SHARED LEADERSHIP AND ITS ROLE IN TEAM LEARNING

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Abstract

Teams have been identified as the vehicle for learning in organizations. However, little is known about the factors that enable teams to learn. From an applied perspective, leadership constitutes a very relevant ingredient. This study is a first step in building up this theory by focusing on the role of shared leadership in team learning. We present data from an exploratory observatory study on the collective leadership and learning process in two business consulting student teams. This qualitative data is used to investigate shared leadership emergence and its role in team learning and is conceptualized as interplays of reflection and action. We find that the more team members engaged in the leadership process, the more the team learned. In particular, we find that shared leadership activities related to task, relations and change complemented one another and enhanced reflection and action in different ways.

Keywords: shared leadership, team learning, qualitative study

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1 INTRODUCTION

With heightened levels of competition and an uncertain, fast-paced economic environment, teams have increasingly become the design choice for many organizations for sustaining competitive advantage (Edmondson, 1999; Guzzo & Dickson, 1996). This growing reliance on teams has led in parallel to an increasing interest in understanding critical group processes. Learning in teams constitutes one of these group processes that has emerged as a topic of compelling interest to a variety of scholars and practitioners (Edmondson, 2002; Kasl, Marsick, & Dechant, 1997; Yorks & Sauquet, 2003). Recently, team learning has been identified as a critical factor in team effectiveness (Schippers, Den Hartog, Koopman, & van Knippenberg, 2008). At the same time, however, researchers have noted that teams often fail to learn and rather tend to behave in more habitual ways (Gersick & Hackman, 1990). Teams fail to learn whenever they neglect to reflect on their activities, or when they engage in reflective behaviors, but omit to implement these new insights following reflection. Thus, given the importance of team learning to the effective functioning of teams, it is crucial to understand what enables teams to learn (Berson, Nemanich, Waldman, Galvin, & Keller, 2006).

From an applied perspective, leadership constitutes a very relevant ingredient for team effectiveness (Hackman, 2002) and in research, too, team leadership has been identified as the most critical factor in the creation and maintenance of effective teams (Zaccaro, Ritterman, & Marks, 2001). To date, however, there has been limited empirical research linking leadership and team learning (Berson et al., 2006; Burke, Stagl, Klein, Goodwin, Salas, & Halpin, 2006). The few existing studies in this particular field have focused on the influence of a single leader on team learning (Edmondson, 1999; Sarin & Mc Dermott, 2003; Schippers et al., 2009), thus largely ignoring the possibility of shared leadership, a form of distributed leadership stemming from within a team (Carson, Tesluk, & Marrone, 2007; Day, Gronn, & Salas, 2004). This lack of research is surprising, especially against the background of trends in team structure and design. First, a single leader may be less likely to successfully perform all leadership functions on his/her own due to the increase in ambiguity and complexity in project tasks (Day et al., 2004; Cox, Pearce, & Perry, 2003). Second, knowledge-workers' desire for more autonomy; and third, companies' need for flatter organizational structures with an intertwined increase of self-managing team structures (Ensely, Hmieleski, & Pearce, 2006; Pearce, 2004) point to the importance of leadership stemming from the team.

We applied this idea of shared leadership to investigating the occurrence of team learning in longitudinal in-depth case studies of two project consulting teams. More specifically, we examined how shared leadership influences team learning over time. The paper starts with a review of the literature on team learning and shared leadership. It then proceeds with the methods followed by the presentation of the data of two cases in the finding part. Finally, the paper concludes with a discussion on the contribution to the literature of team leadership and learning and future research pathways.

2 THEORETICAL BACKGROUND

Over a decade ago, Senge (1990) was the person who set the discussion of team learning rolling, as he suggests that teams represent the vehicle for learning in organizations. Since the middle of the 90s, scholars from diverse fields have continuously contributed to the discussion of team learning. Some of these studies discuss learning as an *outcome* in the form of changes in a team's knowledge. This

learning outcome is achieved through communication and coordination which builds and thus enhances the knowledge base of team members regarding its team and task (Edmondson, Dollon & Roloff, 2008; Ellis, Hollenbeck, Ilgen, Porter, West, & Moon, 2003; Wilson, Goodman, & Naquin, 2001).

