademas et al., 2012)

1. Background

Modification of illness representations

- evidence for changeability of illness representations in patients with chronic conditions (McAndrew et al., 2008):
 - decrease in perceived consequences and beliefs about a long timeline, increased control beliefs, more positive emotions, and faster return to work after intervention for patients with myocardial infarction; (Petrie et al., 2002)
 - illness representations as mediators between participation in an intervention and decrease in symptom severity in patients with Irritable Bowel Syndrome (Chilcot & Moss-Morris, 2013)

2. Aims of the study

General aim: To examine the applicability of the CSM in the context of preventive behaviours (i.e., flu preventive behaviours)

1. How effective is an intervention targeting at changing illness representations and preventive behaviours?
2. Are the positive effects of the intervention on preventive behaviours due to changes in illness representations?

3. Method: Design

- randomized pre-post-control group design

Pre-test:
IR, intention

IG: Intervention
CG: Information, questionnaire

Post-test:
IR, intention

- online study

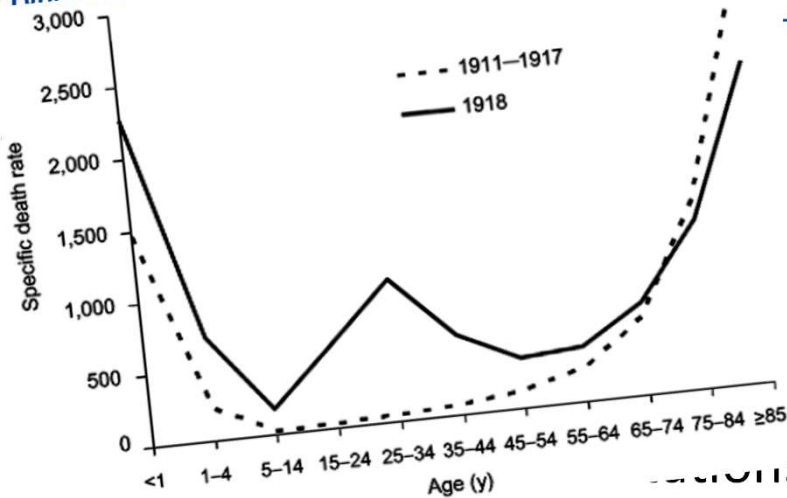
3. Method: Intervention

- based on Intervention Mapping Approach
- targeting illness representations regarding consequences, prevention control, emotional representations and illness coherence of flu
- information provided in written form, via pictures and videos; knowledge quiz with immediate feedback

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Approach

considerations regard

prevention control, emotional representations and illness
coherence of flu



Frage

Was ist das empfohlene Verhalten beim Husten?

- a) Abwenden von anderen Personen
- b) Die Hand vor den Mund halten
- c) **Gegen den Ellenbogen husten**

3. Method: Sample

- N = 416 participants (not acutely infected with flu)
- 300 women (72 %), 116 men (28 %)
- mean age: 36.87 year (SD = 11.78); range: 18 – 72 years
- level of education:
 - low: 19
 - intermediate: 162
 - high: 235
- randomization: 213 in IG, 197 in CG

3. Method: Assessment I

Illness representations: Illness Perception Questionnaire-RH (Moss-Morris et al, 2009; Figueras & Alves, 2007)

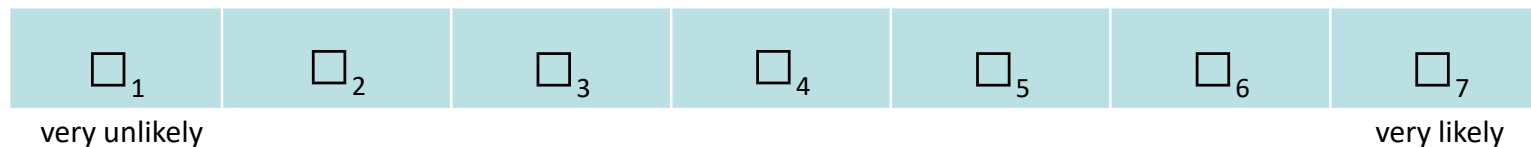
- consequences: 4 items, “Flu has a strong impact on the life of the person fallen ill with flu”
- prevention control: 6 items, “You can do something against falling ill with flu”
- emotional representations: 5 items, “Flu scares me”
- coherence: 5 Items, “I have a clear understanding of flu”

Diagram illustrating a scale from 1 to 5, where 1 is labeled "not at all true" and 5 is labeled "completely true".

