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**Spilling the Tea:
 Barriers and facilitators in the organization of Dutch ReproducibiliTea journal clubs**

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Abstract

Open Science is a movement that strives for research conduct that is grounded in transparency and integrity. This push toward Open Science has taken on many forms including Open Science Communities. These communities work towards an open scientific future and one way that they are doing this is by hosting journal clubs. These journal clubs are called ‘ReproducibiliTea’ in which scientists and/or students get together to discuss topics related to Open Science. However, in the Netherlands, most of these clubs have become inactive, indicating challenges in the organization process. In response to this, this study aimed to explore how one can run a successful ReproducibiliTea by investigating the barriers and facilitators in the organization process. Six organizers were interviewed and the data were analyzed with reflexive thematic analysis guided by Wenger’s framework Communities of Practice. This resulted in five themes that consisted of barriers and facilitators. Ultimately, to run a successful ReproducibiliTea, an organizer ought to establish a Community of Practice by 1) carefully picking meaningful topics, 2) having a clear direction to direct the members towards, 3) communicating with other ReproducibiliTeas, the OSC, and participants, 4) deciding on a format that enables the most participation, and 5) clearly outlining which types of internal leadership is required.



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Barriers and facilitators in the organization of Dutch ReproducibiliTea journal clubs.

“When the results are just not quite what you’d so badly hoped for so ... then, surely, you’re entitled to adjust the results just a little?” (Siegel & Daumiller, 2020, p, 103). This quote is adapted from the autobiography of a scientist called Diederik Stapel, who was convicted of scientific fraud. Driven by a passion for research and making a meaningful change in the world, as well as being addicted to success and achievement, he gave in to the temptation of changing data results to fit the research. Eventually, he found himself caught in a web of lies that led to his exposure (Levelt, et al., 2012).

Growing awareness of questionable scientific practices like the Diederik Stapel case (see “An Open, Large-Scale, Collaborative Effort To Estimate The Reproducibility Of Psychological Science”, 2012; John, et al., 2012; Levelt, et al., 2012; Pashler & Wagenmakers, 2012) and the rise of the internet (see Bartling & Friesike, 2014) has brought science on the brink of a second scientific revolution (see Chiadò, 2018). A revolution where the novel means of knowledge creation and dissemination, provided by the internet, can make knowledge flow more easily and simultaneously battle the conduct of questionable scientific practices. Working towards this revolution is a movement called the Open Science (OS) movement, which aspires to make science open.

According to Vicente-Saez and Martinez-Fuentes (2018) creating an open scientific environment has been interpreted in numerous ways by various researchers. The most common descriptions are OS (1) as knowledge, (2) as transparent knowledge, (3) as accessible knowledge, (4) as shared knowledge, and (5) as collaborative–develop knowledge. This way of knowledge development is characterized by an environment in which scientists are encouraged to collaborate, receive appropriate credit for their work, are enabled to build more easily on previous scientific work, and can make results more accessible to the public (Spellman, et al., 2017). Across the world, communities have flourished that support these practices and strive to establish an open scientific environment (see INOSC, International Network of Open Science & Scholarship Communities, 2024).

These communities are called Open Science Communities (OSCs) and when examining the webpage of OSC-NL, it shows they can be found in 12 Dutch cities with more than 2000 members (INOSC, International Network of Open Science & Scholarship Communities, 2024a).



Moreover, they are closely linked to the respective universities of those cities and are driven by academics who believe in OS and are working voluntarily towards an open scientific future. By teaching OS to fellow academics, they help to spread the word to the public; show how to conduct OS; and express their support for establishing OS as a common practice (Armeni, et al., 2021). Not a lot of research has been done yet on how to do this effectively (Chopik, et al., 2018), but according to Kathawalla, et al. (2021) one OS practice is fit for the job: journal clubs.

Journal clubs are gatherings of people—usually academics—who discuss a scientific article and are mostly organized within the field of medicine (see Alguire, 1998; Cetnar, 2021; Turner & Rosewall, 2011). Participants read the article upfront and will critically discuss it during the meeting to bridge the theory-to-practice gap and expose practitioners to ongoing literature (Honey & Baker, 2011).

In the Netherlands, there exist five OS journal clubs called ReproducibiliTea clubs (henceforth ReproTea). These are organized by OSC members to help cultivate bottom-up change and are organized internationally (Orben, 2019). In an article published by one ReproTea, it states that: “Our aim is to reduce the perceived costs of adopting open and reproducible practices by increasing Open Research literacy” (FitzGibbon, et al., 2020, p1). This goal seems to be part of a bigger one—similar to that of the OSC; namely, establishing OS as a common practice. Moreover, they are also working in the same way towards that goal by providing a space for knowledge exchange and support among scholars.

During these meetings, scientific articles are discussed related to open scientific practices. The topics can range from discussions on reproducibility to critically discussing scientific articles about data sharing. Commonly, these clubs are aimed at early career researchers and according to Muhoozi, et al., (2023), they offer a unique opportunity to discuss diverse issues and papers about improving science, reproducibility, and the OS movement. Moreover, Muhoozi, et al., share that ever since the initiation of the journal club; knowledge, attitudes, and practices for OS and reproducibility have improved. Similarly, Kathawalla, et al., (2021) mentioned that journal clubs are an effective way of teaching and practicing OS.

All in all, the clubs seem fruitful for establishing OS as a common practice, and accordingly, they have established themselves internationally. However, after having contacted the Dutch clubs, four out of five stated they had become inactive and experienced troubles in the



organization. Hence, the purpose of this research is to explore how one can organize a successful ReproTea by investigating the barriers and facilitators in the organization. This has led to the following research question with respective sub-questions.

Main question

How to run a successful Dutch ReproducibiliTea club?

Sub-questions

What are the barriers to the organization of a Dutch ReproducibiliTea club?

What are the facilitators in the organization of a Dutch ReproducibiliTea club?

First, I¹ outline a theoretical framework to guide my interpretations throughout the research. Subsequently, the methodology for this research is outlined, followed by the results. Finally, a discussion and conclusion are provided in which I critically reflect on the results in relation to the theoretical framework and other relevant literature, as well as discuss this research's limitations and implications for future research.

Definition of a successful journal club

Since the research's purpose is to explore how to run a successful ReproTea, it is worthwhile to define what a successful journal club means. Some authors argue that a successful journal club is one with a long continuous existence and a high attendance rate (Cetnar, 2021; Eusuf & Shelton, 2022; Honey & Baker, 2012; Sidorov, 1995; Turner & Rosewall, 2011; Xiong, et al., 2018). Success is also defined as satisfaction among participants (Jouriles, et al., 1996; Turner & Rosewall, 2011; Xiong, et al., 2018). Furthermore, it is mentioned that success can be defined as satisfaction by the program director (Heiligman & Wollitzer, 1987; Jouriles, et al., 1996). Finally, some authors do not define success in the first place and list success factors contributing to the 'overall' success of a journal club.

All in all, one can conclude that there is no consensus on what success in this context means. This makes it difficult to arrive at a general definition. For example, journal clubs can

¹ This research embraces the influence of the researcher on the research. Therefore, I use personal pronouns such as 'I'.



have a long continuous existence and a high attendance rate. However, at the same time its participants could be dissatisfied and its program director satisfied, or the other way around.

ReproducibiliTea as social learning

Until now this study has focused on the technical factors contributing to or standing in the way of a successful journal club such as time, goals, skill development, guidelines, etc. However, journal clubs are more than just a technical platform that people attend solely for practical purposes—it is also a social endeavor. Journal clubs as a social endeavor can be situated in the social learning theory of Wenger (1999). In the following paragraphs, I will describe Wenger’s conceptual framework—a set of principles and recommendations for understanding learning, highlight its implications for journal clubs, and show how to nurture it.

Etienne Wenger’s Community of Practice

Wenger (1999) argues that learning does not happen individually, but rather between people who are actively engaged in a shared practice. Accordingly, learning is a much more social process that comes naturally to human beings. He calls the group engaging in this kind of social learning a Community of Practice (henceforth CoP). This conception of learning is based on four assumptions as to what matters about learning, and the nature of knowledge, knowing, and knowers. First, we assume that humans are inherently social beings. Second, we regard knowledge as a matter of competence with respect to a valued enterprise. Third, we regard knowing as a matter of participating in the pursuit of such enterprise through active engagement in the world. Fourth, learning is to produce meaning; the ability to experience the world and our active engagement as meaningful (Wenger, 1999).

According to Wenger’s theory, this view of learning as social participation is characterized by four components: 1) practice, 2) meaning, 3) identity, and 4) community. When viewing learning as a social process we do not just include a group of people who share a similar interest and talk about this with each other. The key to viewing learning as social participation is that people share a similar interest in a certain topic and engage in the process of practice by contributing to gaining knowledge in the form of competence.



Central to this process of practice is meaning. We derive meaning from the practice we have engaged in which results in experiencing our lives as meaningful. Additionally, to experience a practice as meaningful we need to identify ourselves with that practice. This means caring about a topic, being interested in it, or acknowledging its values. Moreover, Wenger regards these groups of people who are engaged in social participation as communities and links this to the aforementioned practice.

Establishing this link between community and practice results in three dimensions which are at the heart of a community: 1) joint enterprise, 2) mutual engagement, and 3) shared repertoire. Joint enterprise means that the people care about and work towards a common goal during which they create a shared repertoire of artifacts, knowledge, items, data, etc., and are participating in mutual engagement in which they take on the role of active practitioners in pursuit of that common goal.

ReproducibiliTea as a Community of Practice

As previously mentioned, journal clubs are gatherings of academics who critically discuss scientific articles. They provide a space for people to establish a CoP because it allows them to actively engage in the creation of meaning derived from working towards a shared enterprise; driven by a shared interest or concern for OS. This shared enterprise can be regarded as the establishment of OS as a common practice but also as the dissemination of research results or providing knowledge exchange between academics to increase awareness of OS practices.

