

MEMBER DIFFERENCES

E-PLM 2.0 - Experiment 5.1

Types of member differences and how they help
and hinder collaboration

This report has been created within the E-PLM 2.0 project, Experiment 5.1.
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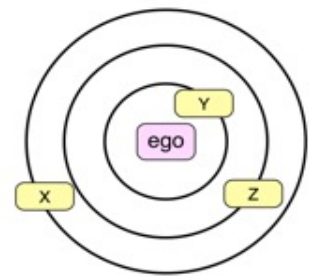
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Member differences: Types of member differences and how they help and hinder collaboration

Member differences are central tenets of contemporary team organizing: We form teams that bring together professionals from different organizations and from different professional backgrounds to broaden the available pool of perspectives, to capitalize on diverse knowledge, to learn from each other's practices and to trigger creativity and innovation. At the same time, we also aim for some similarity within teams: it helps if team members share the same objectives, create a collective feeling of group belonging or adopt a similar terminology to describe their thoughts and ideas.

We have studied which differences members perceived in their E-PLM 2.0 experiments and, importantly, *how* they perceived them: Did they help or hinder collaboration and communication? For that, we conducted various interviews but also joined and video-recorded team meetings to observe how member differences and their effects play out in actual interaction. Figure 1 shows a sketch of the instrument that we used in our interviews. We asked our interviewees to locate their team members on a similar target board, ordered by how different or similar team members were from themselves and then inquired about differences and similarities in more detail.

Figure 1: Sketch of network instrument



While people generally tend to focus on those differences that can immediately be observed (e.g., gender or age) or that appear to be more factual (e.g., job titles that we can read on someone's business card), our studies show that they are additional dimensions that matter, too. We explore four main questions in this report:

- Which differences make a difference for teamwork?
- Do some differences matter less than others?
- Are there differences that tend to hinder, rather than help, collaboration?
- What can we say about the relationship of differences and similarities?

It is useful to begin with a simple typology of types of member differences. Typically, member differences are sorted into one of four categories (Table 1):

Table 1: A four-fold typology of member differences

Surface-level differences	Deep-level differences	Job-related differences	Non-job-related differences
= immediately observable characteristics	= underlying and personal characteristics and traits	= characteristics that directly relate to one’s profession	= characteristics that relate to aspects outside one’s work
<i>Think of age, gender, ethnicity, ...</i>	<i>Think of values, personalities,</i>	<i>Think of education, knowledge, ...</i>	<i>Think of ideological beliefs, religion, ...</i>

Let us turn our attention to our first question: Which of these difference categories makes a difference in teamwork?

Insights 1 & 2) Which differences have team members mentioned and which ones matter more than others

In the interviews, participants mentioned a multiplicity of perceived differences, stretching across the four categories we outlined before and hence reaching beyond only the observable and more factual differences. Interestingly, **deep-level** and **job-related** differences were mentioned most often and described as having more important effects for collaboration. For example, being extrovert or having an exploring mindset were mentioned as relevant deep-level characteristics. Education, experience or an interest in technology were mentioned as job-related differences, to name a just a few. The fewer **surface-level** differences that were named covered the typical repertoire, including age and nationality. **Non-job-related** characteristics for example included family situation or hometown. Table 2 gives an overview of all perceived differences.

Table 2: Differences mentioned, sorted by category

Category	Sub-category	Difference
Surface-level differences	-	Age Nationality
Deep-level differences	Individual deep-level differences	Ambitious—not ambitious Thinking in problems—in solutions Self-conscious—self-confident Rigid—exploring mindset Dedicated—not dedicated

