

# Reflecting on the Impact of a Research Integrity Work Package in a Dementia Research Program: Qualitative Analysis – 1 of 2

## Objective

To understand the impact of a research integrity (RI) work package (WP)<sup>1</sup> from the perspective of individual researchers participating in a research program with a main focus other than integrity research.<sup>2</sup>

## Question

What did you, as a CONT-END team member and researcher on end of life with dementia, experience from the CONT-END project's RI WP, and was this of any benefit? Please reflect.

Answers (written for the project's PI JTvds)  
 ○ WP3 ethnographic work—nothing as secret  
 ○ RI course—negative as interaction limited  
 ○ Dilemma game—huge appreciation.

## Team members answering the question

- were of PhD candidate or postdoctoral level;
- worked on the CONT-END project or a related project on dementia care under supervision of a team member;
- were not a researcher on the research integrity WP themselves;
- participated in team meetings for at least 6 months;
- were part of the team in 2022-2023.

Of 9 team members, 6 PhD students and 2 postdoctoral fellows also consented to independent qualitative analysis by NE.

## Motivation for this work

Researchers on integrity are part of a selective community with increased awareness of integrity. Integration with those engaged in other research areas may be beneficial for all. An area where researchers may often encounter decisions that may impact integrity is end-of-life research, where researchers with a mission (e.g., to make palliative care work) often employ flexible designs in practice.<sup>3</sup> The CONT-END program<sup>2</sup> covers both research areas with the aim to enhance research for all.

## Approach

First, the PI (epidemiologist, main background in healthcare research on end of life; additionally, some RI research) coded the reflection reports of 1/2 to 2 pages each. Deductive coding was used of what the team members experienced from the RI WP and of expressions used for RI, while coding of the reflections was inductive. Second, the PI developed a narrative. Third, to enhance rigour also for the limited amount of data, the PI revised coding for consistency. Fourth, NE agreed to an (unconventional) fully independent analysis and also to facilitate comparison with any approach chosen by NE, the PI grouped codes creating axial codes. Fifth, selective coding was used to create meaningful themes along with refining the narrative.

Reflections (meaningful themes)	Codes
Positive interaction within team	<ul style="list-style-type: none"> <li>○ interaction within team</li> <li>○ agreement</li> <li>○ (co)creation</li> </ul>
Safe and open culture and team bonding within the outside academic environment	<ul style="list-style-type: none"> <li>○ open / (un) safe</li> <li>○ culture within team</li> <li>○ team bond</li> <li>○ culture external</li> <li>○ interaction with outsiders</li> </ul>
Junior – senior interaction in a safe space supports role modeling	<ul style="list-style-type: none"> <li>○ junior</li> <li>○ senior</li> <li>○ interaction junior-senior</li> <li>○ junior-senior hierarchy</li> <li>○ power</li> <li>○ role in team / project</li> <li>○ role modeling</li> </ul>
Shared learning from hypothetical and lived experiences	<ul style="list-style-type: none"> <li>○ not real / simulated</li> <li>○ experiences</li> </ul>
Awareness through reflection and diversity of perspectives	<ul style="list-style-type: none"> <li>○ awareness</li> <li>○ perspective / reflection</li> <li>○ perspective adapted</li> <li>○ diversity</li> </ul>
Principles do not provide the answers	<ul style="list-style-type: none"> <li>○ theory / principles</li> <li>○ (no) answers</li> <li>○ black and white</li> <li>○ grey</li> </ul>
Navigating decisions and tasks <i>(Reflected upon by PhD students only; codes did not appear in postdoc reports)</i>	<ul style="list-style-type: none"> <li>○ decisions / choice</li> <li>○ tasks</li> <li>○ wisdom</li> <li>○ overly emotional</li> <li>○ prevention</li> </ul>
Encouraged to understand and express <i>(Reflected upon by PhD students only; codes did not appear in postdoc reports)</i>	<ul style="list-style-type: none"> <li>○ learn more</li> <li>○ depth</li> <li>○ give words</li> </ul>