Its members actively participate in sharing and creating knowledge because they need to critically discuss a scientific article and share their views with the other members to gain a deeper understanding. Moreover, journal club members are creating a shared repertoire of previously discussed articles, critiques, revelations, etc., as well as identifying strongly with the club since they all share the same interest in OS and are part of the same overarching respective community. Importantly, this does not mean that a journal club in itself is a CoP because the latter is based on social interactions between people. The club provides the space for people to socially interact with each other, share and create knowledge, and consequently develop a CoP.



Developing and nurturing Communities of Practice

Wenger (2008) lists multiple factors that contribute to a legitimate CoP within an organization. The development of a CoP ultimately depends on internal leadership which comes in seven forms: 1) *inspirational leadership* involving thought leaders and recognized experts, 2) *day-to-day leadership* involving those who organize activities, 3) *classificatory leadership* involving members who collect and organize information to record practices, 4) *interpersonal leadership* involves members who strengthen the community's social core, 5) *boundary leadership* involving those who connect communities to other communities, 6) *institutional leadership* involving members who maintain contact with other organizational constituencies, and 7) *cutting-edge leadership* involving members who design 'out-of-the-box' initiatives.

Furthermore, Wenger states that participation should be legitimized by recognizing the work of sustaining them, allowing members the time to participate in activities, and establishing an environment in which the community's value is acknowledged. Additionally, the strategic context of the ReproTea club ought to be negotiated by developing a clear sense of how the created knowledge contributes to the enterprise of establishing OS as a common practice. Effectively making use of existing knowledge speeds up the sharing and creation of knowledge.

Furthermore, many elements within the ReproTea can foster or inhibit CoPs. These include management interest, reward systems, work processes, culture, and policies. Finally, CoPs are mostly self-sufficient but can benefit from various resources such as outside experts, travel, meeting facilities, and communication technologies (Wenger, 2008). A specific team assigned to facilitate these resources can offer support in providing guidance, help communities connect their agenda to the OS strategies, encourage the CoP to progress with their agenda and remain focused, ensure they include the right people, and help establish links with other communities. Moreover, such a team can also offer support in identifying and eliminating barriers to participation in the structure or culture of the ReproTea club.

The Benefits of Communities of Practice

Until this point, I argued how a ReproTea forms the foundation for the development of a CoP and how it can be nurtured, but what are its benefits? Why is it important to develop one within an organization?



Wenger (2008) explains that CoPs consist of members who have a shared understanding of a certain interest. This allows them to exchange and interpret information in useful ways because they know which knowledge is relevant. Moreover, it retains this knowledge organically as opposed to manuals or databases that have been rid of the human element. This makes it easier for newcomers to integrate into the organization because the community can provide them with tacit knowledge that a manual or database cannot. Furthermore, because its members are involved and willing to take responsibility, it taps into its members' competencies. Finally, it provides a place where people are enabled to work in line with their own identities. It makes the work more meaningful because a CoP is organized around what matters to people. Fostering a sense of belonging through identity helps the members to focus on what matters amidst a sea of information.

It structures learning within an organization at the core and at its boundaries. The *core* is where the organization's expertise operates, while at the *boundary* new insights are developed to engage in new ways of learning. Subsequently, activity at the boundary—for example, interactions with other communities or outside experts—complements the core in that it does not become isolated and insular.

Methodology

Research Design

This study aimed to explore barriers and facilitators in the organization of ReproducibiliTea clubs by capturing the organizers' perspectives on factors that influenced the organization process. The literature review was used to design the interview guide and to guide the analysis of the data.

Semi-structured interviews were conducted since these allowed the research participants to share knowledge on this specific matter freely and allowed the researcher to touch on topics derived from the literature review. Reflexive thematic analysis was carried out to analyze the data following the six phases provided by Braun and Clarke (2021). The key to this method is accepting subjectivity and utilizing it to the advantage of the research while reflecting on how



the researcher influences various aspects of the research process such as coding, theme development, and interviewing.

Furthermore, in line with reflexive thematic analysis, a critical realist approach was maintained throughout the research. I held the belief that knowledge exists as something for me to discover but I acknowledged simultaneously that it is perceived differently depending on the perspective of an individual. In line with this viewpoint, knowledge creation is a social process; it is co-constructed between individuals. Thus, knowledge is there for us to discover but at the same time co-constructed between individuals who might view this knowledge differently.

Study Participants

Researcher Description

The interviews were conducted by a 28-year-old white male who wrote this research. At the time of the interviews, I needed to rely on interview skills that I developed during one interview I had to conduct as part of a Master's course. This might have influenced the quality of the data because I might have failed to ask important follow-up questions or establish rapport.

This study has potentially been influenced by my prior understanding of journal clubs and CoPs due to the literature review I conducted on these topics. During the interviews, I was already aware of success factors and challenges to journal clubs which might have steered the direction of the interview. Moreover, I was aware of factors that can develop and nurture a CoP which also might have steered the direction of the interview.

Participants

I interviewed six participants. Four participants organized the same ReproTea club—one pair belonging to one club and one pair belonging to the other. The other two participants each organized a separate club. All of them were organizers or had been organizers. Four participants were founders of the ReproTeas and the other two participants took over or joined the organization after the club had already been established. Two of the participants were PhD candidates, three were assistant professors and one participant—with a PhD—was specifically hired to coordinate the ReproTea.



Researcher-Participant Relationship

No prior significant relationship was established with participants, except for a few emails to discuss the logistics of the interview and brief contact during one of the journal clubs that I visited. In the recruitment email, the participants were made aware of the research goals and my background as a Master's student. Before the interview, no other characteristics than the ones above were reported to the participants.

Participant Recruitment

Recruitment Process

To contact members of the communities, a recruitment email was sent in which the research purpose and an invitation to an interview were mentioned. Additionally, they were asked to identify other suitable participants for the study, in case the contacted participant did not want to be interviewed. Furthermore, the number of participants was decided based on when data saturation was reached (Saunders, et al., 2018). Ultimately, this resulted in six participants because, after the sixth interview, I noticed a lack of novel information. The participants were not compensated for their participation.

Participant Selection

Purposeful and snowball sampling were used to select the participants for this study. Purposeful sampling is used to select respondents that are most likely to yield appropriate and useful information (Tongco, 2007), and snowball sampling builds on this by asking the purposefully selected participants to recommend other participants who fit the participant criteria (Parker, et al., 2019). These types of sampling methods suited this research because it specifically required researchers who were or had been involved in the organization of a ReproducibiliTea club. The two sampling methods provided me with four participants, and I asked the other two participants in person to partake in the research.



Data Collection

Data-collection Procedure

I carried out semi-structured interviews to collect the data with the support of an interview guide (see Appendix A). I used semi-structured interviews because I wanted the participants to share knowledge with me freely but also touch on topics that I deemed important because of the literature review. It consisted of predetermined open questions with relevant follow-up questions. However, the order of the questions was not predetermined and during the interviews, there was room for questions that weren't included in the interview guide. The latter was especially important because I reflected on the interviews that I had carried out to decide which questions sparked interesting answers that I could use to answer the research question. The questions revolved around the following topics: 1) success factors of journal clubs, 2) Wenger's CoP, 3) barriers to the organization, and 4) facilitators to the organization.

Recording and Data Transformation

To record the data, I used a memo recorder and a laptop which I informed the participants about before the interview. These recordings were then destroyed after they had been transcribed to respect the participants' privacy. I transcribed the recordings manually and uploaded them on the X-drive of the University of Groningen to ensure they were stored in a secure location. Subsequently, the transcripts were deleted from my laptop.

Analysis

Data-Analytic Strategies

At the time of the data analysis, I needed to rely on coding experience that I gained in one of the Master's courses. During this course, I conducted a thematic analysis and used an inductive approach to coding. Therefore, I was slightly familiar with the coding process.

Reflexive thematic analysis is a type of analysis used to recognize and interpret data patterns which are also known as themes (Braun & Clarke, 2021). Central to this method is the acceptance—rather than avoidance—of subjectivity. It acknowledges that the researcher inevitably influences the research and emphasizes the importance of reflexivity to highlight this



in order to create transparency and integrity. Maintaining a reflexive attitude means that the researcher consistently reflects on how he reacts to and influences the research. My account of reflexivity is showcased in the positionality statement. Furthermore, Braun and Clarke (2021) provide six phases of reflexive thematic analysis 1) familiarization with the data, 2) generating codes, 3) constructing themes, 4) reviewing potential themes, 5) defining and naming themes, and 6) producing the report.

I familiarized myself with the data by manually transcribing it because this forced me to go through all of the interviews. Also, I took familiarization notes by reading the transcripts multiple times and taking notes of important segments relevant to the research question (see Appendix B). After this first phase, I generated the codes using Atlas.ti; a type of software used for qualitative data analysis (<https://atlasti.com/>). I coded paragraphs and sentences that captured important knowledge that could answer the research question. This occurred mostly on the semantic level; meaning that I coded the explicit content of the data. By contrast, latent coding involves reading into meaning that is underlying the data. Furthermore, the codes needed to speak for themselves, meaning that one can capture the essence without consulting the underlying data. Each code consisted of one or two sentences that summarized a piece of data, which mostly consisted of paragraphs. Ultimately, this led to a total of 172 codes (see Appendix C).

To construct the themes, I combined codes that would support me in telling a multi-faceted story. This meant that each theme consisted of a variety of codes. This is important to reflexive thematic analysis because it differs from other types of thematic analysis in which themes are developed based on codes that revolve around one concept or topic. Subsequently, I reviewed the themes by examining whether each theme told a multi-faceted story that could answer the research question, which themes could be merged, and if certain codes fitted better with a different theme. Finally, I provided each theme with a compelling title that captured the story's essence. Finally, the report was produced.

While writing the report, I started to analyze the results in relation to the research question by linking the themes to one another and reflecting on the literature explored in the introduction. This resulted in a crossover between the results and the discussion, which is common when doing reflexive thematic analysis (Braun & Clarke, 2021).