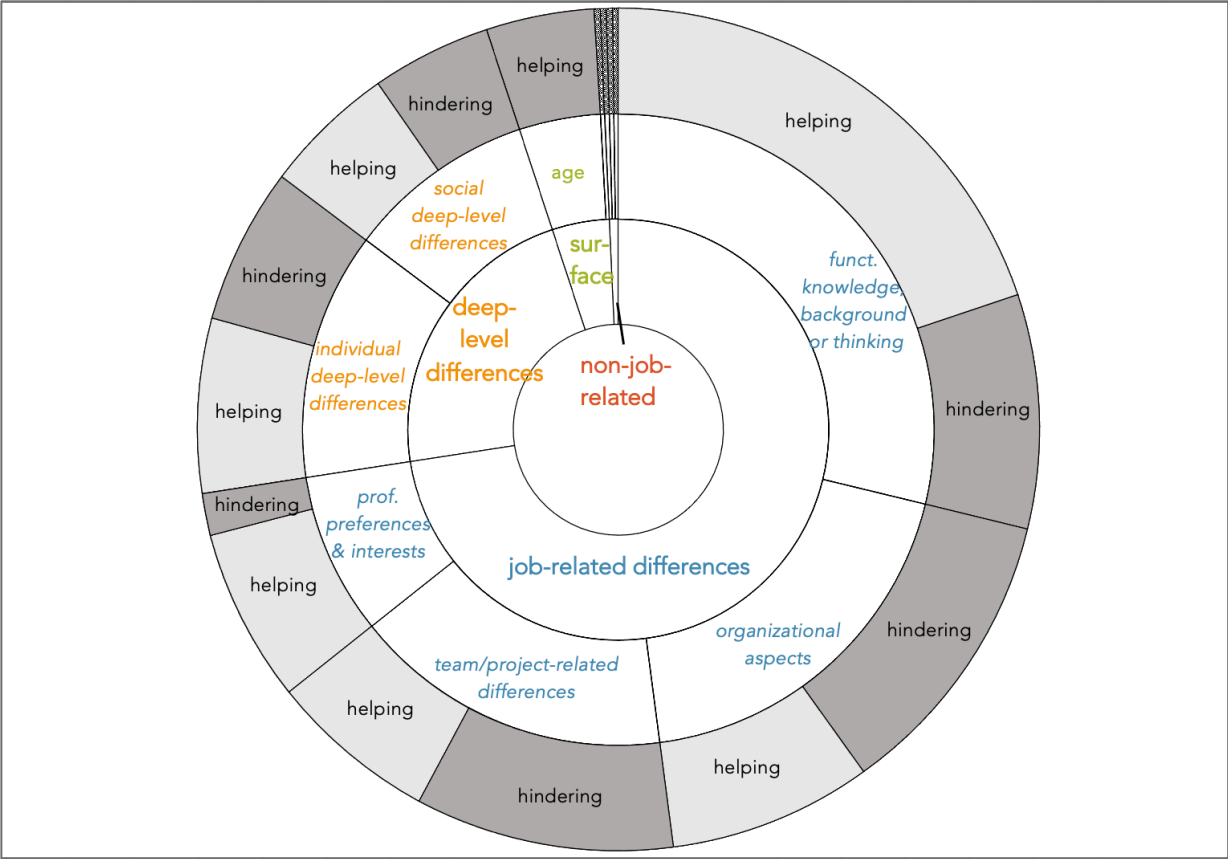
Category	Sub-category	Difference
		Formal—informal
	Social deep-level differences	Sharing—not sharing Introvert—extrovert Social click—no social click Laissez-faire—directing style
Job-related differences	Functional knowledge, background and thinking	Abstract—operational thinking Work role & field Education Experience Knowledge & expertise Perspective & background
	Professional preferences and interests	Preferred way of working Interests
	Organizational aspects	Organizational goals & interests Organizational structures Markets, products & services Organizational size & maturity Organizational perspective-taking
	Team aspects	Team member roles Team goals
Non-job-related differences	-	Family situation Hometown

Of all these differences, **deep-level** and **job-related** differences were mentioned most often and were also described as having more important effects for collaboration.

Insight 3) Which differences help, and which ones hinder?