In contrast, other researchers investigate team learning from a *process* perspective, as one aspect of a team's interaction process (Argore & McGrath, 1993; Hackman, 1987). In this tradition, researchers observe and measure the process of team learning as specific behaviors which include asking questions, challenging assumptions, evaluating alternatives, and reflecting on past actions (Edmondson, 1999). In this vein, team learning scholars often refer to the learning conception by Schön (1983) who regards learning as interactions between action and reflection. Based on this, Kasl et al. (1997) distinguish in their learning concept between cognitive processes (framing, reframing, integrating perspectives) and specific activities (crossing boundaries, experimenting). Likewise, Edmondson (2002) conceptualizes team learning as the interplay of reflection and action, by differentiating between behaviors that promote a team's insights and those that apply the team's gained insights. However, teams need to engage in both learning categories, reflection and action, to perform complete learning cycles (Edmondson, 2002). This non-substitution of learning patterns is also reflected in Gibson and Vermeulen's (2003) concept of team learning which is defined as "a cycle of experimentation, reflective communication and codification." (2003: 202) Here, too, all three elements of the learning cycle need to be present for team learning to occur. In this paper, we join the latter tradition and regard team learning from a process perspective including the idea of conceptualizing team learning as a non-substitutable interplay of reflective behaviors and action that need to occur to implement gained collective insights (Edmondson, 2002).

As research has identified that team learning fosters team performance (Edmondson, 1999; Kayes, 2004) it suggests that organizations can support team performance by stimulating team learning. This gives rise to the question of what factors enhance team learning and leads us to look for a key interface between team members. The team leader plays a critical day-to-day role in the maintenance and functioning of effective work groups (Hackman, 2002), yet there has been very little research done on the relationships between team leadership and learning (Burke et al., 2006; Edmondson et al., 2008).

The few existing studies in this particular field tend to focus on the characteristics of a single leader and his or her role in team learning. Edmondson (1999) focuses on the relationship perspective of leadership and highlights team leaders' need to decrease interpersonal perceptions and concerns of power differences. In particular, this study points to the importance of creating a psychologically safe team climate which encourages team members to think freely, and to openly debate their opinions and ideas. In contrast, Sarin and McDermott (2004) went beyond the relationship side of leadership and found that leaders characterized by a democratic leadership style, clarification of team goals, and the leader's position within the organization had a positive impact on team learning. Schippers et al., (2009) focused on a particular leadership style, on transformational leadership which includes the process of appealing to followers to go beyond self-interest by modifying morale, values and ideas, and by encouraging the followers to perform beyond expectations (Bass, 1985). Schippers et al., (2009) found that transformational leadership was positively related to team learning through establishing a shared vision. All these reviewed studies bear a resemblance to leaders' approach to strengthening the position of the followers by decreasing

hierarchical differences or by including followers in the decision-making process. Despite this, a juxtaposition of individual actors, who are classified as either leader or follower, still remains in these referred studies.

An emerging stream in leadership literature views the team as a potential source of leadership (Avolio, Walumbwa, & Weber, 2009; Yukl, 2010). Early leadership scholars have already pointed to the importance of sharing leadership among members. For example, Gibb (1954) stated "Leadership is probably best conceived as a group quality, as a set of functions which must be carried out by the group. This concept of 'distributed leadership' is an important one" (1954: 884). Although early leadership literature challenged the traditional, individual, leader-centered perspective, this collective phenomenon has been sought into oblivion and hence only little research has been done until recently (Carson et al., 2007). This lack of research led scholars to note: "Given the infancy of shared leadership theory, it is not surprising that this is an issue that requires attention – shared leadership is, after all, still a relatively 'primitive' term" (Pearce, Conger, & Locke, 2008: 626).