The analysis was mostly inductive by nature. This meant that I allowed myself to interpret the data freely without a pre-established codebook or pre-determined themes. However, by having carried out a literature review before the analysis, I sensitized myself to the explored concepts which inevitably influenced my interpretation (Bowen, 2006). For example, I was aware that a reward system fosters a CoP and consequently started looking for this facilitator in the data.

Ethical Issues

In the recruitment email, all the participants were informed of their rights and the research purpose. Furthermore, data was de-identified as part of the transcript, and any association with them and the data was removed, thus removing any risks outside of the study duration to the participant. In addition, an informed consent form and information letter was shared and signed before the interview to inform the participants about data management and the research purpose (see Appendix D & E). Moreover, before this document was signed, the participants were made aware of the intentions of this study. Finally, throughout this research, I have not mentioned the names of the ReproTea club to further prevent the association of the participants with the club. Finally, this study has been approved by the Ethics Committee of the Rijksuniversiteit Groningen (see Appendix F).

Positionality Statement

To increase this study's sincerity and credibility, as well as adding to the quality of the reflexive thematic analysis, it is worthwhile to highlight how I influenced the data collection and data analysis process. This is because I was heavily involved in the research process due to its qualitative nature. By contrast, quantitative research is much less dependent on the researcher and more so on statistics, arguably resulting in less involvement of the researcher.

Data collection was influenced by the literature review, personal norms and beliefs, and culture. First, I was sensitized by topics that I derived from the literature review. This meant that I steered the interviews in the direction of those topics. This might have caused me to overlook potentially important topics. Second, the culture that I grew up in, fostered in me a sense of modesty and submissiveness which was the attitude that I maintained throughout the interviews.



This might have prevented me from asking more provocative answers that could have led to interesting answers. Finally, throughout the course of the interview phase, I started to feel more comfortable and found a way of interviewing that spoke to me. I felt that having a conversation in which I also contributed to the generation of knowledge, resulted in a more organic interview. Again, this does mean that I steered the conversation in certain directions at times, potentially missing out on important information.

Naturally, I heavily influenced the data analysis because the method I used embraces research subjectivity and therefore allows for a high degree of interpretation by the researcher. My interpretations were mostly influenced by Wenger's theoretical framework but also by the participants. Throughout the interviews, I sometimes noticed that the participants placed extra emphasis on a certain answer. This resulted in me allocating more significance to some parts of the transcripts.

Quality Assurance

Additionally, I followed the big eight criteria provided by Tracy (2010) to ensure the quality of this study. These criteria include 1) *worthy topic*, 2) *rich rigor*, 3) *sincerity*, 4) *credibility*, 5) *resonance*, 6) *significant contribution*, 7) *ethical*, and 8) *meaningful coherence* (see Tracy, 2010 for descriptions of each criterion).

To ensure a *worthy topic*, I explained the research's societal and scientific relevance in the introduction. *Rich rigor* was established by including participants until the data was saturated. However, it could have been more rigorous if I also had included the members' perspectives. By engaging in reflexivity in the positionality statement, I attended to the study's *sincerity and credibility*. Moreover, I uploaded a preregistration plan to an open repository for my research design to be scrutinized (Ferwerda, 2024). This is a plan, uploaded before conducting the research, that shares 1) the research aim and question, 2) the design plan, 3) data collection, 4) the analysis plan, and 5) reflection on positionality, with the public.

This study has made a *significant contribution*, was *ethically* conducted and holds the capacity to *resonate* with others. It explored an area that had not been covered before and built the foundation for future research. ReproTea organizers can use the results as a guide to their



organization. Furthermore, it was approved by the Ethics Committee of the Rijksuniversiteit Groningen (RuG).

Finally, it is *meaningfully coherent* because all parts of the research are interconnected with each other, meaning they can be logically derived from one another. One example that illustrates this, is my choice of reflexive thematic analysis which fits my critical realist approach to knowledge. Another example is the data collection method that fits the research question. Since the research question is qualitative, the appropriate choice of data collection method was one with a qualitative nature, hence the choice of semi-structured interviews.

Results

The following overview is based on the themes developed from the reflexive thematic analysis. I coded parts of the data that I deemed important for answering the research question, which resulted in five themes. Each theme tells a multi-faceted story about a topic relevant to the research question and comprises codes representing a part of the data. I did not include sub-themes because the themes themselves told a clear enough story that did not need to be split into sub-themes to make it comprehensible. However, each paragraph could be interpreted as a sub-theme. Each theme will be presented with transcript excerpts to verify or strengthen certain statements. The excerpts are cited with numbers to respect the anonymity of the organizers. Moreover, they will be analyzed in relation to Wenger's CoPs.

Theme 1: A successful ReproducibiliTea

I explored the perspectives of ReproTea organizers on what constitutes a successful club. The organizers listed numerous success factors—some are related to the factors introduced in the introduction, and some stand more on their own.

Multiple organizers mentioned that a ReproTea is successful when it is consistent. “Indeed, I think you need consistency. That something is organized once per two weeks or once per month or how many times you would like to do it. That there is always an event” (1). Another organizer stated: “In my case, what I wanted was, so what I wanted from myself as a coordinator was to get consistency” (3). For a CoP to develop, members need time and space to



collaborate. Consistency offers this by making the sessions predictable. This allows members the time to schedule their work around the sessions and be able to participate regularly.

Besides consistency, success was defined as engagement. This meant that the organizers wanted the club's participants to participate actively. Participation in this sense meant they were engaged in discussion with each other or the external speaker for that session. Another organizer mentioned that the club was not a success because there was hardly any input from the participants during some sessions: "Yes, during some meetings I really needed to pull the information out of them, there was very little input" (6).

The emphasis on engagement indicates that the organizers wanted the club to be meaningful. One engages in discussion when one cares about the topic and acknowledges its value. It allows the members to identify with the club. This ultimately leads to a meaningful experience and social participation; two key components of a CoP.

Another success factor was a fixed recurring group of participants joining the sessions. One organizer stated that in faculties where researchers or students know a lot about OS, a fixed group of returning people would be necessary to make a ReproducibiliTea successful because the bar is raised higher, and a more in-depth understanding is required. Others, who established a fixed returning group, clearly attributed this to success. This facilitates the development of one key dimension of a CoP: shared repertoire. The communal resources a group creates are only possible when members keep coming back. These resources expedite knowledge creation and exchange. A changing group has trouble establishing this because there is simply no commonality.

Other success factors related to the variety and the amount of participants. Organizers mentioned that the ReproducibiliTea could be more successful when a wider variety of disciplines would attend the sessions to create richer discussions. "Yes, I would have liked it when more people from different disciplines attended the meetings" (1). Furthermore, students and researchers of all levels should be able to join. Others thought their club was unsuccessful because they reached too few people. After asking whether the club was a success the following was mentioned: "No, I think our reach is too small for that. We are not able to attract a substantial amount of participants" (5). According to Wenger, leveraging existing practices



nurtures a CoP. Including various disciplines allows its members to take advantage of each others' expertise within their practice. This facilitates knowledge development.

Finally, success was attributed to developing certain intellectual skills like stimulating critical thinking or learning about OS. One organizer mentioned: “I think a club that stimulates critical thinking among its members, that seems very successful to me” (5). Another one stated as a response to the question of whether the club was successful: “I think everyone who did attend got a lot out of it, it was not a waste of time in any way” (2). This relates to a CoP’s joint enterprise. Its members engage with each other to work towards a common goal. In this case, the organizers think that goal ought to be to stimulate critical thinking or learning about OS.

Theme 2: ReproducibiliTea and the establishment of a community

As I argued before with Wenger’s theory on CoPs, a ReproTea forms the foundation for establishing a community. The data showed various topics related to this. The benefits of a community were mentioned, whether a sense of community existed within the club, and what would facilitate or stand in the way of establishing a community.

Multiple organizers stated that a community makes the organization less time-consuming due to the involvement of the participants. They will take responsibility and involve themselves in the organization. A lack of responsibility among the participants made the organization more effortful for the organizers.

Furthermore, they mentioned it caused more stress because of the uncertainty of how many participants would show. This seems to be intertwined with the success factor of a fixed returning group. People who return care about the club and perceive it as valuable. Ultimately, this might lead to a self-sustaining community which is what a CoP must be according to Wenger.

However, generally speaking, there did not exist a sense of community within the ReproducibiliTeas and organizers found it hard to establish this. They argued that a community could not be built due to a low member count or the volatile presence of most members. However, in some cases, the organizers mentioned that it existed for a certain time. A time during which participants would take responsibility and create a sense of belonging and togetherness.



So I noticed that at first it was mostly me contacting, deciding the content, and contacting people who would give good content and then it became much more an organic thing in which people were actively engaged in finding the topic and teaching the topic themselves (3).

Here it seems a CoP was developed. When unpacking this, one can notice that it relates to various facets of Wenger's CoP. Its members being actively engaged shows they perceived the club as meaningful and identified themselves with it. By taking on the responsibility of teaching they were actively engaging in the process of practice. The latter especially highlights a key facet; sharing one's competence. Members need to actively tap into their competence instead of passively absorbing knowledge.

Most of the organizers, and all the participants, volunteered to involve themselves in the club's organization. Therefore, they had other tasks with more priority. For this reason, a community can never sustain itself according to one organizer. It needs a paid coordinator who takes over when the community's activity falters due to other tasks with more priority. This coordinator can prioritize the management because he or she gets rewarded.

So it is very difficult for people within the community to understand, to take enough time to organize the community itself, right? It is a skillset. It is a job. So having a person who is paid to do so really facilitates things (3).

The organizer and Wenger seem to be on the same page here. Wenger explicitly mentions that the development of a CoP ultimately depends on internal leadership. The organizer appears to refer to day-to-day and interpersonal leadership. However, this does mean that it is steered in the direction of the interests of the organizer rather than in the direction of what the community wants. This could interfere with the extent to which the participants regard the club as meaningful.