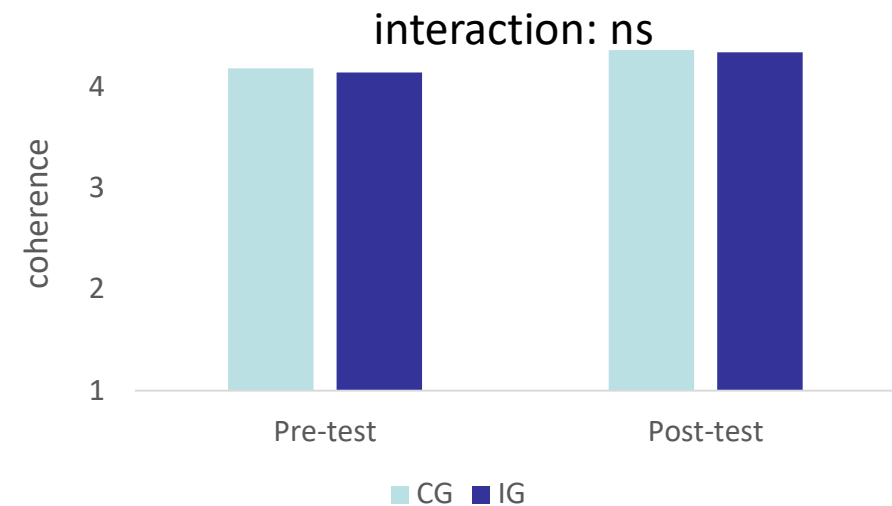
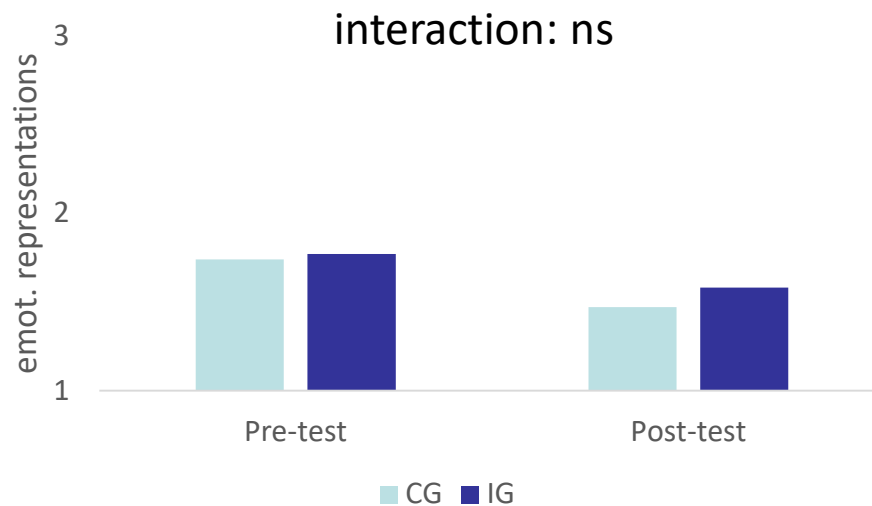