Participants described some of the differences they mentioned as helping collaboration and teamwork, while others were described as hindering these processes. Yet others were reported as both helping and hindering (often depending on relational surroundings, as we will explain later). Figure 2 presents an abstracted, frequency-based overview of the mentioned difference (sub)categories, including whether they helped or hindered teamwork and collaboration.

Figure 2: Differences and whether they help and hinder teamwork



As we said already, job-related and deep-level differences were overall perceived and mentioned more often than **non-job-related** and **surface-level** characteristics. Indeed, as what felt like a way-out strategy, the latter two were almost exclusively mentioned when interviewees had a feeling of not knowing a person well or when they demonstrated difficulties in naming differences:

“We’re both male ((laughing))? [...] And also I don’t know that much about him [...] No, I don’t really know his background either, so...”

These two categories generally were also not described as affecting the teamwork either positively or negatively, except for age differences which were generally named as helping collaboration. Team members overall perceived these differences categories as not very much affecting their collaboration, which might also explain why they were mentioned less frequently:

“But then again he’s also a bit older, but it’s not like causing a gap or so.”

In contrast, **job-related** and **deep-level** differences were named much more often and were described as both helping and hindering the teamwork. These two categories were also named as most influential or as key differences affecting the collaboration (which non-job-related and surface-level differences were not):

"If would miss the knowledge of this part of the team, then we would have made a lot less progress for sure."

"I think he's a bit more positive and outspoken than I am. Well, I also like to laugh but he has this very positive and lively attitude. It's always great to collaborate with that type of people."

"The company culture and just in general how things go, that quickly becomes some sort of automatism, without you even realizing. And if that person sitting at the other side of table does not have that automatism, things go wrong very quickly."

Zooming into the subcategories of **job-related** characteristics, it appears that:

- Individual differences (professional preferences and interests and functional knowledge, background or thinking) were more often related to helping,
- while organizational and team-level differences (e.g., different degrees of organizational maturity, different team goals) were more often associated with hindering collaboration.

This was often a function of relations to other differences, and sometimes similarities.

Insight 4) Links and relations between differences and similarities

Perceived differences were often linked to other perceived differences or similarities. Especially organizational **job-related** differences (including their possible hindering effects) were often described as overshadowing other differences, almost as if there was a hierarchy of differences: For instance, when organizational differences were too big, such as in business maturity, they quickly interfered with a team's joint work and even thwarted possible positive effects of other differences, such as differences in members' knowledge and experiences:

"He has the experience, the knowledge, he has the possibilities to execute parts, but I think he has taken up more the role of trying to understand what's happening and

to formulate that towards a [...] project, what his organization wants, and then it is basically done, for him. I think it could be more fruitful. The input he's bringing is little in terms of what you might expect from his capabilities."

At times, interviewees specifically stressed that lack of collaboration was caused by organizational aspects and that it was not related to the specific team member per se. Organizational differences were simply in the way of possible collaborative activities or positive effects:

"He's certainly furthest away, for a very good reason. That has limited to do with his personality but more with the role he has received from [company]. That's not like the core of the question. So he can hardly contribute from the background of [company]. He is part of the team, but really on the edge."

One difference that was repeatedly mentioned across interviews as overshadowing many of the collaborative work processes was members' organizational manner of reasoning. We would categorize this difference as a hybrid difference, linked to both an individual and an organizational, job-related characteristic. It once more highlights the strong effects that organizations can have on their members, and thus on interorganizational collaboration. At the same time, it is important to realize that the reason to engage in interorganizational collaboration is to learn from each other. Imagine collaborating with employees from different organizations that all were similar in their way of reasoning, how they are organized, the company size etc. Would that still be of any use? In other words, similarities and differences need to be balanced for fruitful collaboration. It is important to integrate and communicate across organizational differences, which needs mutual perspective-taking: If every team member thinks only from his or her organization's perspective, organizational differences can quickly complicate finding some common ground. However, if everyone is open to think from each other's' perspectives and viewpoints, a truly integrated direction can be formed that fully capitalizes on learning from each other's differences (see also our deliverable on *Direction and Pronouns*).

