

# Requirements Analysis Towards Future Design of an Innovative Distance Learning Device Intended for French Orthodontic Practitioners

Contribution of a Community of Practice Analysis

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# About the authors

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*Research focus on :*

Human factors

Acceptability of innovative system

Psychology and ergonomics



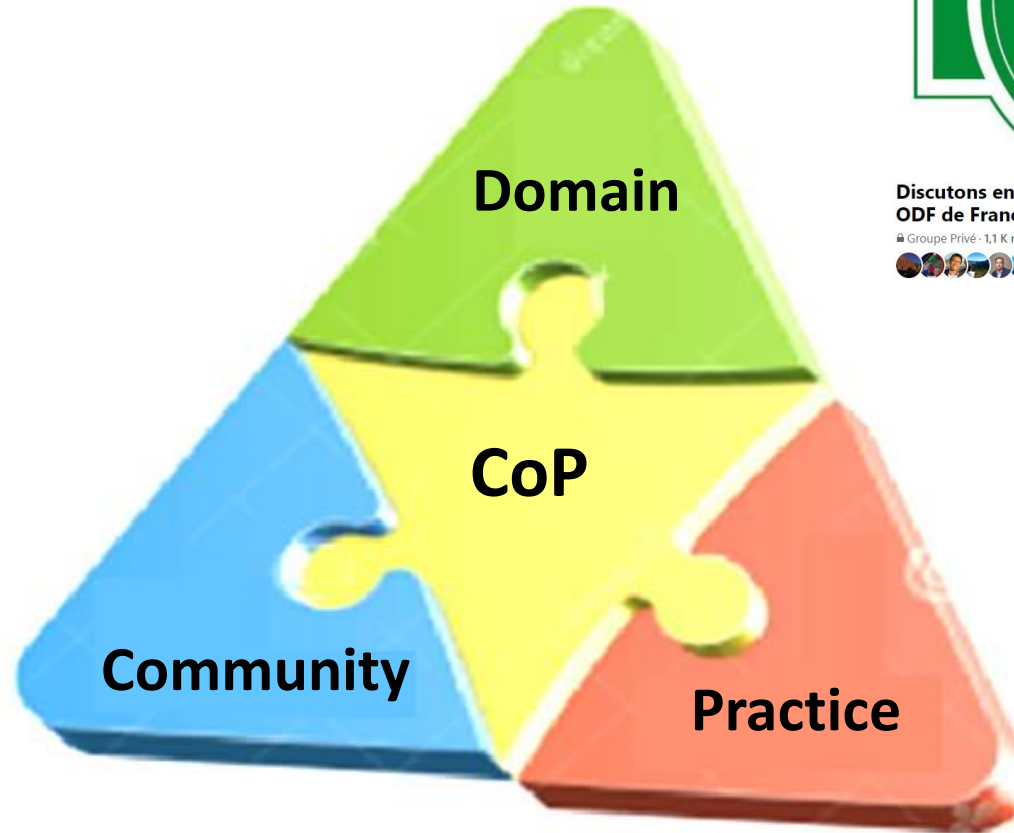
## *Context and goals*

1- Training is a legal and ethical obligation... but there are many barriers!