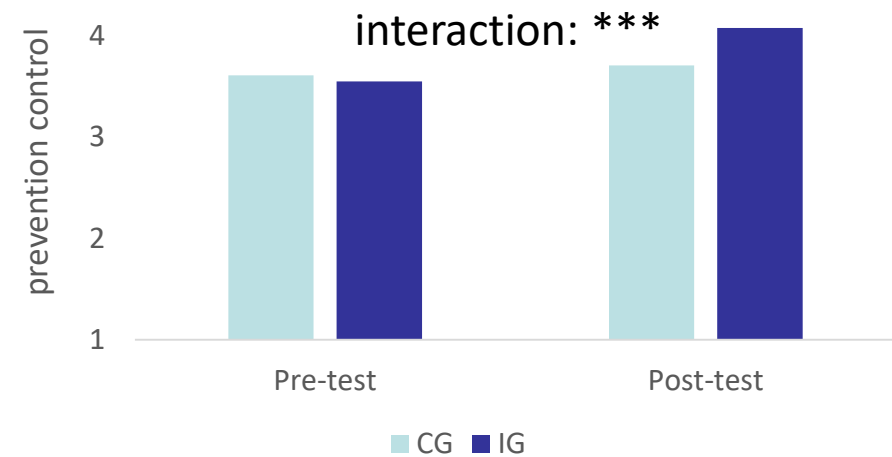
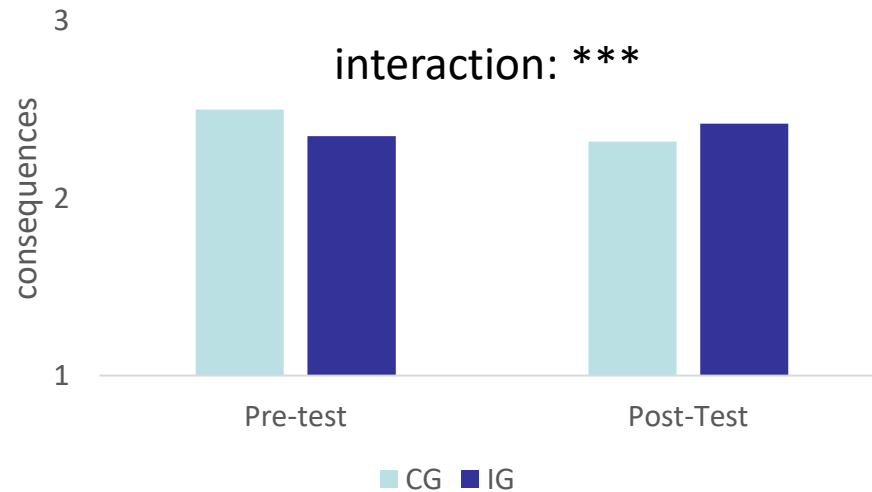
3. Method: Assessment II

