Western Norway University of Applied Sciences

User experience and performance of a mobile application for translating EBP to clinical education:
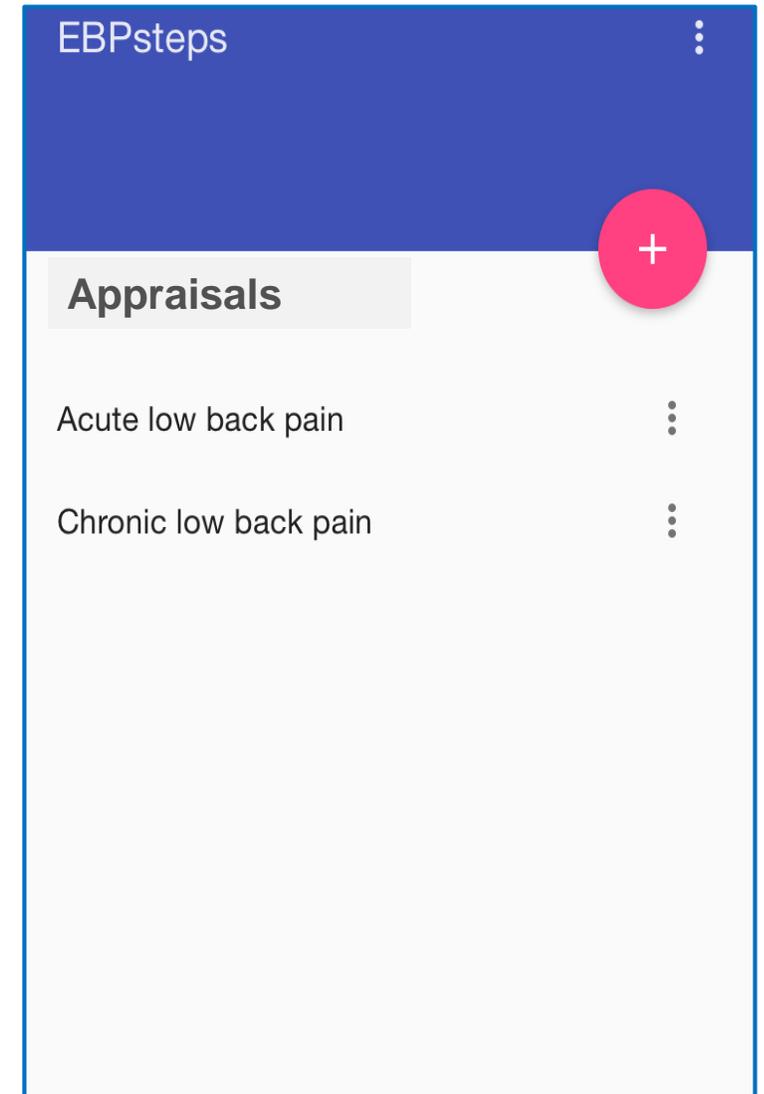
The EBPsteps

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EBPsteps

Appraisals

Acute low back pain

Chronic low back pain

Background

› Students within health- and social care programs:

  › Lack sufficient EBP competence
  › Struggle transferring research evidence to clinical situations[1-10]

[1]Bradley et al. (2005) Eval Rev., [2]Cooper & Elnicki (2011) Clin Teach., [3]Florin et al. (2012) J Adv Nurs., [4]Forsman et al. (2010) J Adv Nurs., [5]Ilic & Forbes (2010) BMC Med Educ., [6]Jonsen et al. (2013) Nurse Educ Today., [7]Lai & Ramesh (2006) Singapore Med J., [8]Olsen et al. (2013) Med Educ., [9]Pruskil et al. (2009) Med Teach., [10]Stronge & Cahill (2012) Occup Ther Int.