Shared leadership occurs in teams when leadership is distributed between two or more members of the team who share the role, responsibilities and function of leadership (Gibb, 1954). The difference between traditional, focused leadership which resides within a single individual and shared leadership is regarded by Gibb (1954) as two endpoints of a leadership continuum rather than either-or distinctions. Based on this idea, shared leadership has more recently been defined as "an emerging team property that results from the distribution of leadership influence across multiple team members" (Carson et al., 2007).

As in this referred definition of shared leadership, some authors basically highlight the distribution of leadership influence among team members, regardless of who is engaging in these leadership activities in their shared leadership definitions (Carson et al., 2007; Day et al., 2004; Pearce & Sims, 2002), whereas others expand the concept of shared leadership and point to the possibility of combining shared and vertical leadership in teams (Mehra, Smith, Dixon & Robertson, 2006; Pearce, Yoo, & Alvai, 2004). In this vein, Pearce et al. (2004) defined shared leadership as a "simultaneous, ongoing mutual influence process within a team that is characterized by 'serial emergence' of official as well as unofficial leaders." (2004: 48)

Consistent with research on the traditional vertical leadership form, these collective mutual leadership influences across multiple members may be based on a range of different leadership styles which have, however, only been theoretically discussed (Cox et al., 2003). Although Carson et al. (2007) claim that shared leadership originates with team members who engage in activities that influence the team in areas related to direction, motivation and support, which is consistent with the traditional leadership behaviors by Yukl (2002), this study investigated whether shared leadership was present or absent as opposed to what kind of leadership activities team members engaged in when leadership was shared among them (Carson et al., 2007).

In this present study, we address two gaps in research: The first purpose is to better understand factors that play a role in enhancing team learning. To explain differences in the occurrence of team learning, divided into reflection and action (Edmondson, 2002), we focus on the role of shared leadership in team learning. The broad questions guiding our investigation were: *How does learning occur in teams? How does shared leadership influence learning?*

The second purpose is to enhance the understanding of the shared leadership construct. Scholars have called for more attention to the nature and development of this emerging leadership form (Carson et al., 2007; Avolio et al., 2009; Yukl, 2010). In this study, consistent with recent shared leadership definitions (Pearce et al., 2004), shared leadership exists wherever individual team members, official as well as unofficial team leaders, engage in leadership activities which stimulate members in areas relating to task, relation and change (Yukl, 2010). Based on this assumption, we further explore in this study *how these different leadership roles are shared and, in turn, how these shared roles influence team learning.*

3 METHOD

3.1 The Study

Due to the lack of existing research focusing on our area of interest, an exploratory case study research design is well suited for arriving at a better understanding of the here studied phenomena (Yin, 2003). Additionally, recent studies on shared leadership (Day et al., 2004; Mathieu et al., 2008; Conger, & Pearce, 2003; Yukl, 2010) have highlighted the future need to explore this new leadership form by means of a longitudinal in-depth case study design. For example, Yukl (2010) stated "More intensive, descriptive and longitudinal research is needed to understand the complex process involved in shared and distributed leadership" (Yukl, 2010: 504) Team learning scholars have also called for more attention to detailed, real-time observations, as learning is not necessarily consciously accessible in interviews and questionnaires by asking team members what they have learnt (Wilson et al., 2007).

3.1.1 The Site

As shared leadership is most appropriate for tasks that involve creativity, complexity and interdependence (Pearce, 2004), we chose to explore this phenomenon in two creative project consulting teams. These studied teams were comprised of graduate students from a leading international business school who were involved in a real business project. A medium-sized company had asked students for consulting services as this organization felt the need to increase their sales abroad. Hence, the consultancy task included the analysis and definition of clear approaches how to increase international sales. These two observed teams, each with five international members, worked on an ongoing business problem over a three-month period. Each consulting team belonged to a different student organization that represented a consultancy with different expertise fields. The student teams selected from each consultancy belonged to the field of I) business policy and II) marketing, respectively. This produced a convenience sample (Patton, 2002) which satisfied our request to follow and observe the teams in their project life with subsequent individual interviews after project finalization.