Intention to perform flu preventive behaviours:

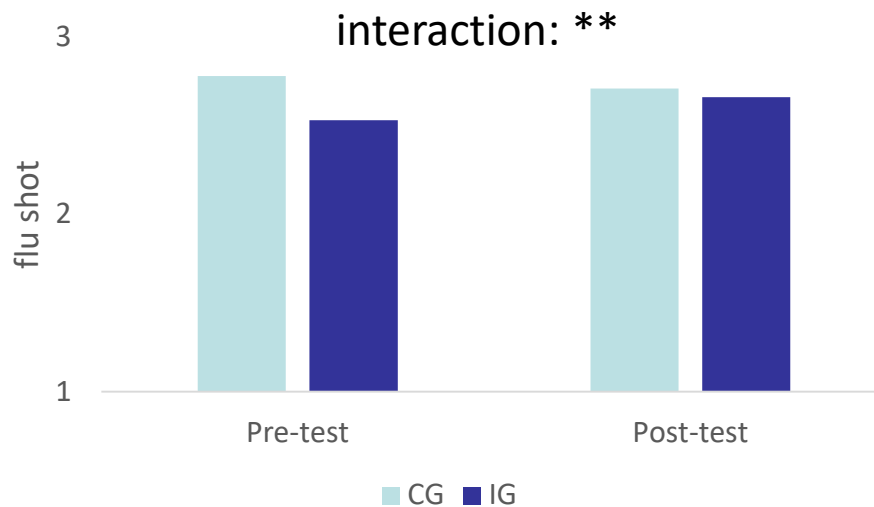
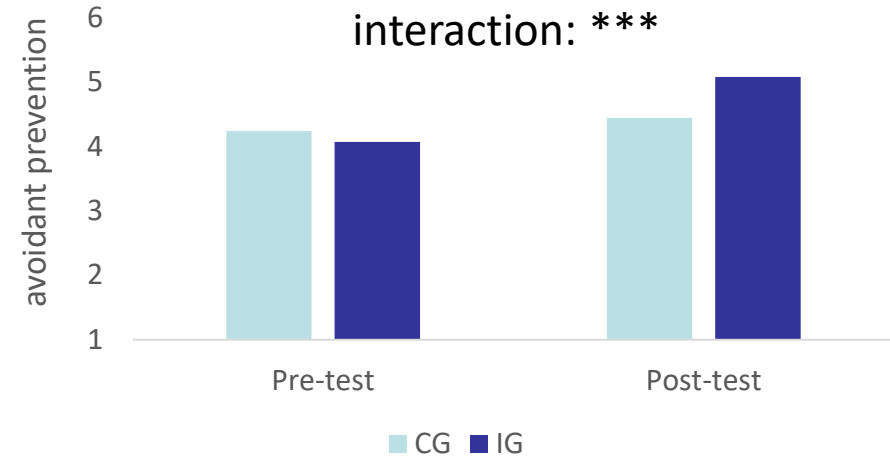
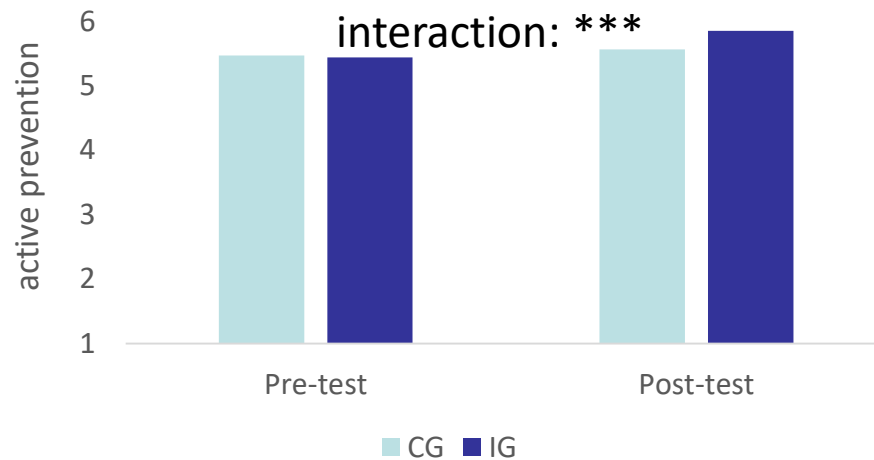
- active prevention: 6 items, “To prevent flu, I will wash my hands regularly”
- avoidant prevention: 4 items, “In times of high rates of flu infections, I will avoid shaking hands in order to prevent an infection”
- Flu shot: 4 Items, “In order to prevent flu, I will take a flu shot next autumn”