Background

› Mobile technologies have the potential to enhance learning activities[1]

› Educators need to:
  › Have the courage to use mobile technology to improve teaching
  › Be aware of the practical possibilities and limitations[2]
  ›

› Existing mobile technology/tools to support EBP:
  › EBR tool[3]
  › CASP[4]
  › GATE[5]

[1]Gikas & Grant (2013) The Internet and Higher Education, [2]Masters et al. (2016) Medical Teacher, [3]Long et al. (2016) Worldviews Evid Based Nurs.
[4]http://www.ithinkwell.org/free casp-iphone-app-for-critical-appraisal-skills/2017, [5]Jackson et a. (2006) ACP J Club,

The EBPsteps

› The app guides students and health professionals through the EBP steps: ask, search, appraise, apply and evaluate

› Freely accessible at: https://ebpsteps.no/

› Built for mobile phones, but works on any device

› Currently only available in Norwegian

› The app provides:
  › Links to learning resources and sources of research evidence
  › Tools, e.g. glossary, calculator, email function, checklists
  › Possibility to document the EBP process

Aim

› To explore user experience and performance of the EBPsteps among bachelor students who used the app in clinical education

Methods

- Four focus group interviews: conducted spring 2017 (n=15)
- Interpretive description[1] guided the data collection and analysis

Interviews	Study program (BSc)	Year of study	Participants (n)	Exposure to EBP (teaching sessions)*
1 (Feb)	Social Education	3rd	n=4	Low (11 h)
2 (Feb)	Occupational Therapy	3rd	n=3	Medium (24 h)
3 (May)	Physiotherapy	2nd	n=2	High (37 h)
4 (May)	Social Education	2nd	n=6	Low (12 h)

*Low=0-15 teaching session, Medium=16-26 teaching sessions, EBP integrated, High=more than 27 teaching sessions, EBP integrated

[1]Thorne SE. Interpretive description. Walnut Creek: Left Coast Press; 2008.