Furthermore, one organizer mentioned that a community needs a clear direction to work toward.



If you don't, I am telling you, if you don't have a clear direction, even if it is crowd-sourced right, but there needs to be a clear direction and somebody, a person who needs to bring people towards that direction, if you don't have that, the community dies (3).

By arguing that a community needs a clear direction, the organizer implicitly refers to the joint enterprise of a CoP, one of the key features. Moreover, it acknowledges the importance of long-term focus. In this pursuit, the strategic context ought to be negotiated to discuss how to reach this long-term focus. What knowledge does this strategy require and how can an emergent CoP contribute? This is an important factor that nurtures a CoP. Here, the emphasis lies again on internal leadership.

Theme 3: The impact of topic and format

The ReproTea sessions were held physically and digitally. Furthermore, different topics were discussed across the meetings, as well as the way they were presented. According to the organizers, these variations had various implications for the organization.

Online meetings carry certain benefits and downsides with them. One benefit multiple organizers mentioned is the increased variety of disciplines that attended the sessions because the attendees did not have to travel from one faculty to another. This rings especially true for faculties spread out across the city, or even between multiple cities. “Yes, everybody is spread out. If you need to go for one hour to another building you will lose time quickly” (6). Similar to this, it was also mentioned that the online format enabled the organizer to attract interesting speakers from other countries.

However, three organizers mentioned that it was hard to engage people during online meetings because they would have their cameras off or refused to participate in the discussion. “I feel like in the online meetings, kind of the barrier to just unmute and ask a random question or share a random thought you know, I think the barrier is much higher” (2). Moreover, the participants canceled more easily.



There is a tension here between attracting interesting speakers and allowing members to participate on the one hand; and on the other hand a decline in engagement. Online meetings seem to nurture a CoP on the one hand by legitimizing participation but on the other hand work against active engagement and social participation.

On the contrary, physical meetings made it more difficult for participants to attend the sessions because of the traveling between faculties. However, when participants were physically present in the room it was easier for them to find common ground in discussions and express their emotions. It created a more spontaneous, open, and talkative environment. “So I think the big benefit for the offline version was that the atmosphere was much different, much more spontaneous, open, people talked more” (2). Offline settings appear more social than online settings. Therefore, physical meetings seem better equipped to foster a CoP because they build on the CoP’s social foundation; people learn from each other by engaging in social learning activities. Online meetings suggest that it impairs social learning to a certain degree.

Concerning format; all of the ReproducibiliTeas deviated from the original journal club format. As previously mentioned, the original format requires participants to read an article upfront and discuss it during the session. However, multiple organizers perceived the upfront reading as a barrier or noticed that participants did not do this. All of them resorted to a format in which one participant or external speaker presented the article during the session and led the discussion after the presentation. This, in combination with inviting external speakers, motivated people to attend the sessions. Inviting external speakers nurtures a CoP. Even though they should be mostly self-sufficient, they can benefit from support. According to Wenger, one form of support is outside experts.

Finally, the topics that were discussed seemed to influence the attendance rate. Controversial and educational topics appeared to attract more participants. Topics related to reproducibility appeared to attract fewer students. However, it was difficult to pinpoint which topics attracted more participants due to the possible influence of other factors such as advertising and timing. Answering a question about which factors led to a higher attendance rate, one organizer stated:

I think the theme. We organized two about AI, one of which was highly visited. I don’t



know if that maybe had something to do with advertising, that I don't know, but that one was about AI in education, but we also had one about AI and science which attracted a lot less (4).

Again, this relates to meaning; meaning fosters a CoP. Some topics appear more meaningful to participants than others. The choice of topic also relates to the long-term focus. Wenger emphasizes the importance of this. When the long-term focus is clear and perceived as meaningful, topics can be picked accordingly.

Theme 4: ReproducibiliTea's voluntary nature

ReproTeas are part of the OSCs in the Netherlands. These communities are run by researchers, students, and staff voluntarily. Four out of six organizers volunteered to organize the club, one was hired to organize, and one organizer first volunteered and then got hired. According to the organizers, this comes with various implications for the involvement in the community.

Multiple organizers mentioned the importance of rewarding students for attending or organizing a ReproTea club. Rewarding people for attending might reach a bigger audience resulting in people staying even after they are not rewarded anymore.

I think if you look at it from a general perspective, most of these ReproducibiliTeas are organized by very young researchers or Master students. Then it is extra important that they are rewarded. This could already be like getting two or three hours of paid time to organize it. That is I think a really important facilitator in for those ReproducibiliTeas (5).

This could come in the form of credits that students need to obtain during a school year or as certain tasks that are mandatory to fulfill as part of their PhD. Also, in the case of senior organizers, the tasks they were rewarded for as part of their job were prioritized over the organization of the ReproTea.



Yes, I think it [reflecting on OS] is very important for your development as a researcher but it is not something we get rewarded for. In that one hour, I can also write a piece of a paper, grade some exams, or prepare a class (5).

Wenger's framework acknowledges reward systems as a factor that can increase participation. However, it does not necessarily mean that a CoP will form. For learning to occur within a CoP, its members need to be intrinsically motivated; meaning they care about it, are willing to take on responsibilities, and actively use their competencies to contribute to the community.

Related to this, a lack of time was also expressed as one reason for not organizing the club anymore. The organizers arranged the sessions next to their job making it difficult to find time for the ReproducibiliTea.

Theme 5: Communication and Collaboration in the World of Open Science

ReproTeas are part of a larger OS community that operates internationally. Moreover, they are part of the respective OSC. The clubs are bound together by their belief in OS and one might assume that they communicate with each other; either for support or to share ideas. Could this also be the case for the ReproTeas in the Netherlands? Importantly, the following results represent how I interpreted their answers. In no way, the organizers expressed their dissatisfaction.

Communication existed between the ReproTeas and the OSCs, and overall the organizers reflected positively on the relationship between the two communities. In one case, the OSC provided the budget for the organizers to buy beverages. In other cases, the OSC offered support by advertising the session by including it in the newsletter or allowing the organizers to tap into their mailing list to gather new participants. Answering a question about whether the OSC supported the organizer, one of them mentioned:

Yes, a lot. Also before I started organizing it, when I was still a member. Then we got a budget to buy beverages. To stimulate people to come. Also later it was stimulated a lot by the OSC. I also got paid hours for it, even though I did it voluntarily at first (1).



This is an important factor that can foster a CoP. A team that provides support and guidance facilitates developing a CoP. In this case, the respective OSC provided resources that the ReproTea could benefit from.

However, a lack of communication was also mentioned numerous times; either because the organizer did not reach out or the OSC did not involve themselves enough. Moreover, when asking about the communication between the clubs, it was stated that there was one big meeting with all the ReproTeas somewhere around 2020. This makes it seem that there is a lack of communication between the clubs since there has not been an event like this again and no organizer stated that they communicated with the other clubs. Additionally, all organizers reacted surprised when I mentioned that most clubs had become inactive. “All of them are now inactive?” (5). This indicates that they were not in touch with one another. Finally, one organizer shared that communication on social media platform X had stagnated.

The ReproTeas appeared to have missed out on a factor posed by Wenger that aids in fostering a CoP: creating links with other communities. Again, assigning a team that is responsible for this facilitates the development. Moreover, this requires more boundary and institutional leadership to connect the community with others.

The audience the clubs attracted depended on the background of the organizers. The clubs organized by Master students attracted more Master students and the club organized by university staff attracted mostly PhD students, postdocs, assistant professors, and librarians. This indicates a bias from the organizer’s perspective which could form difficulties in the organization. For example, it makes it hard for both parties to identify themselves with the ReproTea when one group dominates the other. This forms a barrier to the development of a CoP. In line with this, one organizer stated that the presence of mostly Master students did not seem appealing to assistant professors:

So, mostly Master students with every now and then a PhD student or assistant professor attending. But I understand that if you enter a meeting and you see only students you probably think: “Mmmmh, this is maybe not suitable for me” (1).



All of the organizers stated various facets of how they promoted each session. The session was advertised in the faculty's newsletter, on the social media platform X, via email, through posters, and on television screens in the universities. One organizer mentioned that it was this process of advertising and promoting that failed and that support in this process would make the organization easier. Moreover, assistance in advertising would increase the motivation to start organizing again.

I enjoyed coming up with a topic, and an article. So the content I could always find time for but then I had to find which website to post it on, where I needed to navigate, and how long the message needed to be. Who do I email to get it advertised, and also on Twitter. So the advertising, that will cost time, and I don't like that part (6).

Again, a team designated to provide support helps to foster a CoP. This can also be linked to internal leadership. This organizer would benefit from day-to-day leadership so the focus could be more on inspirational leadership.

Another case—in which internal leadership could benefit the club—was the input from one organizer who mentioned that a lack of consistency in advertising might have caused a lower attendance rate or even the death of the club. What would aid Master students in advertising and arranging, would be to provide infrastructure for them within the university as it was quite difficult to arrange practicalities such as booking a room or printing posters. Additionally, an influential staff member would also be helpful. Finally, one organizer stated that it was hard to find new people after the personal network was exhausted, indicating difficulties in advertising the sessions.



Discussion

Key Findings

Theme relations

The reflexive thematic analysis I conducted produced five themes that provide facilitators and barriers to the organization of a Dutch ReproTea. These barriers and facilitators can guide the organizer in running a successful ReproTea.

Since there is no clear definition of a successful journal club, Theme 1 helps to clarify what success means in the context of ReproTeas, and what the organizers should strive for. The clubs ought to strive for consistency with a high attendance rate, its members need to be actively engaged during the discussions, and a fixed recurring group of participants should keep joining. Moreover, the participant's background should vary in which different competencies can contribute to learning about OS and stimulate critical thinking.