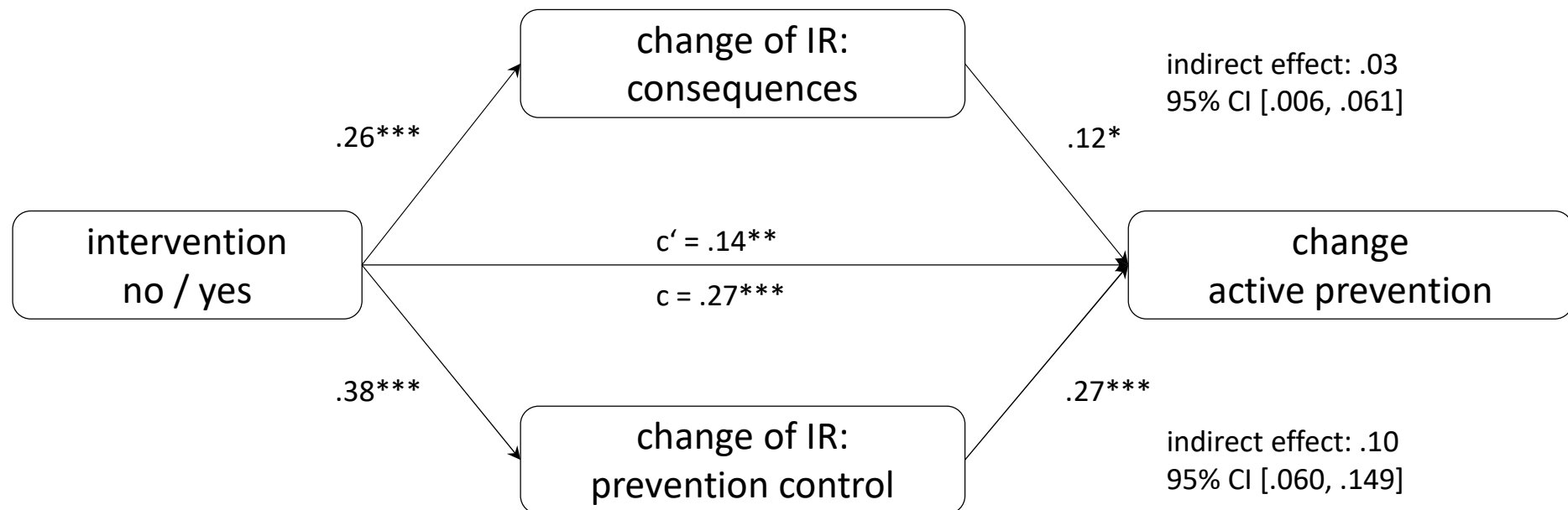
3. Results: Effectiveness of the intervention



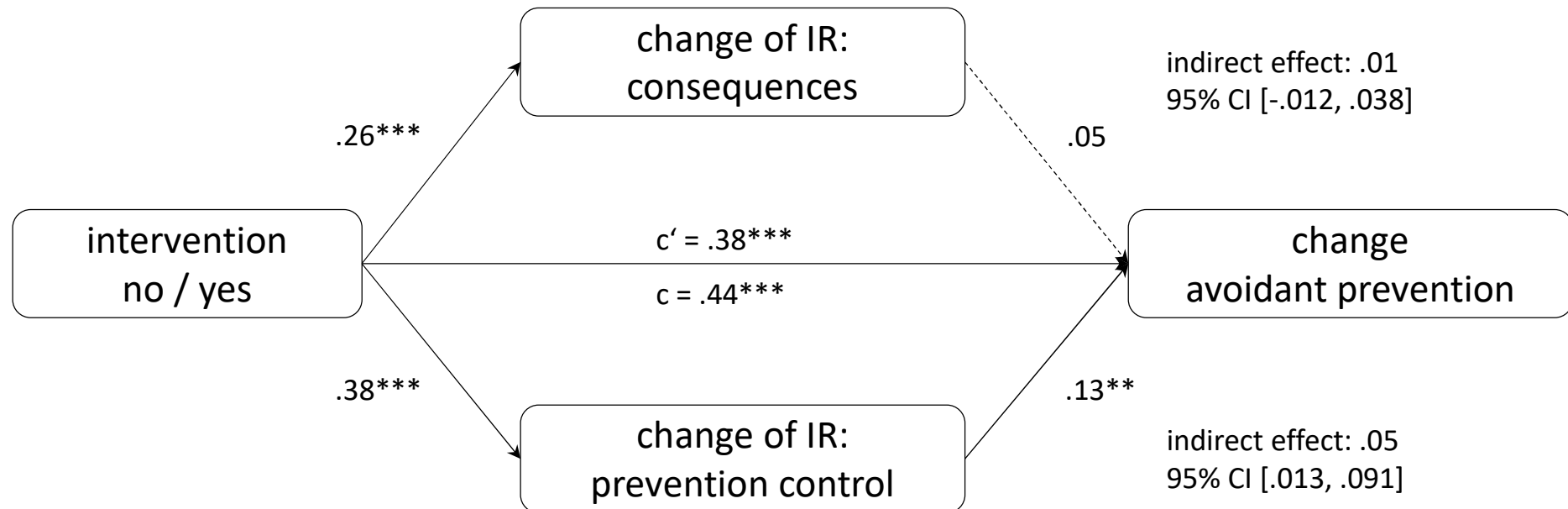
3. Results: Effectiveness of the intervention