3.1.2 Data Collection

Data was gathered from multiple sources. During this project period, the first author observed and tape-recorded 35 project meetings ranging from one hour to half a day long and received team members' project e-mail communication, comprising in sum 321 e-mails. After the business project, each member of the two teams was interviewed for around 90 minutes. In sum, 10 individual interviews were conducted and transcribed. In these interviews, the first author asked the members of each team to describe their team's development from the beginning to the end of the project, including the team's task, the members' role allocation and problems that arose in the team. We animated team members to tell us incidents from their daily project life rather than asking them to

assess learning and leadership constructs. Additionally, we asked externals, the faculty advisors, to give us an assessment of the teams' performance. We also received a peer evaluation of both teams from all the members of each consultancy. As a result, due to these different data collection sources in both cases, data triangulation was assured (Yin, 2003; Eisenhardt, 1995).

3.2 Data Analysis

The analysis of the qualitative data followed an interpretative approach which allowed us to reflect on emerging themes from the data, but also to analyze existing findings in the team learning and team leadership literature based on the data collected (Glaser & Strauss 1967; Eisenhardt, 1995). To cross-check our interpretations, the first and the second author independently coded transcripts of team meetings and interviews for learning by distinguishing between reflection (behaviors that foster new insights) and action (involving actions taken to test or implement these new gained insights) (Edmondson, 2002). Likewise in the second round, both authors independently coded the transcripts for team leadership and categorized data into leadership activities related to task, relations, and change, consistent with Yukl's (2010) conception of leadership. Yukl (2010) refers to each role with specific leadership behaviors which we adapted in order to identify more specific leadership activities for each leadership role. Similar to the first two rounds, we coded different kinds of such leadership activities and investigated who, when, and how these different leadership activities had been performed. Finally, the authors examined the relationships between each of the three leadership roles and the two learning categories, i.e. reflection and action. In sum, from the data analysis a framework for conceptualizing how shared leadership influences team learning emerged.

4 FINDINGS

This section compares observations of the role of shared leadership in team learning in two consulting teams. We start by analyzing team learning in both teams, followed by a section on the emergence of shared leadership activities and its impact on learning.

4.1 Patterns of Team Learning

To explore the teams' learning capacity, learning behaviors are distinguished into two main learning behavior categories of reflection and action (Edmondson, 2002). Each of these two categories is constituted by specific learning behaviors: In accordance with recent team learning process conceptualizations (Edmondson, 2002; Gibson & Vermeulen, 2003, Kasl et al., 1997), the former category includes learning behaviors such as seeking help and feedback, giving help and feedback, and reframing. The latter category entails behaviors that take action based on new insights, therefore decreasing the team's ambiguity (Gibson & Vermeulen, 2003). In particular, this sub-category of learning comprises behaviors such as codification, transferring new information to others, and making change and improvement.

This twofold classification of team learning allowed for the identification of two patterns among the studied teams: The business policy student team, case I, appeared to iterate between learning activities of reflection and action, whereas case II, the marketing team, showed little evidence of either learning category.

4.1.1 Case I: Iterative cycle of reflection and action

In the course of this project, we identified a set of activities that members of team I used to induce their peers to participate in each other's problematic situations. Team

members openly admitted to each other when they were confronted with a problem relating to their subproject tasks and asked the others for help on how to proceed. In response to these help-seeking behaviors, the other team members showed a high degree of willingness to assist in the problem-solving of others, hence devoting time and effort to discuss and debate each other's task-related problems during project meetings. As Mathias reported *"Each of us worked on a topic. [In the meetings] we looked: where are problems arising? Are we all on the same page? Where can we help each other by next week?"* (Interview: Mathias) Due to these mutual help and feedback interactions within the team, it was observed during team discussions that the members built on each other's arguments and advised each other not only to follow the original proposal, but also encouraged the others and disclosed new ways of approaching the subtask. As a result of their project discussions, team members helped each other to frame a problem as a starting point and, on this basis, to also reset the course and hence to shift each other's awareness in ways that made new frames visible. One member reported *"Sometimes we initially took decisions together to do certain things, but then we had to adopt these decisions, but not because we forgot, that was done intentionally because we saw the project required this shift."* (Interview: Angelina)