2- COVID

*What would an innovative distance device bring to orthodontists?*

# *What is a Community of Practice (CoP)?*



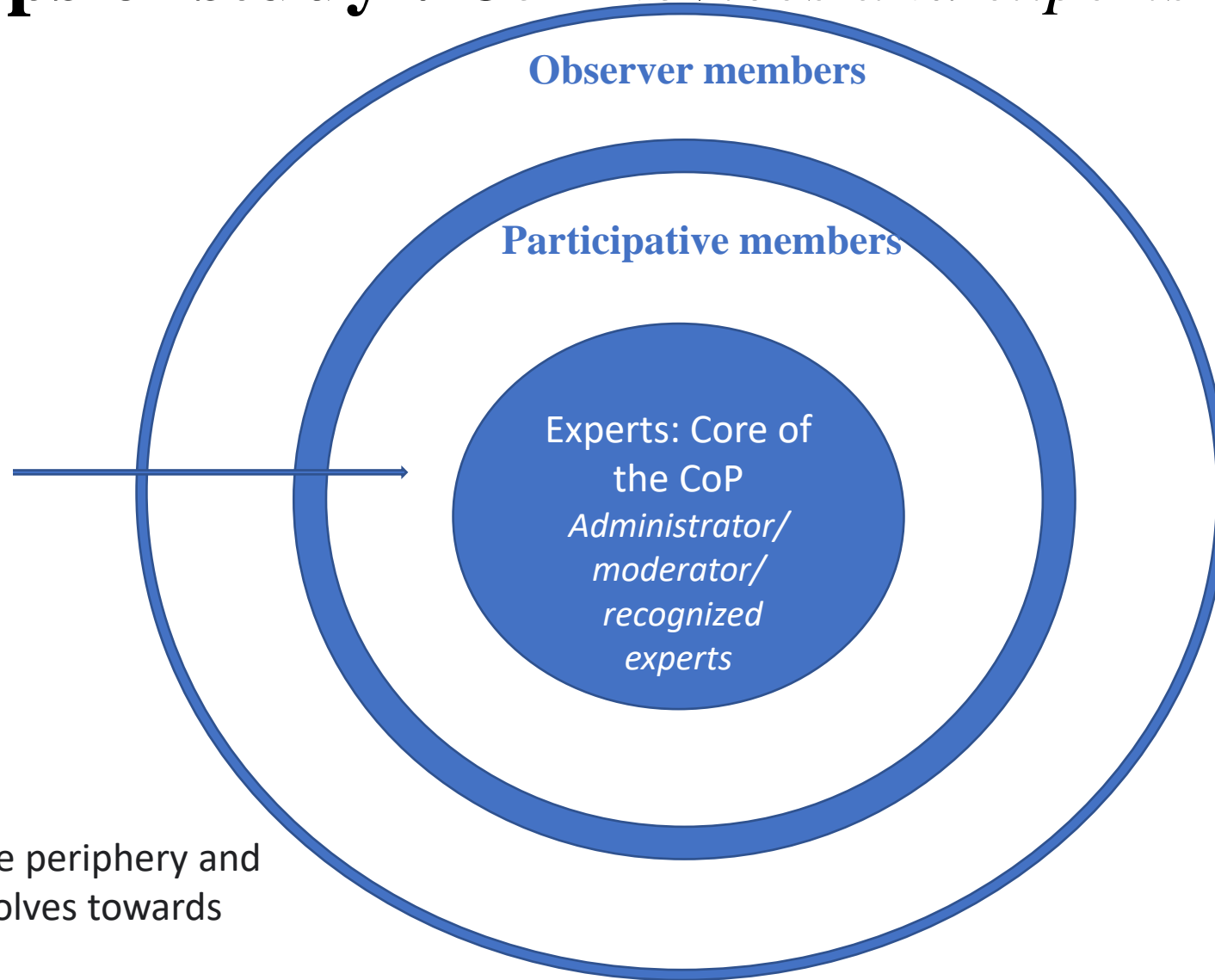
Discutons entre SPÉcialistes en Orthodontie-  
ODF de France