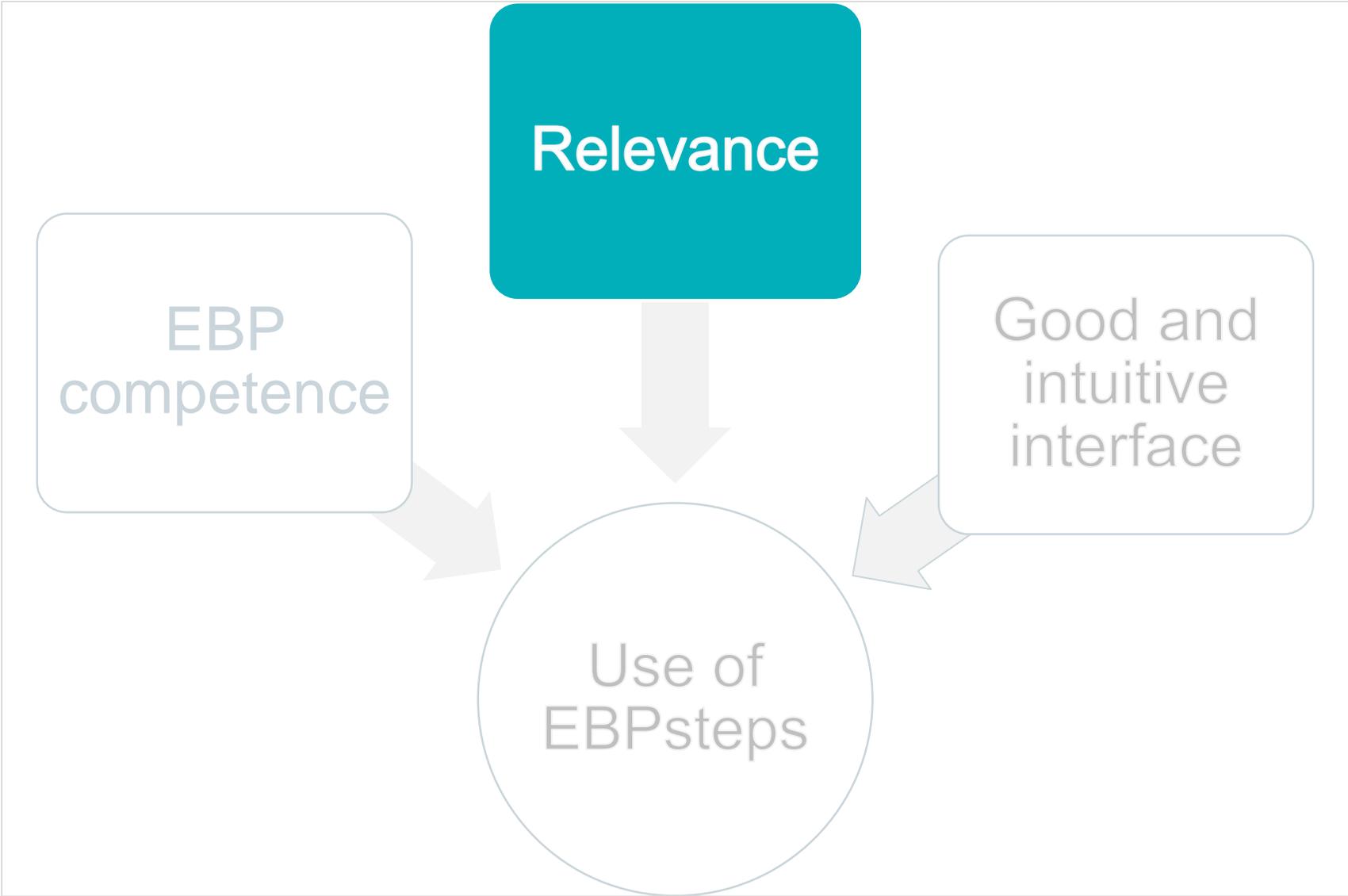# Results