These collectively gained reflective insights were translated and implemented into more concrete action items by repeating, summarizing, and codifying the discussed and agreed items at meetings. According to Mathias *"She [Angelina] put the points on paper that we had discussed during our meetings and sent them around via e-mail."* (Interview: Mathias) Additionally, actions were taken as regards transferring the team's newly generated knowledge to others outside its boundaries. In sum, team I showed continuous improvement in its project proposal: members built upon comments in the team's dialogue and implemented advice and feedback from each other and from outside. Then, in the subsequent meeting, they asked for further feedback which, over the course of the project, finally led to a continuous development of the consultancy project and to reconsiderations of the teams' proposals. Thus, team I engaged in complete learning cycles, gained collective insights on the team's task, and subsequently implemented and acted on the team's insights. This finally resulted in the team's project output which was externally perceived as a very satisfactorily completed project product. The team's faculty members, as well as members of consulting I in their peer evaluation, assessed the project delivered by team I as very good.

4.1.2 Case II: Little reflection and no action

Over the life span, field data revealed only a few activities which members used to induce their mates to participate in problematic situations. On the contrary, members of team II worked more individually on small, less independent subtasks and rarely gave feedback to each other. *"I think they did not care [about each other's part]. And they cared for their own part, everyone had their own problems, had to do their own part, and that was it."* (Interview: Vladimir) Only Nina actively tried to obtain help from her mates. However, instances were observed when most of the members neglected to respond to Nina's request for assistance.

Team II rarely built on each other's comments and failed to combine each other's ideas into one overall project proposal. Hence, the case data showed only little evidence of collectively transforming the team members' perception. Members retained their individual initial frames of the project task, as Thomas explained *"I had the feeling that if one of us made any suggestions, the others were happy that proposals were made. Most of the time, the members said, 'OK, if you want to do it, go ahead!'. The team members did not say 'I will support you, yeah, we will do it together, that is a really*

good idea', or 'That is a good idea, but I would suggest we do it like this, in a slightly different way!' " (Interview: Thomas)

In contrast to this lack of collective reframing with regard to the team's task, the members did show some instances of reframing their team's process functioning into a new understanding. After this team passed the mid of its project, members rethought their initial understanding of teamwork into more collaborative and supportive approaches of working together, as Nina remarked: *"… it was not related to our specific task. We talked about our group dynamics, how the marketing phase was and what we could improve for the future. We discussed that every member should be more proactive, that we should not only do the tasks we were assigned to do, but also to ask others - find out what the other members were doing and help them when they experienced problems."* (Interview: Nina)

In team II, the low occurrence of gaining collective insights on the team's project task correspondingly influenced the team's actions when implementing this inferior knowledge. Field data identified the difficulties of team members in trying to translate the content of team meetings into concrete action items through a codification process. Similarly, this team also appeared to be rather reserved when transferring knowledge to others outside the team's boundaries. In sum, this team showed only little project progress in their task and seemed to be going round in circles. *"You never close it. So next time you meet up, the same issues come up. Why do they come up? Because last time, it was not properly closed. It was not closed because the ideas were not really discussed, accepted or rejected,"* (Interview: Vladimir) admitted Vladimir. Likewise, although this team arrived at a new perception in terms of how to work in this project, no action was taken to change self-identified weaknesses, as Nina reported, *"…In the first moment yes, after that no… actually, we continued with the same kind of interaction as in the first phase."* (Interview: Nina) Thus, team members showed little evidence of reflective behaviors, subsequently resulting in a low rate of collective action and a poor externally assessed project product. Besides the low external evaluation by the team's faculty advisor, the team's peers in consulting II evaluated the team's final project product very poorly.

4.2 Understanding the difference: Shared leadership and team learning

To explore shared leadership, we have distinguished leadership as activities related to task, relations and change (Yukl, 2010). For each of these roles, Yukl (2010) suggested operational leadership activities which we have adapted for our analysis of the data. The task-oriented leadership role includes planning, clarifying roles and objectives, and monitoring; the relations-oriented role is operationalized by building and maintaining relationships between the team members. The change-oriented role comprises intellectual stimulation and boundary spanning activities. The next section explains how shared leadership emerges, followed by the part concerning the role of shared leadership in team learning in either case, which is summarized for each team in table I and II.