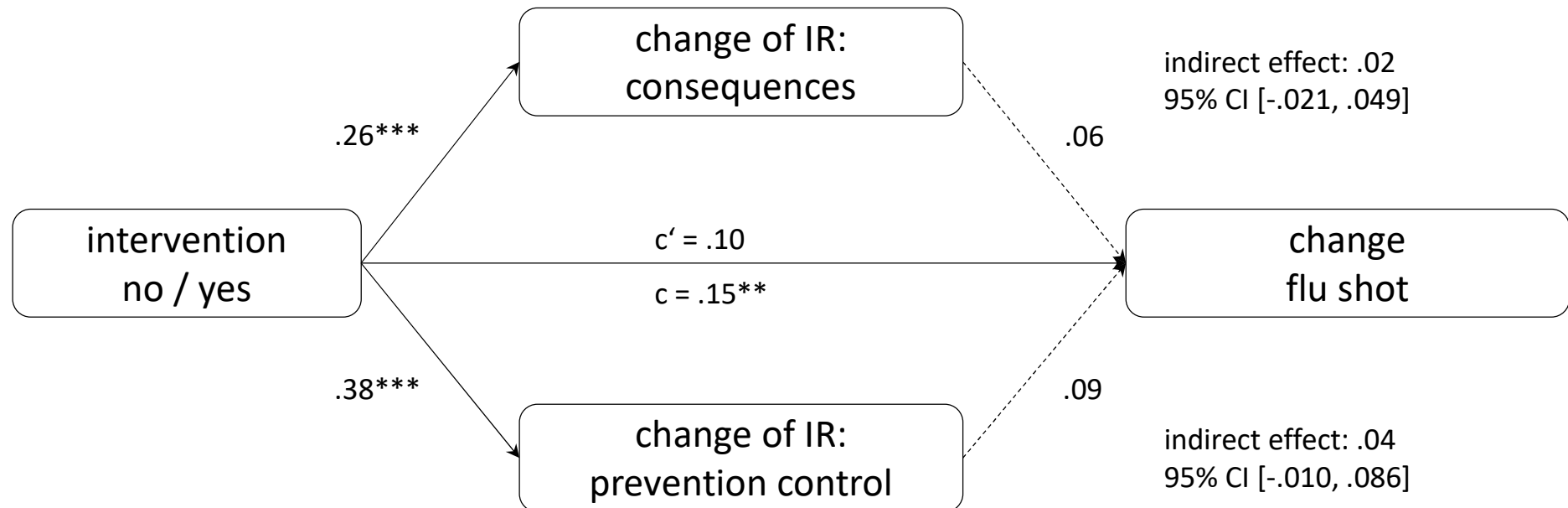
3. Results: Illness representations as mediators



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3. Results: Illness representations as mediators



4. Summary

- increase of intentions to perform three forms of flu prevention behaviour after intervention targeting illness representations of flu
- also, increase in perceived flu consequences as well as in beliefs about prevention control
- illness representations mediate the relationship between the intervention and behavioural intentions to some degree

5. Discussion

- indicator for the effectiveness of short media-based intervention to change both illness representations and intentions to perform preventive behaviours (Petrie et al, 2011); however, intervention results in more negative beliefs about consequences
 - long-term effects?
 - effectiveness to change behaviour?
 - effects on other outcome measures, e.g., well-being?

Thank you for your attention!

christel.salewski@fernuni-hagen.de