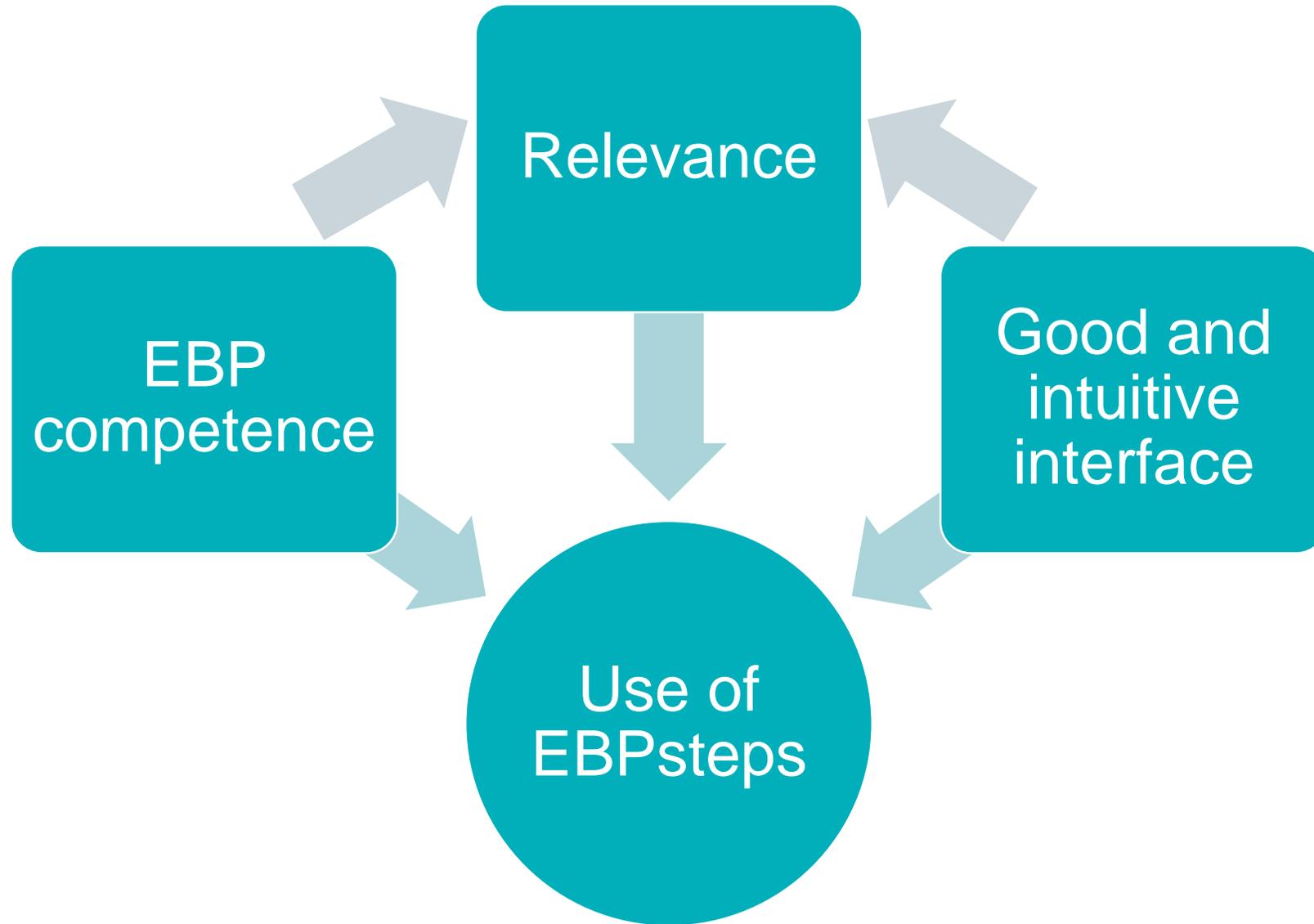