Grounded in Wenger's framework, I interpreted Theme 2 as a dominant facilitator with Themes 3, 4, and 5 contributing to it. In other words, when an organizer develops a CoP within a ReproTea, it could become successful as defined above, and the choice of topic and format, communication, and ReproTeas voluntary nature contribute to this. Therefore, the following key findings all center around CoP development.

CoP and ReproducibiliTea

CoPs make knowledge flow quicker, generate novel ideas, retain knowledge more effectively, and offer a place where people can connect based on what matters to them (Wenger, 2008). Besides these benefits, increased member involvement and responsibility can make the organization less time-consuming and stressful.

For a CoP to develop it requires internal leadership (Wenger, 2008). As I showed, this can come in various forms. Boundary, institutional, day-to-day, interpersonal, and inspirational leadership appear most important for the organizers. These forms of leadership can take away the stress, contribute to the community's social fabric, and increase the club's value. Rewarding people to take on this leadership role supports this because they can devote more time and energy to it. However, as I will show later, this is more complex than it seems. It needs a clear direction;



requiring a long-term focus shared among participants—a direction the people can be brought towards by the community’s leader(s). This direction is the joint enterprise of the CoP during which its members are actively involved in knowledge creation by active engagement while making use of each other’s competencies.

Formats and topics concerning CoP development

Regarding format, the results imply certain tensions within and between online and physical meetings related to Wenger’s CoP (Wenger, 2008). Online meetings nurture a CoP by legitimizing participation on the one hand. However, on the other hand, they work against active engagement and social participation. Physical meetings create more engagement between participants but block attendance due to traveling between faculties. It seems the hybrid version is the golden mean in this case. It allows for participants to join from all faculties—which also contributes to discipline variety—while supporting engagement. However, people might be less likely to join physically when there is the temptation to join online. Moreover, technical difficulties might hinder the physical discussions.

When choosing the topics, organizers ought to be aware they evoke meaning among the participants—topics they can identify with and care about. Preferably, these topics enable participants to utilize their competencies. For example, the topic of Open Data can be tackled by various disciplines such as librarians, data stewards, ethics experts, and researchers with diverse backgrounds. On the contrary, the topic of reproducibility might be too narrow because it is commonly associated with quantitative research, leaving out qualitative researchers.

Reward systems and CoP development

The absence of rewards can form a barrier to the organization and development of a CoP when organizers have too many tasks with more priority they get rewarded for; such as writing papers, preparing classes, and checking exams. These tasks are part of their jobs which they get paid for. Moreover, neglecting them might negatively impact their academic career. In the case of students, tasks such as studying for an exam or writing an essay have more priority because they receive study credits for them.



Therefore—especially for early career researchers and students according to the organizers—reward systems can positively impact the organization and establish a CoP (Wenger, 2008). Not only does this make the organization more successful, but it can also be used to attract more students by assigning study credits as part of their Bachelor's or Master's degree. Even though this might mean that these students will leave after the reward stops, it does increase the club's reach and potentially leads to members who do stick around.

Communication and its implications for CoP development

Wenger mentions that communication between CoPs nurtures development. This can explain why communication between the Reproducible Teams and between them and their respective OSC facilitates the organization. It shows support and the communities can learn from each other by exchanging what works and what does not. Moreover, when the OSC provided support, the organizers reflected positively on this possibility indicating they felt their efforts were recognized.

The background of the organizers influences the communication as well. Master students attract mostly Master students, and university staff attract mostly university staff. It is difficult to arrange a combination of the two because the participants have different interests as well as different competencies/experience/skills in communicating and capturing the interests of others/other demographics. Students attend to learn about the basics of OS and university staff aim for more in-depth understanding. Therefore, establishing two clubs might be more suitable to attract more participants; a club for students and a club for university staff.

Further considerations

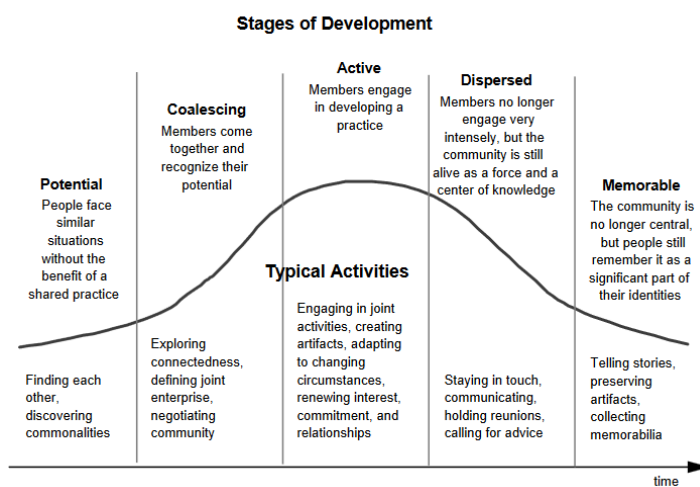
Stages of Development

Figure 1 shows a CoP's Stages of Development. It becomes clear that all of the ReproTeams meet each other at the first stage. They all had or have the *potential* to develop a CoP; the researchers and students who came together found each other because they all cared for OS and its respective values and principles at the outset. However, in most cases, the development stopped there, and the organizers and members seemed not to recognize this potential and did not negotiate the possibility of a community. The two ReproTeams that managed to develop a CoP find

themselves in the last stage of development. The community is now a *memorable* enterprise for them. They can still reminisce about the experience and regard it as a place where they found meaning and a home for their identities. This may have a lasting impact on the development of their embedment in the greater open science movement further into the future, even leading to jobs/careers in that landscape.

Figure 1

CoP's Stages of Development and Typical Activities



Note. Adopted from Wenger (2008). This figure shows the five *Stages of Development* a CoP can go through together with *Typical Activities* that accompany the stages.

Grassroots initiatives, university culture, and the intricacies of motivation

The key findings suggest that organizers and members need to be rewarded for their efforts. At first sight, this might seem like the most efficient facilitator to the organization. However, Stukas, et al., (2016) argue this is not sustainable. There are two groups of volunteers who get involved in a community: 1) volunteers who are self-oriented and extrinsically motivated, and 2) volunteers who are other-oriented and intrinsically motivated (Stukas, et al., 2016). Concerning the first group, these volunteers are less committed to sustained service for the community than the second group. This is because extrinsically motivated individuals are



frequently associated with being less persistent compared to intrinsically motivated individuals (Deci & Ryan, 2000).

Consequently, it is important to induce intrinsic motivation among volunteers. Stukas, et al., suggest that an emphasis on socialization and a sense of community is needed to establish this (again, one can see how Wenger's CoP comes into play). Focusing on shared social values and beliefs, and the degree to which volunteers see their interests and motivations satisfied, are important factors in achieving this. Moreover, ReproTeas are Grassroots Initiatives (GRIs) at the core which also has implications for motivation.

GRIs consist of a group of volunteers working on a small-scale basis to make a change higher up the ladder in the shape of a sustainable long-term positive effect (Dana, et al., 2021). For a grassroots initiative to succeed, its members need to be motivated to make a change. To increase motivation, they must know why the change is necessary, and how their behavior can nurture that. Moreover, they need to believe it is within their capacity to establish this (Grabs, et al., 2016). This ties in with the key findings about communication. When an OSC or other ReproTea involves itself with another ReproTea it can increase a sense of significance because it shows the organizers they are not alone and see their effort being recognized.

Grabs, et al., also argue that for a GRI to succeed, organizational resources are equally important. Wenger (2008) also highlights the benefits of outside resources to nurture the community. Resources such as funding, infrastructure, and time need to be plentiful to allow its members to support it. For example, two organizers mentioned the OSC supported them by giving them a budget for beverages and by finding a location to host the ReproTea. Wenger (2008) argues that this should not be ignored and that it could be used to, for example, support participation. Moreover, this should not be confused with reward systems because organizers can still receive resources without being extrinsically rewarded for their efforts. Since a ReproTea is part of an overarching OSC, one might assume this responsibility rests on the OSC management. However, this is more complicated than it seems.

Commonly, OSCs are part of a university. Within the university, teachers are accountable for two primary charges: generate new knowledge and educate students (Anderson, et al., 2011). However, Anderson, et al., argue that the emphasis is mostly on generating new knowledge rather than educating students. Research accomplishments and success at raising outside research



funds are sometimes even rewarded with a decrease in the amount of teaching. It is safe to say that it is therefore unlikely that teachers will be rewarded for their contributions to OSCs and consequently ReproTeas. Its grassroots and voluntary nature make it less of a priority in comparison to paid work such as supervision, teaching, research projects, etc. Therefore, reward systems, infrastructure, and time are not easily distributed even though they would pose an important facilitator to the organization.

However, one organizer mentioned that the Dutch Research Council (henceforth NWO) is putting more money into OS projects. For example, since 2020 the NWO distributed funds for 71 OS projects (Open Science Fund | NWO, 2023). This might indicate that the various endeavors of the OSCs are beginning to take effect higher up the ladder, surpassing grassroots endeavors such as ReproTeas. This could mean that these initiatives have reached their goal and are now no longer of value.

Recommendations

This study focused on the organizers of the ReproTeas. However, many organizers mentioned they did not know what would make members join the club or how to attract more students. Therefore, follow-up research aimed at (potential) ReproTea members would add to the richness of the results and generate a fuller understanding of this topic.

Furthermore, this study focused on ReproTeas within the Netherlands. However, these journal clubs exist internationally and a significant amount are still organizing sessions. For example, in Week 21 in 2024, twenty sessions were organized across the globe. These countries range from the UK to Australia, but also Japan and Germany (Getting Started, n.d., Way 2). To develop a bigger picture of the ReproTea community, a quantitative survey study could be conducted in which the international ReproTeas are surveyed to determine the success and activity of the clubs nationwide. The results of this qualitative study could be used to determine the items on the survey.