## Findings

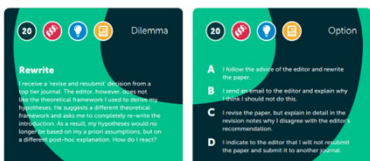
The participants disliked the RI course, citing limited interaction along with substantial individual homework, missing guidance to navigate in-between black and white. They compared with the dilemma game team discussions and felt that the multiple perspectives of team members with different backgrounds, levels and roles on hypothetical dilemmas that also triggered sharing real-life experiences, increased awareness especially of the PhD students of grey areas in ethical decision making in academia. The PhD students mentioned it supported their learning experiences through, for example, enhanced alertness, confidence, vocabulary, or analytic skills to dissect dilemmas in communication about RI issues, or

motivated them to become a role model in this in their future roles. The postdoctoral fellows additionally cited the academic climate more generally and considered the ethics of mere asking of junior researchers to report to the PI in this study was safe enough for them.

## Conclusion

Interaction between junior and senior researchers around hypothetical RI issues can offer a relatively safe learning experience equipping juniors in their careers to identify and act upon dilemmas. The findings refer to a single program and the analyses may be limited through impact of hierarchical relationships and interests.

## The dilemma game



Dilemma 20 was chosen in 3 of 50 30-minute discussions since April 2020

"The dilemma game has been an enriching experience." (PhD student 2)

"By presenting hypothetical situations, a safe space was created to discuss situations that are more difficult to address "in real life". For example, dilemmas related to power issues between a junior researcher and a supervisor could be discussed in a group where both senior and junior researchers were present. Both viewpoints were addressed without it negatively impacting on the relationship" (PhD student 1)

"I also wonder whether asking PhD students, who still have something to gain in the research group, for a reflection like this one, would contribute to the atmosphere of trust. Perhaps we can be even more reflective by raising more awareness of specific power structures within our research group, or any research group. However, I do feel safe and secure enough to mention this in a reflection, which I believe signals a healthy research environment. I've worked in research groups before where I didn't feel that space at all". (Postdoc 2)

Now, turn over to view independent analysis and interpretation

## References

1. van Drimmelen T, Slagboom MN, Reis R, Bouter LM, van der Steen JT. Navigating ambiguity and uncertainty in research practice. WCRI 2024 presentation abstract nr 638. <https://osf.io/tqwgp/>
2. CONT-END ERC-funded project on control at two levels (end of life & research process), 2018-2025. Consolidator grant ID 771483.
3. van der Steen JT, Ter Riet G, van den Bogert CA, Bouter LM. Causes of reporting bias: a theoretical framework. F1000Res 2019 March 12;8:280.

## Acknowledgments

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## Reflecting on the Impact of a Research Integrity Work Package in a Dementia Research Program: Qualitative Analysis – 2 of 2

### Objectives

1. To explore researchers' experiences of the activities of a comprehensive Research Integrity (RI) work package (WP)
2. To demonstrate how data is organized, interpreted and co-constructed through analysis, presentation of results and final interpretation of findings.

### Results

Four themes were identified:

1. Team discussions
2. Formal course
3. Learning through RI experiences
4. Exposure to Research on Research

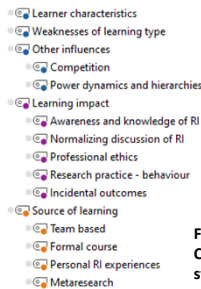


Fig 1. Code system

### Methods

#### Intervention

Researchers from two projects on dementia end-of-life decision-making took part in a RI intervention (described as the CONT-END WP) which consisted in:

- 1) Regular team meetings to discuss RI using the Erasmus dilemma game app;
- 2) Participation in a two-day RI course conducted at Amsterdam UMC;
- 3) Close working with a researcher conducting research on integrity in end-of-life research.

#### Evaluation

Researchers were asked to write an open reflection on their experience of the CONT-END RI WP and if they thought it had any benefit.