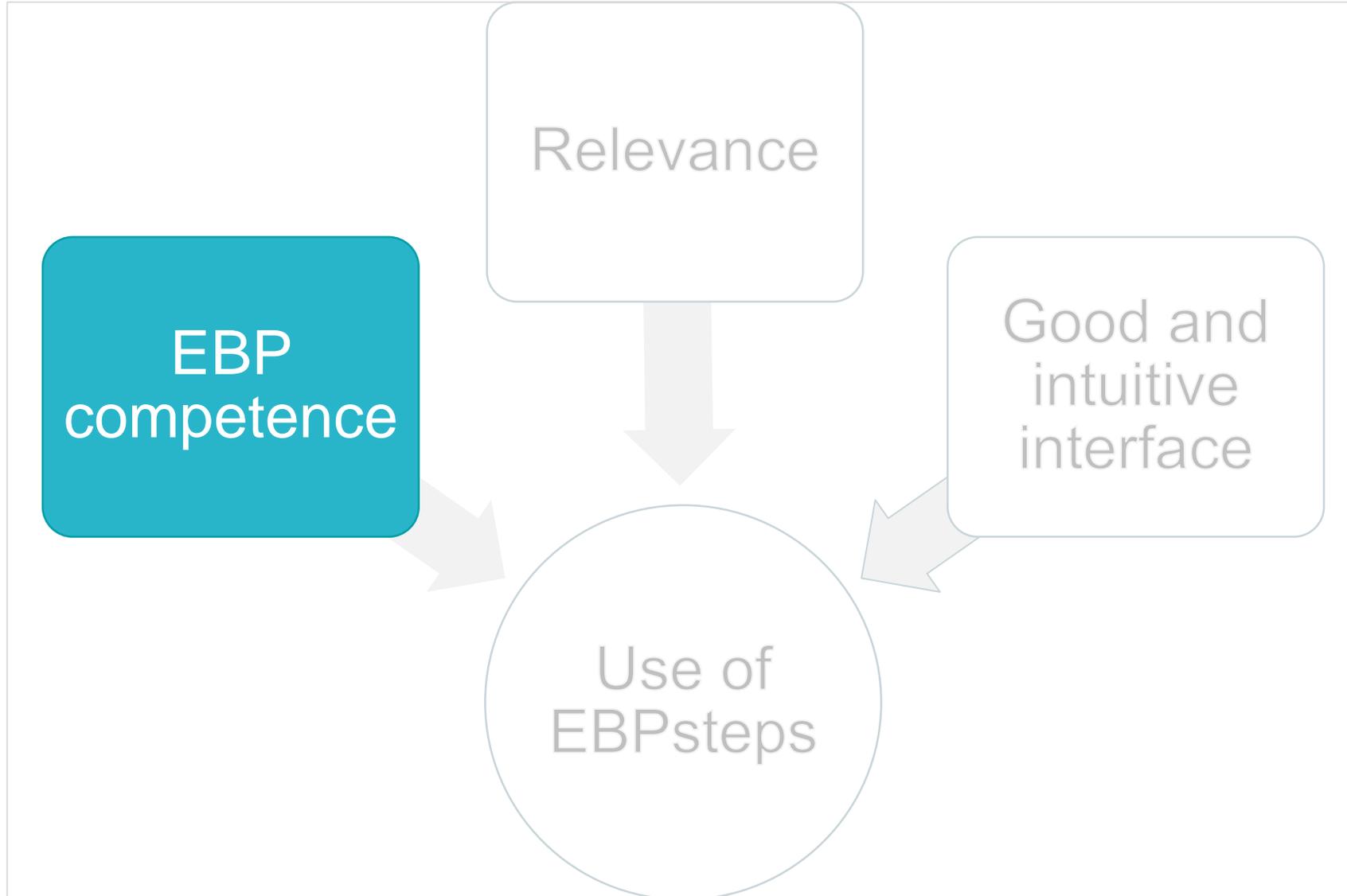
EBP competence