Limitations

I used Wenger's framework as my theoretical lens to examine the ReproTeas and to legitimize my interpretations. I argued that it fits because ReproTea is a form of social learning



and ties well together with Wenger's CoP which revolves around social learning but also includes the community aspect. However, I could have approached the ReproTeas from different theoretical perspectives possibly resulting in different results. For example, I could have used theories on community involvement and volunteerism to map what could make members join a ReproTea and what this implies for the organization.

Furthermore, there are multiple ways of doing thematic analysis such as 1) approaches oriented around coding reliability, 2) a reflexive approach, and 3) approaches based on a structured codebook (Braun & Clarke, 2021a). I used reflexive thematic analysis in which I did not strive for objective research conduct. I accepted and embraced subjectivity, allowing me to value my interpretation of the results. From a positivist viewpoint, this could be regarded as a limitation since this ontological or epistemological viewpoint values objectivity and would rather resort to approaches revolving around coding reliability or structured codebooks.

Conclusion

On the Getting Started page on the ReproTea webpage, it states: "Want to start your own journal club? Do it! It's a low commitment, fun and flexible way to start spreading Open Science ideas in your department" (Getting Started, n.d., Way 1). I challenge this statement for the following reasons.

Theoretically speaking, setting up a ReproTea sounds like a low commitment. One prints posters, advertises on social media, chooses a topic from the list to discuss, and sends out emails to invite participants to the sessions. However, this study provides evidence that it is more complicated than this and can require a lot of commitment. Organizers are not rewarded for the organization, and even though we have seen that intrinsic motivation is more sustainable than extrinsic, the organizers emphasize how important it is to get rewarded because they are busy people with limited time for extracurricular activities such as ReproTea.

Moreover, I argued that establishing a community is an important facilitator to the organization. However, most organizers struggled with establishing this. Not only is it difficult to establish a fixed group of returning participants that take responsibility and actively engage with each other, but an organizer also needs to steer this group in a direction they are all passionate about and choose topics and formats that make each session meaningful.



Further, when having established the ReproTea, it needs to be carefully advertised and planned which can require more time and effort than one might assume and for some, it can be a tedious task. For example, the Dutch organizers attempted to make each session more meaningful by inviting external speakers which can be straining and create anxiety. This leads me to my second issue.

Even though, according to my sources, the organization can be fun and successful sessions can generate lots of motivation, it can also be a strain on organizers' time and energy. In the case of inviting external speakers, the organizers expressed their worries because they were anxious that not a lot of participants might show up, making the session feel awkward when an external speaker presented for just two participants. Indeed, asking a stranger to give their effort and time to deliver a talk can be intimidating, even if one knows in advance that the attendance numbers will be high. In general, attendance creates anxiety as one organizer stated that it was at times a one-on-one session which can be daunting for the organizer when there is no pre-established relation with the speaker.

Furthermore, in online formats there seemed to be less engagement between the participants, and people often do not turn on their camera, which can make it feel like one is speaking to an empty room. The organizers felt responsible in these cases for trying to pull the information out of the participants which again, can be straining.

Finally, ReproTeas are less flexible than one might assume. Usually, participants must travel between faculties to attend a meeting which can be time-consuming or even impossible. Moreover, students who would want to start organizing can lack the infrastructure and reach that university staff have, making it harder for them in particular. All in all, these reasons pose significant barriers to the organization but what can be done to make it a low-commitment, fun, and flexible process? What would facilitate this?

The most obvious answer is to pay researchers or students to start organizing the ReproTea. As I have shown, reward systems can highly benefit the organization process because more time and effort can be put into it like this. However, due to the grassroots nature of ReproTea and the university's culture surrounding it, this is in most cases impossible. Additionally, within universities, not everyone supports OS, making it harder to invest money



into it (Spellman, et al., 2017). Moreover, even though this would tackle the commitment issue, it still fails to address the issues around fun and flexibility. So, what could be the alternative?

Since the ReProTeas are run and attended by volunteers who are not and most likely cannot be rewarded for their contributions, the biggest facilitator would be to develop a CoP. It thrives on intrinsic motivation which counters the lack of extrinsic rewards. However, this is hard to establish, leading us to the question of how this can be made easier for the organizers.

The main solution—but also perhaps a prerequisite—is to gather a fixed group of returning members who actively involve themselves in the organization, take responsibility, and identify with the club. To create this type of group the organizers need to 1) carefully pick meaningful topics, 2) have a clear direction to direct the members towards, 3) communicate with other ReProTeas, the OSC, and participants, 4) decide on a format that enables the most participation, and 5) clearly outline which types of internal leadership is required.



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Appendices

Appendix A - Interview Guide

<p>Introduction: Thank you for partaking in this interview and signing the informed consent form.</p>		
Type	Topic	Main Question
Introductory	Background	<p>I would like to start this interview by asking you a couple of questions about you. If you don't feel like sharing some of these details please let me know and I will move on to the next question.</p> <p>How long were you part of this journal club? What were your tasks? Was there anyone else involved in the organization? What made you want to organize the club and what were your motives? What was your current academic position while you were participating? Which academic positions did the participants have?</p>
Transition		<p>Now, I will first ask you some descriptive questions about the format of your journal club to get a clear image of what it looked like. I will ask questions about the way the club was organized, how learning was enabled, and what types of articles were discussed.</p> <p>Do you have any questions so far?</p>
Key Question	Descriptive	How would you describe a successful ReproducibiliTea club?
Key Question	Descriptive (organization)	<p>Could you explain how you organized the journal club? <i>Here I am looking for more practical details such as time, place, amount of participants, preparation, etc.</i></p> <ol style="list-style-type: none"> 1) Was there a defined leader of the club? <ol style="list-style-type: none"> a) Who picked the articles? b) How was this arranged? 2) How many times was it organized? 3) How long did each journal club last? 4) How were the participants involved in the organization? 5) Was there food available? 6) How would you describe the setting? 7) How many participants attended on average? 8) Were there ever any outside experts invited to guide a session?
Key Question	Descriptive	Could you explain how the journal club was promoted?



	(Promotion)	How were members notified of an upcoming journal club?
Key Question	Descriptive (Goal)	What was the goal of the journal club? How were you working towards that goal? Did all participants have the same goal?
Key Question	Descriptive	Could you explain the types of articles that were discussed during the journal club? Do you think these were the right articles to be discussed? 1) If yes, why? 2) If not, why not?
Key Question	Descriptive	Did you evaluate the journal club? 1) If yes, why and how? 2) If not, why not?
Key Question	Descriptive	How was learning enabled during the sessions?
Key Question	Descriptive (CoP)	Do you think the club created a sense of community among its members? Do you think the members recognized the value of the journal club? With what purpose do you think the members attended the journal club? How did this journal club work towards a more open scientific environment? Do you think it was clear to the members how the journal club contributed to the Open Science enterprise?
Key Question	Descriptive (Culture & Reward)	How would you describe the OSC culture surrounding the journal club? 1) Do you feel this culture enabled you to organize and keep organizing the club? 2) Were you rewarded for organizing the club?
Transition		Thank you for answering these questions. Now, I would like to ask you some questions about the journal club's activity. Do you have any questions so far?
Key Question	Challenges	In an email, you mentioned that this journal club is inactive. According to you, how do you think this journal club has become inactive? 1) Why is that? 2) Could you explain how this happened?



Key Question	Facilitators	According to you, what would enable organizers to start organizing the ReproducibiliTea club again? 1) Why is that? 2) How would you make this happen?
Key Question	Facilitators	According to you, what would be the most effective way to keep the journal club active once it is being organized again? 1) Why is that? 2) How would you make this happen?
Key Question		Would you conclude that your journal club was successful? 1) What contributed to this success? 2) What would have made it more successful in your opinion?
Closing	General	Were there any important questions that I missed and that you would like to touch on?



Appendix B - Familiarization Notes

Familiarization Notes

How do I respond to the data?

I see who care about the norms and values of Open Science. People who have a lot of fun with the meetings but maybe not necessarily with the organizational aspect of it.

What sounded familiar to me was that they both acknowledged that other priorities were more important for them. This is because they get paid to do so. Also, a lack of time as a barrier was expected.

I see a world in which two people are motivated - also because they both deem the club as unsuccessful - but are held back by a lack of time to organize the event properly. In my interpretation, I think this also has led to low participant amounts.

What was unfamiliar to me, was that one participant pointed out that their position of [redacted] enabled them to organize the club more easily. How important it is to reward students for doing so.

Theme seems to be important but could also be promotion. Not really structural promotion. What surprised was that both organizers had a different definition of success.

Also that organizing it less did not lead to a higher participant amount.

It seems that some themes attract more people.

One participant seems to contradict himself.

Big mailing list doesn't mean anything.

People like the club but don't seem to fear coming.

Mostly psychology

No sense of community -> sounds important to me especially after interview with [redacted]

[redacted] also struggles a bit.

No contact between Reproten -> sounds to me like a big barrier but also facilitator!

Format change to stimulate people to come. Doesn't seem to work though.

One participant doesn't seem to know entirely what this is a successful Reproten.

Rep Sessions are steered by organizer's interest.

↓
attracts mostly people from psychology.
→ they would like to attract people from other disciplines as well.

What sounded interesting to me was that I pointed out that psychology ~~that~~ maybe felt more responsible, → therefore more participants from that discipline.

As someone who joined one session I can empathize with other Master students.
→ However both ~~participate~~ organizers seem very open to Master students.

I start to realize there are equal ^{poss} benefits and cons to organizing it online or offline.

I also notice that both organizers are really good at empathizing with the people who are not joining.

Familiarization Notes

- Volunteer -
- Took on the whole organization on her own.
- Success as consistency and perceived value.

• Priorities
→ stood in the way of the promotion

• Motivated to prepare the sessions
→ not to promote them → logistics.

• Finding external speaker seemed to lead to higher participant amount. → seemed to work better than "official" format journal club.

• Focus on education seemed to work.
→ but could have also been better advertising.