To address **objective 1**, written reflections from 8 researchers were independently analyzed using a thematic analysis (Braun and Clarke 2021). Codes were inductively developed (fig 1.). Themes reflect the cross-over between the source of learning code and other codes.

To address **objective 2**, analysis, presentation of results and final interpretation was conducted independently by NE and JS. Participants of the WCRI 2024 are invited to compare the results and interpretation.

#### Analyst reflection

NE is a qualitative researcher in both RI and end-of-life care. NE is the current coordinator of the Amsterdam UMC course RI course but was not coordinating/ teaching at the time the participants took the course in 2020. The current focus of NE's research is RI education.

### 1. Team discussions

Researchers wrote extensively on the team discussions about day-to-day research dilemmas using the dilemma game app. Regular discussions provided opportunities for early career researchers to ask about the implicit and explicit rules of research. The meetings also improved researchers' awareness that RI dilemmas are complex ethical dilemmas with social dimensions, and they provided a space to discuss, and try to address, the social, time and productivity pressures influencing research practice.

*"These are often legitimate concerns and I realized that instead of ignoring that these factors might play a role, it is more helpful to recognize them and consider them openly when making decisions, because this allows us to see whether there will be consequences on research integrity and find remedies accordingly."* PhD student 2

The mix of career stages was valuable for normalizing the discussion of issues in the group and transmitting knowledge gained through personal experiences. Although different career stages participated, the meetings were described as 'safe', aided team building, and sensitive issues such as power relations could be discussed in a low threshold, hypothetical way. Some real impacts on research practice were described, such as being inspired to reduce the interview burden on participants, however researchers also acknowledged that increased knowledge and awareness did not always result in improved research practices.

*"I found that while my perception and awareness of several guidelines was improved, the implementation in practice did not always improve."* PhD student 1



### 2. Formal course

Only three researchers touched on the formal course they participated in, comparing it unfavorably to the team discussions. They stated that the team discussions had made them better able to discuss RI dilemmas than other course participants, and that a tailored course would have been more appropriate for them. One participant thought the course was not sufficiently interactive and focused too much on research misconduct and not enough on the importance of the research team. In comparison to the team RI discussions they had already extensively participated in, the formal course was found to be a less satisfactory, less interactive, repetition of content.

*"It would be much better if we had a tailored course where the team could discuss more among ourselves. Content-wise, I would have appreciated more focus on smaller breaches of research integrity and the grey area instead of black-white things like data fabrication and falsification. Some tips on how to discuss these issues with the team would also be good."* PhD student 2

### 3. Learning through RI experiences

A couple of researchers described how they knew from past and present personal experience how difficult it can be to follow RI normative guidance in real-life situations.

*"As a postdoctoral researcher who has worked at five different universities, in five different research groups, it is clear to me that scientific integrity is not always black and white, nor easy to implement."* Postdoc 2

### 4. Exposure to Research on Research

The presence of a RI WP and having a colleague dedicated to research on research was also said to heighten awareness of RI issues and provide the impetus for reflection and discussion.

*"Even though I was not directly involved in WP3 as a researcher, this ensured that ways to research integrity were regularly discussed. And how difficult this is. In addition, the additional focus from WP3 made the entire research group even more aware of the importance of conducting research with integrity and what to pay attention to."* Postdoc 3

### Discussion

Team-based discussions of RI dilemmas close to practice made the biggest impact on researchers participating in a RI WP. This was reinforced by reflections on past and present experiences in practice and the presence of a researcher dedicated to 'research on research'. A formal course had little added value because of the considerable learning derived already from regular team-based learning.

### Limitations

Only 8 reflections, of varying richness, were available to analyse. Not every reflection addressed every aspect of the RI WP. Moreover, the reflections were examined without a thorough understanding of the context because the second independent analyst (NE) was knowledgeable about the formal course but not the team-based components of the RI WP.

### Acknowledgments

We thank the CONT-END team for their willingness to share their perspectives. We thank ERC for funding end-of-life research and research integrity research integrated in a single project.