👤 Groupe Privé · 1,1 K membres



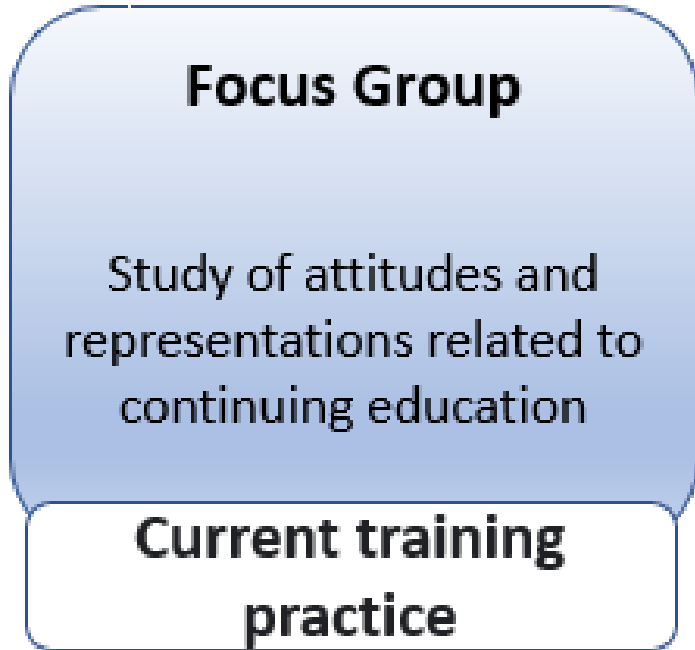
Membre ▾ + Inviter ▾

# Groups of study : *CoP novices and experts*



Novices start at the periphery and their trajectory evolves towards the center

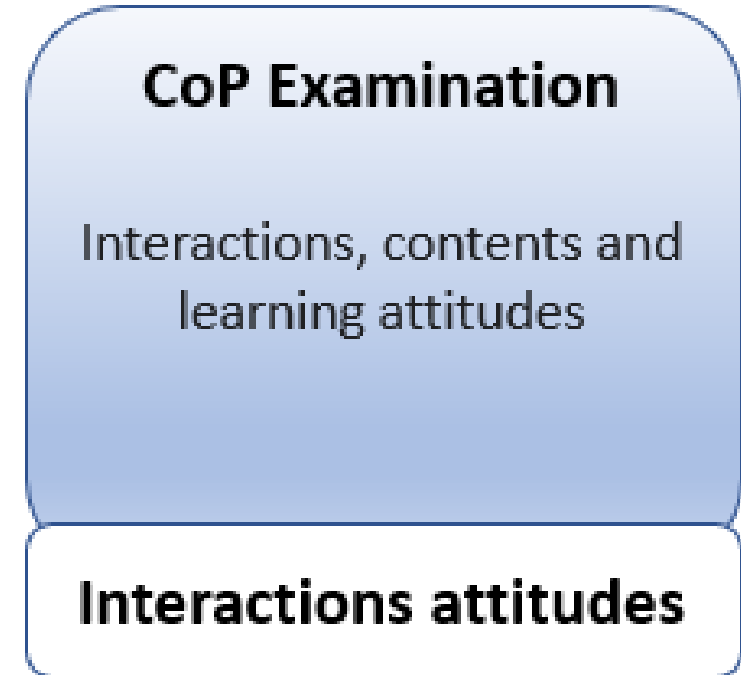
# Methodology : *Triangulation*



4 focus group  
(4 to 6 novices)  
3 before/1 after COVID crisis



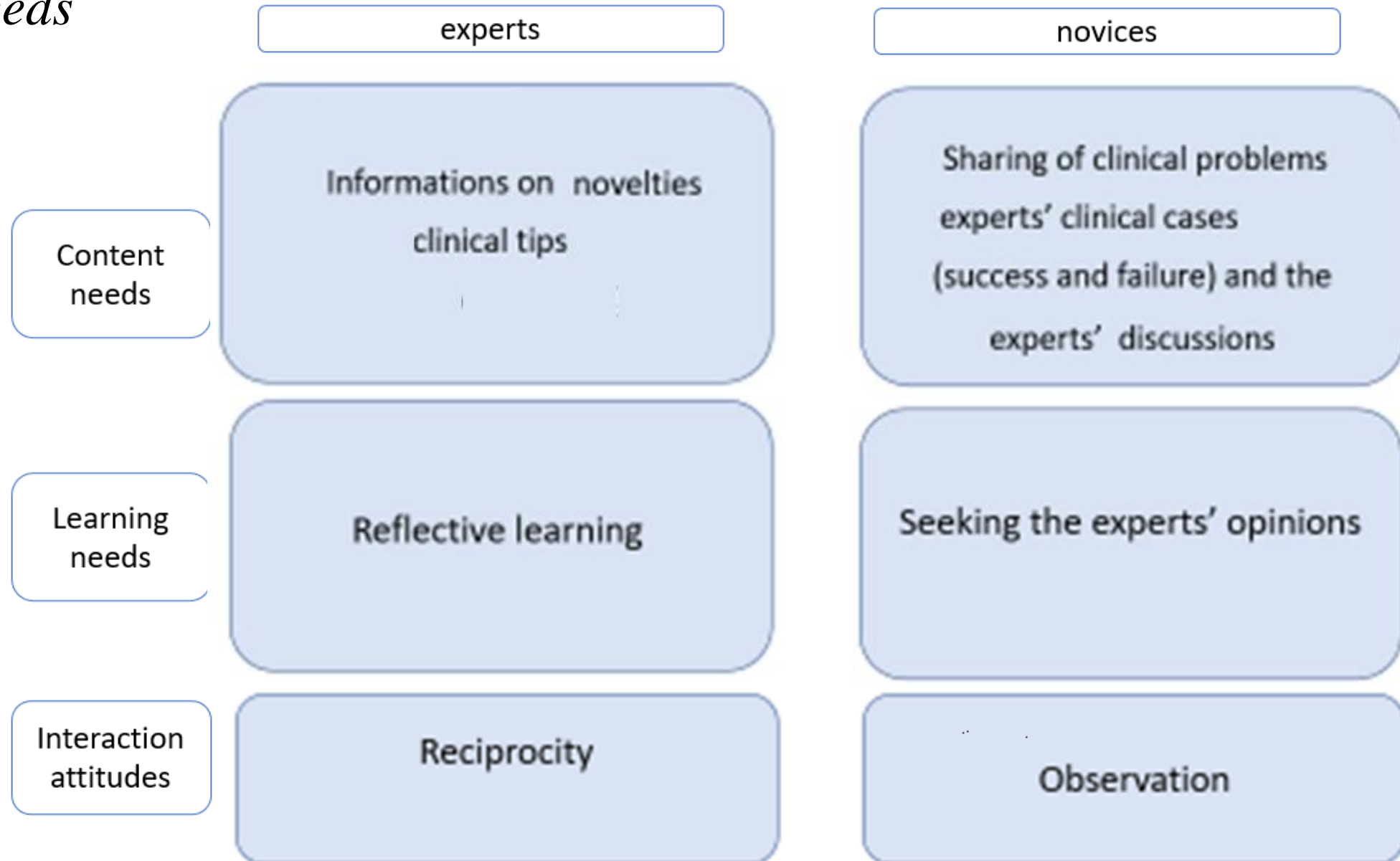
59 CoP members: 41 CoP experts and 18 CoP novices