What I found difficult was the searching. (Interview 4)

The process of searching after research evidence took time. (Interview 1)

Using the app did not make EBP any easier. I felt that I needed some basic knowledge about EBP to use it. (Interview 4)

To me it was a little bit too difficult, or maybe not difficult, but too many steps before I found what I needed. What I really needed was simple exercises… (Interview 3)

It was ok to formulate a question; using PICO gave me a good overview, but when it came to the rest.. I felt lost. (Interview 4)

Relevance

During my clinical placement, I needed to learn more about a specific diagnosis and related challenges. Then, it was relevant for me to start searching, and it was relevant to use the app for this. (Interview 1)

I found it relevant to look for the newest research evidence and recommendations related to exercise program from mothers who had recently given birth. This is why I started using the app. (Interview 3)

I had a clinical instructor who had participated in a course in EBP. She challenged me to see if I could find the same research evidence as she had found, on therapy for children. (Interview 2)

EBP is for people with a special interest…I have now been to different placements and workplaces, and I have yet to meet someone who works evidence-based.(Interview 4)
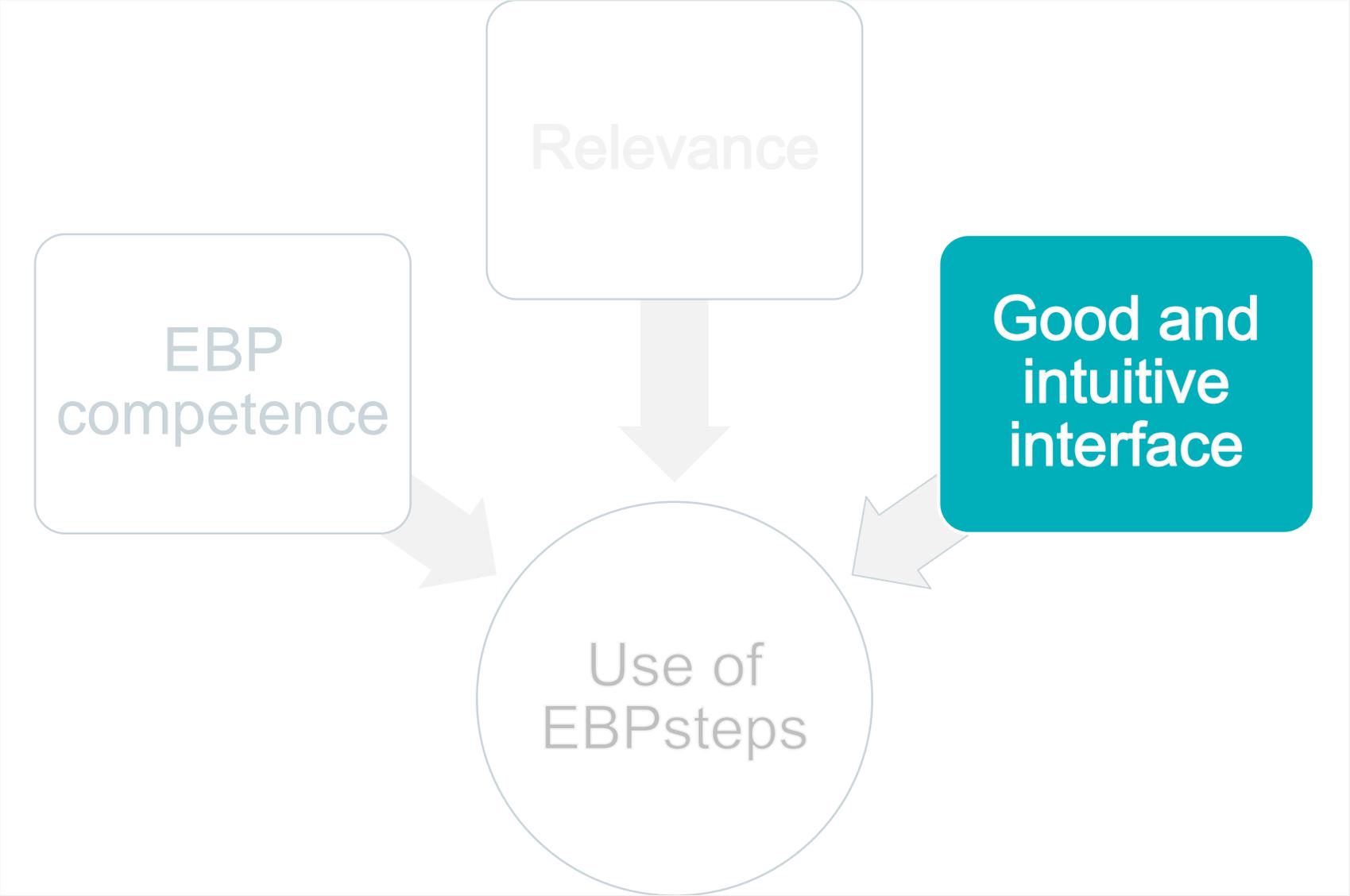
…each step is intuitive; you fill in some information and continue to the next step, and this requires very little thoughts about how to do it. (Interview 1)

I used the app to be sure I did it (used the EBPsteps) in the right order, so I did not skip a step. In this way, the app structured the process. (Interview 4)

Searching for research evidence…had to be done in a different window and then I kind of forgot about going back to the app (to fill in information). (Interview 4)

I found it useful that I had a tool on my phone, easily accessible instead of those pieces of paper (checklists)..(Interview 1)

There should have been a video that demonstrated how to use the app. (Interview 4)

Good and intuitive interface

Limits

› Further systematic piloting of the tool is needed before extensive implementation

Bottom line

› Translating EBP to clinical education by implementing the EBPsteps app will depend on
   › Level of EBP competence
   › Academic expectations
   › Role models applying EBP and challenging students
   › Good instructions on how to use the app (e.g. instruction video)

› The EBPsteps is a promising tool for translating EBP into clinical education within health- and social care study programs