• Variety of disciplines.

• Fair coffee → Barrier? → think with [redacted]?

• Mostly attracted university staff. "I hope there won't be alternatives that look the same."

• No sense of community



- Support from OSC [redacted] but sometimes the communication faltered.
- [redacted] states that [redacted] values coming together more than the actual discussions.
 - ↳ interesting.
- No success because it didn't attract people from outside the regular attendees.
- At the end of this transcript I feel like people do not really add anything new. Personally I feel like I have enough information to answer the 'RQ'.

- Tension between online and offline.
- Big benefit of physical meetings is its contribution to a sense of community.
- Communication interationally
 - ↳ Big facilitator.

Familiarization Notes [redacted]

- Hired and rewarded to organize
- Seems very involved
- Seems to be a strong connection between the Tea and the OSC
- Success as consistency and engagement
- Could be a blessing to help people connect
- Interesting how [redacted] describes community and the shift from to a self-sustained community!
 - ↳ However, he doesn't believe that is possible due to people's priorities.
 - ↳ Having a paid person really facilitates things.
 - ↳ problem of bias

But, you do need some attraction. → Don't have that?

- ↳ community dies.

 Bias.

- ↳ tension between leadership and coordination.

Familiarisation Notes

[redacted] seemed to be driven by a sense of community.

- ↳ speculation → when that sense of community faltered she got less and less motivated.

 The atmosphere at Sips seemed to inspire [redacted] to start organizing.

OSC [redacted] very supportive and helpful.

[redacted] attracted mostly students because it was organized by students.

- ↳ speculation: it seemed that this made it less appealing for university staff to join.

 To me it sounds like this Tea really created a community in which its members actively contributed to the self-sustainable club.

Success = consistency

- an inviting atmosphere where mistakes can be made and silly questions can be asked.
- to learn from each other despite your level.



Notes²³

Yellow = a story about ReproTea as a community – Heavily influenced by my literature search on Wenger’s Community of Practice. Not quite sure what story I want to tell with these themes but I have grouped them because they seem to fit together. They either comment on community building, community coordination, community ... Maybe a story about belonging? Togetherness? Connecting...

Green = a story about what happened inside ReproducibiliTeas the sessions

At first I decided to dedicate a theme to online and offline benefits and challenges but instead chose to turn it into a story about format because I think this captures more relevant topics. Then I changed it to a ‘story about what happened inside the ReproducibiliTea session’ because I think this theme will show richer results that can be related to each other.

Pink = a story about priorities and rewards

Throughout the interviews I noticed more and more that members had other priorities that they deemed as more important because they were rewarded for those.

Blue = a story about communication

Red = a story about success

Light green = a story about the organizers

² Some themes did not make it. Some themes were merged together. Some themes were redefined.

³ Not all 172 codes are included in this appendix. This would make it cumbersome.



Project: ReproducibiliTea

Report created by Jimte Ferwerda on 7-5-2024

Code Report

All (172) codes

○ **A barrier to member contribution was to find an article. What facilitated this was a list of papers.**

1 Quotations:

1:11 ¶ 42 in * - 220424

Ja, de artikelen kozen wij dan wel. Behalve als iemand een specifiek artikel had. Maar dat was een soort van een drempel die wij ondervonden, dat het mensen het dan moeilijk vonden om met een paper te komen. Dan hadden wij een soort van paar... een lijstje van papers waar ze uit konden kiezen. En daar dan iets van een onderwerp wat ze interessant vonden uit te kiezen. Daar iets mee te doen.

○ **A community needs a clear direction**

1 Quotations:

4:20 ¶ 52 in * - 290424

"No, let's do it." But that is a big bias and that is exactly why at some point we thought 'okay, having a community coordinator that is a bit more outside would give more agency to the community members so that they would shape the community as they see fit in terms of content in terms of structure. That did not happen. If you don't, I am telling you, if you don't have a clear direction, even it is crowd-sourced right, but there needs to be a clear direction and somebody, a person who needs to bring people towards that direction, if you don't have that, the community dies. And my hope was that I would be wrong. And so far I am only right. So sad.

○ **A consistent group of members made it easier to keep organizing.**

1 Quotations:



3:19 ¶ 50 in * - 260424_

And he had like the three, four, five, like engaged interested students who also cared about it and were interested in discussions and it also clicked personally, right. All these things worked out in the beginning. But that was really hard to carry through online with a much more changing group.

○ **A paid coordinator facilitates the sustenance of a community**

1 Quotations:

4:9 ¶ 27 in * - 290424

Yes! Yes, thank you, yes. Thank you. So it is very difficult for people within the community to understand, to take enough time to organize the community itself, right? It is a skillset. It is a job. So having a person who is paid to do so really facilitates things. But on the other hand, the risk is that, if this person, and this is what we noticed for example, the coordinator that we hired after me did not have a lot of knowledge about Open Science or about what is needed to connect with researchers, right? And * did amazing, all things considered right? I don't want to diss * in any way. But we noticed that this was a problem. So basically researchers felt at some point that the community slipped away from them because they were not given the content anymore despite the fact that we were asking but they were like to busy. But on the other hand it was also much less coordination because then our coordinator also went on sick leave. So it felt like 'okay then what do we do?' Then probably some of you researchers should try and coordinate the community. We give the power back to you and we are going to pay you for that. So that is what is going to happen right now. Now we are looking for two, three people could actually coordinate the community under my supervision, under supervision of a couple of other people that are working also with the community. And then we are going to pay researchers for that.

○ **A reoccurring group facilitates the organization because it makes the club run itself. Organizer doesn't have to worry then if enough members will show up. Then the focus is less on promotion but mostly on picking papers**

1 Quotations:

1:42 ¶ 130 in * - 220424



Ik denk dat het meest effectieve, gewoon mensen die iedere maand komen. Want als jij mensen hebt die komen, dan wordt er ook wel een soort van verwacht dat je iets hebt. Dan hoef je niet iedere keer zenuwachtig te zijn van wie gaat er komen als je gewoon een groepje van tien hebt die er gewoon iedere keer bij is dan gaat het relatief vanzelf, denk ik. Dan is het echt alleen een kwestie van papers uitzoeken. Meer dan alle marketing er omheen. Als dat een beetje loopt, als je een beetje mond op mond reclame krijgt van andere mensen die komen dan wordt het een stuk makkelijker denk ik.

- **Advice is to give credits to reach a bigger audience which might lead to people sticking around.**

1 Quotations:

1:28 ¶ 101 in * - 220424

Ik denk als we het nu willen opstarten dat het misschien juist wel een goed idee is om dat te doen. Omdat je dan meer mensen werft die misschien blijven hangen. Dus of een eenmalig event ofzo waar je credits voor geeft. Dus nu in * weer mensen die het op zouden willen pakken om het wel weer te starten, dus ik hoor graag je resultaten om te kijken of daar nog dingen zijn om aan hen mee te geven. Ben heel benieuwd. Maar ja zij, toen heb ik wel het advies gegeven van ik zou wel kijken of je voor sommige evenementen wel credits kan geven om dus een soort van een grotere groep te creëren, want je moet er ook maar van afweten en het is best een drempel om voor de eerste keer natuurlijk naar een evenement te gaan.

- **After covid people didn't want to attend online meetings anymore**

1 Quotations:

4:32 ¶ 87 in * - 290424

Well I think the reason why activity was lower, because after covid people wanted to go back to their normal lives and so this connection with the online meetings... There was a connection in people's minds, I think, I don't know, maybe I am projecting, maybe it is for me, right? There is this idea that you know like now that we can have physical meetings I am just going to have physical meetings and not online meetings. Which was, first of all I think it was irresponsible at some point, but second this means that we go back to the problem that we said before right, if you organize a meeting in a specific building, people who work in another building won't come. So you see that is why the decline is more related to that.



○ **Driven to take over the club because participant found the sessions fun and cared for its existence**

1 Quotations:

1:2 ¶ 13 in * - 220424

Ja omdat dus die andere organisator die het had opgestart een PhD ging doen en ze kreeg het eigenlijk te druk. Dus zij kon niet meer officieel door en toen dacht ik: "ik vind dit wel heel leuk. Het is leuk als het doorgezet wordt, dus dan ga ik dat wel doen."

○ **Expression of emotion makes it easier to connect**

1 Quotations:

4:28 ¶ 68 – 70 in * - 290424

37:42 A: Yeah can be a shared problem, can be a shared goal. But I think it is easier to express the emotional aspect of that in a room together with other people. Because what, I mean you can tell me, you can rationalize with me, why everybody should do Open Science but if I, if you hear how I talk about Open Science, you will have a different way of looking at the topic.

38:11 J: Easier to connect with it then.

38:11 A: Precisely.

○ **External speakers motivated people to attend**

2 Quotations:

4:12 ¶ 32 – 33 in * - 290424

Yeah, I heard that a lot actually that inviting external speakers really motivated people to join the journal club. It seems that makes it a little bit more interesting as well.

17:15 A: Yeah and that's why I think there was also this idea of having speaker swaps so that the community's

5:7 ¶ 25 in * - 250424



Nee, dus voor de organisatie niet. Nee. Ik heb wel op een gegeven moment ook, dat leek beter te werken, dat ik ook in plaats van dat ik een artikel koos dat ik interessant vond en dat we het daar over hadden, iemand uitnodigde die dan of een artikel zelf had geschreven of heel erg werkt in een bepaald veld of een onderwerp en dat dus een andere persoon uit was genodigd om die sessie te vertegenwoordigen of te leiden, dus dat zij iets zeiden over hun expertise en wat discussie vragen daarover in de groep gooiden. Dus dan maar dan ging ik in overleg met hun, welke dag, welke tijd het beste zou uitkomen, maar dan zou ik alles nog verder organiseren.



Appendix D - Informed consent forms

Consent Form

Study: Barriers and facilitators in the organization of ReproducibilTEa journal clubs in the Netherlands.