Another interesting insight that our analysis revealed is that possible hindering effects of differences could be preempted by similarities. For instance, one interviewee talked about how similar mindsets helped him and a team member to find common ground despite differences in careers and work roles. Similarly, another interviewee explained how similar ways of thinking helped to collaborate across differences in organizational affiliation, challenges, and questions:

"We have a similar academic mindset [...] well he's in [company] and I'm in [company], so completely different organizations with completely different sets of challenges and questions. But we might, I think that we talk quite a bit the same language."

The same holds for job-related similarities on the team level. These were also depicted as helping to bridge across various differences. One possible reason might be that both organizational and team-related similarities helped members to establish a sense of shared directionality, conveying a feeling of working together towards the same objectives:

"He's more on the strategy and I'm more on the on the (.) more the policy. But we have that interest in common. We, we agree also on the things we want to do in this team."

Recap: An overview and some practical implications

This report has provided answers to the four questions we have posed in the beginning:

- Which differences make a difference for teamwork?
- Do some differences matter less than others?
- Are there differences that tend to hinder, rather than help, collaboration?
- What can we say about the relationship of differences and similarities?

In Table 3 (next page), we bring everything together and provide some practical implications and recommendations, based on the insights we gained. There is one additional thing that we would like to stress or, rather, suggest:

Many of our interviewees emphasized how the reflective character of our interview helped them to think about differences and the role they play in their collaboration. A similar exercise might be helpful for teams at the start of their collaboration, in order to enhance of awareness and hence possible usefulness of member differences.

Only if team members know about each other's' differences can they also make use of them!