Discursive analysis, quantitatively and qualitatively (Sept =51 posts)  
=> according to their experience (expert vs novice)



# Main results : *Experts/novices: contents, learning and interactions needs*





# **Main results** : *Impact of the COVID-19 on training needs*

## **Pre COVID-19 practitioners' needs**

- face-to-face conference
- focus on the clinical aspect
- scientifically validated content
- limited costs
- limited duration



## **Post COVID-19 practitioners' needs**

- clinical cases sharing
- scientifically validated content
- Anonymous interactions
- videoconference instant translation (French)

# Main results

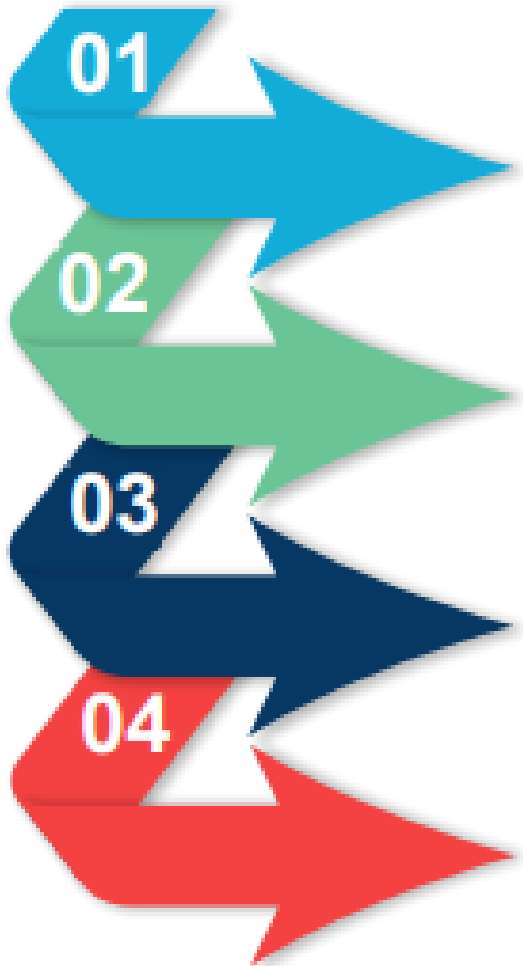
## Novices' needs

- Fear of being judged
- Content scientific validity
- Discussions with novices and/or experts about clinical cases

## Solutions

- discussions under a **pseudonym**
- **practitioner's status** should be known
- Content validation by experts/teachers from universities.
- creation of limited or extended discussions groups (expert/novices).

# *Discussions*



A comprehensive distance learning device could meet many novices and experts' expectations.

An education device should encourage all CoP members to participate on a voluntary basis to reduce the feeling of loneliness and foster their commitment.

This is more difficult to maintain comitment and mutual trust in an online environment.

Our user-centered approach must be extended during the design/redesign phases.

Thank you!

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