Please read the statements below and sign below each if you agree with them and consent to take part. If you do not consent to take part after reading this form, inform the interviewer, Jimte Ferwerda - you are free to choose not to participate at any point and for any reason.

To participate in this study, you must be:

- Over the age of 18
• Fluent in English, Dutch or Frisian
• Involved in some way in the organization/coordination of a Dutch ReproducibilTEa

Audio of your interview will be recorded during the interview for the purpose of transcription. Once your interview is transcribed and de-identified (by the removal of any identifying information, and the assignment of a participant/source number) the recording will be destroyed (i.e., not stored in any location).

Have you:

- Been given information explaining the study?
• Had an opportunity to ask questions and discuss the study?
• Received satisfactory answers to all the questions you asked?
• Received enough information about the study for you to make a decision about your participation?

If you believe so, please sign the declaration below.

I hereby fully and freely consent to 1) my participation in this study, 2) the audio recording of my interview and 3) the processing of my personal information (my name, my affiliation and my career stage).

Participant signature only (not name)

Remember: You are free to withdraw from the study and free to withdraw your data at any time up to one week after the interview, and without having to give a reason for withdrawal.

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Audio of your interview will be recorded during the interview for the purpose of transcription. Once your interview is transcribed and de-identified (by the removal of any identifying information, and the assignment of a participant/source number) the recording will be destroyed (i.e., not stored in any location).

Have you:

- Been given information explaining the study?
• Had an opportunity to ask questions and discuss the study?
• Received satisfactory answers to all the questions you asked?
• Received enough information about the study for you to make a decision about your participation?

If you believe so, please sign the declaration below.

I hereby fully and freely consent to 1) my participation in this study, 2) the audio recording of my interview and 3) the processing of my personal information (my name, my affiliation and my career stage).

Participant signature only (not name)

Remember: You are free to withdraw from the study and free to withdraw your data at any time up to one week after the interview, and without having to give a reason for withdrawal.



Consent Form

Study: Barriers and facilitators in the organization of ReproducibilTEa journal clubs in the Netherlands.

Please read the statements below and sign below each if you agree with them and consent to take part. If you do not consent to take part after reading this form, inform the interviewer, Jimte Ferwerda – **you are free to choose not to participate at any point and for any reason.**

To participate in this study, you must be:

- Over the age of 18
- Fluent in English, Dutch or Frisian
- Involved in some way in the organization/coordination of a Dutch ReproducibilTEA

Audio of your interview will be recorded during the interview for the purpose of transcription. Once your interview is transcribed and de-identified (by the removal of any identifying information, and the assignment of a participant/source number) the recording will be destroyed (i.e., not stored in any location).

Have you:

- Been given information explaining the study?
- Had an opportunity to ask questions and discuss the study?
- Received satisfactory answers to all the questions you asked?
- Received enough information about the study for you to make a decision about your participation?

If you believe so, please sign the declaration below.

I hereby fully and freely consent to **1) my participation in this study, 2) the audio recording of my interview and 3) the processing of my personal information** (my name, my affiliation and my career stage):

Participant signature only (not name)

Remember: You are free to withdraw from the study and free to withdraw your data at any time up to one week after the interview, and without having to give a reason for withdrawal.

Consent Form

Study: Barriers and facilitators in the organization of ReproducibilTEa journal clubs in the Netherlands.

Please read the statements below and sign below each if you agree with them and consent to take part. If you do not consent to take part after reading this form, inform the interviewer, Jimte Ferwerda – **you are free to choose not to participate at any point and for any reason.**

To participate in this study, you must be:

- Over the age of 18
- Fluent in English, Dutch or Frisian
- Involved in some way in the organization/coordination of a Dutch ReproducibilTEA

Audio of your interview will be recorded during the interview for the purpose of transcription. Once your interview is transcribed and de-identified (by the removal of any identifying information, and the assignment of a participant/source number) the recording will be destroyed (i.e., not stored in any location).

Have you:

- Been given information explaining the study?
- Had an opportunity to ask questions and discuss the study?
- Received satisfactory answers to all the questions you asked?
- Received enough information about the study for you to make a decision about your participation?

If you believe so, please sign the declaration below.

I hereby fully and freely consent to **1) my participation in this study, 2) the audio recording of my interview and 3) the processing of my personal information** (my name, my affiliation and my career stage):

Participant signature only (not name)

Remember: You are free to withdraw from the study and free to withdraw your data at any time up to one week after the interview, and without having to give a reason for withdrawal.



Appendix E - Participant information letter

INFORMATION ABOUT THE RESEARCH

VERSION FOR PARTICIPANTS

Barriers and facilitators in the organization of ReproducibiliTea journal clubs in the Netherlands.

EC code: TBA

Why do I receive this information?

You are being invited by Master student Jimte Ferwerda (j.ferwerda.4@student.rug.nl), to participate in an interview discussing barriers and facilitators in the organization of ReproducibiliTea journal clubs in the Netherlands. In particular, Jimte wants to talk to you, as you have been identified as someone in an organization/coordination role associated with an Open Science Community ReproducibiliTEA group. Supervising Jimte is Dr. Sarahanne M. Field, assistant professor at the University of Groningen (s.m.field@rug.nl).

Do I have to participate in this research?

Participation in the research is voluntary. However, your consent is needed. Therefore, please read this information carefully. Ask all the questions you might have, for example, because you do not understand something. Only afterwards you decide if you want to participate. If you decide not to participate, you do not need to explain why, and there will be no negative consequences for you. You always have this right, including after you have consented to participate in the research.

Why this research?

Research shows that journal clubs are an effective way to practice and teach Open Science - known as ReproducibiliTea clubs within the OSCs (Kathawalla, et al., 2021). However, after contacting the organizers, four out of five clubs stated they have become inactive.

The goal of this research is to explore factors that explain why four out of five ReproducibiliTea clubs in the Netherlands have become inactive. To achieve this goal I will investigate what encourages the organizer(s) of the active club to keep organizing, as well as what prevents organizers of the inactive clubs from organizing one. Investigating why one club is still active highlights what the inactive clubs lack or do differently in comparison to the active club. The question that guides the research includes:

- Why have four out of five Dutch ReproducibiliTea journal clubs become inactive?

What do we ask of you during the research?

To discuss this topic, I will conduct an interview. The interview will last for no more than an hour and will be audio-recorded. I will make a transcript of this recording and destroy the recording as soon as the transcript is made, in line with GDPR guidelines. Additionally, the transcript will be edited to remove any possible identifying text (such as your name, institution, or the ReproTEA/region you're associated with). You will be given the chance to abandon the interview at any time in the duration and will be given the opportunity to exclude your data from the analysis after the interview.



What are the consequences of participation?

We do not foresee any risks to you, individually or professionally, should you choose to participate in this study.

How will we treat your data?

An interview with you will be conducted, to contribute towards the qualitative master thesis research of Jimte Ferwerda. Audio of your interview will be recorded during the interview for the purpose of transcription. Once your interview is transcribed and de-identified (by the removal of any identifying information, and the assignment of a participant/source number) the recording will be destroyed (i.e., not stored in any location). This will happen before the 31st of April.

The transcript will then be qualitatively analyzed using Atlas.ti, and the themes Jimte interprets in the data will be reported in his master thesis. Should part of the interview text be quoted in the written report, it will be associated with a participant/source number, and not associated with you in any way.

What else do you need to know?

You may always ask questions about the research: now, during the research, and after the end of the research. You can do so by speaking with the researcher present right now or by emailing Jimte Ferwerda (j.ferwerda.4@student.rug.nl) later.

Do you have questions/concerns about your rights as a research participant or about the conduct of the research? You may also contact the Ethics Committee of the Faculty of Behavioural and Social Sciences of the University of Groningen: ec-bss@rug.nl. Do you have questions or concerns regarding the handling of your personal data? You may also contact the University of Groningen Data Protection Officer: privacy@rug.nl.

As a research participant, you have the right to a copy of this research information



Appendix F - EC Request approval

EC Request: [redacted] request approved Inbox x



EC Request <noreply.gmw@rug.nl>
to me ▾

Tue, Apr 9, 2:20 PM ☆ ↶ ⋮

Dear researcher(s),

Your research plan *master thesis - jimte ferwerda* (research code: PED-2324-S-0055) was recently reviewed by the Ethics Committee of the Faculty of Behavioural and Social Sciences. The final outcome of this review was positive. Therefore, on behalf of the Faculty Board, the Committee has now approved your research plan.

The reviewers have added the following explanation:

ECPEDON: reassessment PED-2324-S-0055 The EC has seen the adjustments made by the researchers and gives a positive advice on this research proposal. The EC wishes the researchers success in conducting this research. Kind Regards, on behalf of the EC, [redacted]

The Ethics Committee is established by the Faculty Board and reviews research plans in accordance with the Ethical Code of the National Ethics Council for Social and Behavioural Sciences (NETHICS), the General Data Protection Regulation (GDPR), and the Netherlands Code of Conduct for Research Integrity. The review was based on the documents uploaded in EC Request (e.g., research plan, data management plan, participant information forms, consent forms - document requirements vary with the type of research). The approved version of these documents will remain in EC Request.

Please note that while the responsibility for conducting the research according to the plan lies with the entire research team, the principal investigator holds final responsibility. The Ethics Committee should be notified about any changes to the research plan, data management, or participant information forms and consent forms, as well as about other ethical issues that may arise during or after your research. Changes can be reported via [EC Request](#) in the form of an amendment. (An amendment is made by reopening, modifying, and resubmitting a request.) Procedural questions are best asked via ec-bss@rug.nl. For other issues or questions about this specific request, contact the departmental subcommittee that reviewed the research plan.

After the research has ended, all data should be stored according to the [Faculty Data Storage Protocol](#), unless your Data Management Plan (DMP) deviates from this protocol, in which case the data should be stored according to this DMP.

Sincerely,

Executive secretary EC-BSS

ec-bss@rug.nl