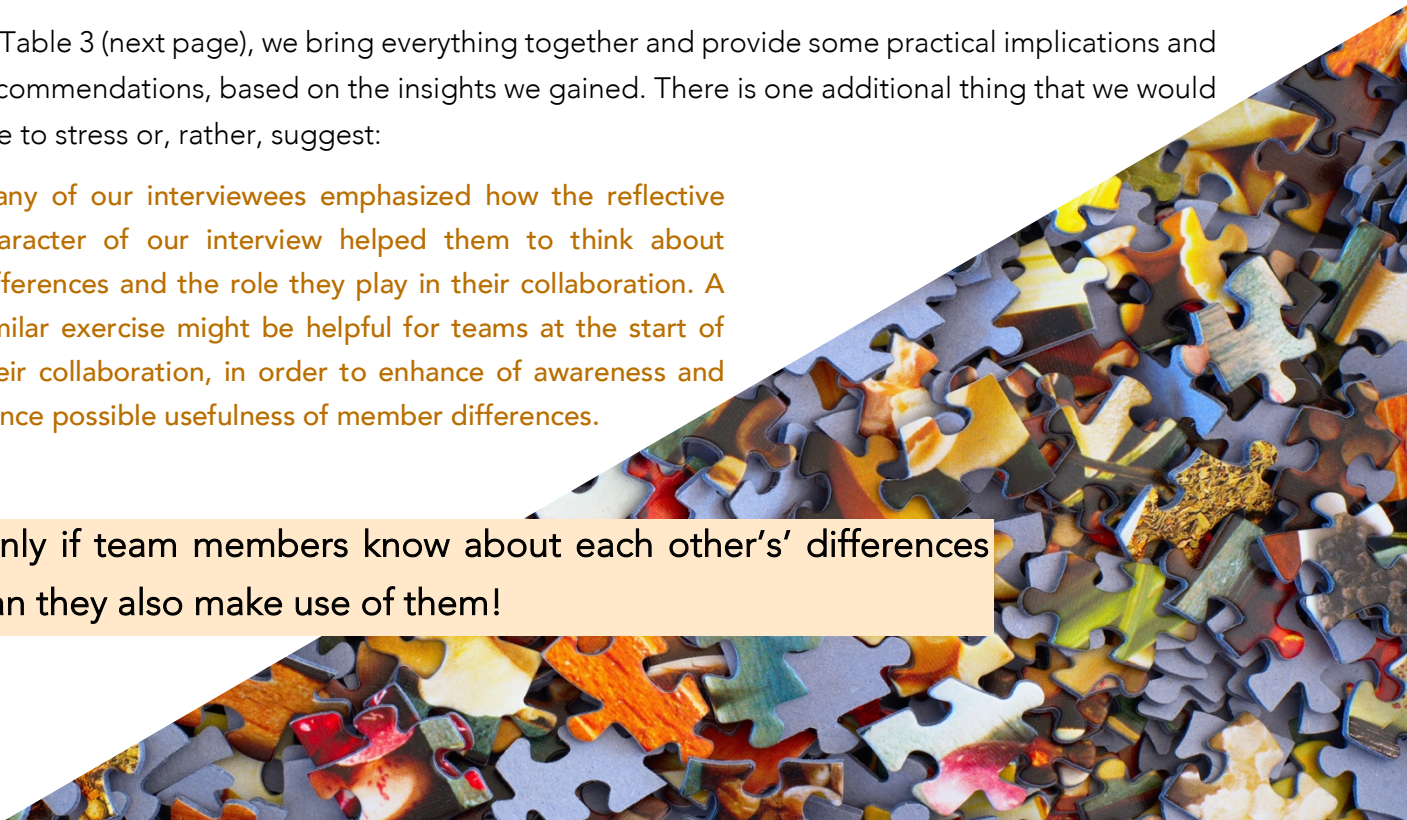


Table 3: Summarizing insights and practical implications

Insights	Practical implications
<p>Job-related and deep-level differences matter more for interorganizational teamwork than non-job-related and surface-level differences. However, similarities on non-job-related and surface-level characteristics can help bonding and thus overcoming differences.</p>	<ul style="list-style-type: none">○ Make sure to find out about team members' characteristics when starting to collaborate. Talk, have coffee, get to know each other!○ Job-related differences can be of particular value, so go and ask your team colleagues about the specific expertise or background they can contribute.
<p>Individual job-related differences tend to help teamwork, while team or organizational job-related differences more often hindered it, at least at the start of the collaboration (that was when we interviewed team members). Deep-level differences help and hinder collaboration to similar extents.</p>	<ul style="list-style-type: none">○ Make sure to understand organizational differences: they are crucial for learning but can easily complicate collaboration, so you need to discuss and integrate organizational differences. You can have conversations about your organizations, or you could think about rotating your meetings: Maybe visit a different company each time—exposing yourself to a company's environment might tell you even more about where your organizations differ or maybe even are alike.
<p>Deep-level and job-related differences are often perceived in combination or relation with additional differences and, at times, similarities. These surrounding differences and similarities can impact whether a difference is perceived as helping or hindering collaboration. Especially organizational job-related differences appear to overarch other job-related or deep-level differences and can thwart possible positive effects.</p>	<ul style="list-style-type: none">○ Try adopting a learning attitude: Even when companies are very different, or precisely because of that, there are certainly many things that you could learn from your team members. Important is that everyone remains open for perspective-changing, so that differences can be integrated in a fruitful manner. In the end, it is all about integrating and after a while, you might discover more and more similarities.○ From time to time, also speak about your personal characteristics. Maybe you can find a similar hobby? Similarities can help bonding and bridge across differences.

Credits and acknowledgements

This report has been created within the E-PLM 2.0 project, Experiment 5.1. All insights, findings and recommendations are based on interviews conducted with members of E-PLM 2.0, analyses of video recordings made, and field note data taken while observing team meetings (as non-participant observer). For questions and suggestions, please contact Ellen Nathues (e.nathues@utwente.nl) or prof. dr. Maaïke D. Endedijk (m.d.endedijk@utwente.nl).

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