4.2.1 Case I

Emergence of shared leadership in team I. Although team I included an official team representative position, the other team members emerged naturally as co-leaders. From the beginning to the end of the project, we saw a continuous increase in members engaging in the leadership process in those areas where each member was most knowledgeable and comfortable in. *"…Every member was contributing to leading in his or her own way."* (Interview: Angelina) and continued by explaining the team's distribution of leadership: *"So, within the team you could really see, I don't know, like*

an expression of the personality of the people, the way they think, the way in which they behave, the things that are important to them." (Interview: Angelina)

The role of shared leadership in team learning. Observations of team meetings revealed an energetic exchange of leadership activities between the individual members which influenced the team and its members in areas related to task, relations and change (Yukl, 2010). At the same time, these different leadership activities stimulated both learning categories of action and reflection, yet in different ways.

Task-oriented role. Observations of team meetings in team I revealed an exchange of task-oriented leadership activities among team members. All members were highly involved in the planning of project goals and activities. Due to the consulting task context and the fact that the main overarching goal of the project task was already set by the client, this team was highly involved in making sense so as to arrive at a common understanding of what they were expected to do, as one member reported: *"… clarify our understanding of the task, whether we all had the same picture of it."* (Interview: Mathias) The team's need to plan its task stimulated the members to discuss the project and, concurrently, to gain project insights.

This collective planning led, in turn, to a reduction of ambiguity in the team; it induced the team as to where to focus in its project. This reduction of ambiguity was again reinforced by Ina who pushed her group to come up with a milestone plan by explicitly determining each subproject area. At one meeting, we observed: *"So, how should we proceed in general? I think we should do a timeline! I think it is better if we set a schedule."* (Observation of team meeting) Team members wrote down the agreed goals and itemized the various project areas of the team. Hence, the insights gained by the team became explicit proposals so that workable knowledge could be developed in each project area.

These collectively agreed proposals were again reinforced through one person in the team who took over the leadership activity of clarifying the roles and objectives of the individual members. Angelina's reinforcement of project goals led to the fact that team members knew what they were supposed to do which, in turn, induced a reinforcement of implementing collectively generated and discussed ideas. Mathias reported: *"[Angelina] clarified it, so it was ensured that everybody knew what he or she needed to do, what was expected, so that no double work was done in tasks."* (Interview: Mathias) As a result of her reminders, the team was encouraged to act on what the members had collectively agreed and discussed with a view to the team's overall progress. Based on these clarification activities regarding the team's action part, other members responded in turn, adding new perspectives and ideas which evidently again led to a reframing of the project undertaking, hence to an increase in the team's insights. One member reported: *"Okay, now that we had decided these goals, we were to go further and study what we wanted to do in this respect, and for that matter and this matter. And even then some of us said, 'Yes, I also think that we should add to this, we should also study this and that.' "* (Interview: Marie) Hence, based on this clarification of members' activities, other team members added new perspectives so that new insights arose.

This team collectively monitored its progress as to whether the defined plan and agreements had been achieved and thus implemented in the team's undertaking. The team monitored each other's actions regarding what each member was supposed to do with a view to achieving the team's goal. This monitoring induced an enforcement of

the action part of learning whether the collectively gained insights had been implemented, as explained by Angelina: *"So in the end, we were really controlling the different tasks of each single person and we were making progress in the general development of each task for each individual part of the project. That was really good because, in this way, you clearly saw that everybody was working, everybody was actively looking for information and everybody was involved…"* (Interview: Angelina) This review of each other's project action stimulated, in turn, discussions on task difficulties that members experienced when working on each subproject and thus led to an increase in the team's insights. Hence, it likewise seemed that collective monitoring not only induced the action part of learning, but also stimulated reflective insights.

Relations-oriented role. The relationship side of leadership in the form of building and maintaining members' relationships was performed by one single team member, the *"HR leader"* (Interview: Marcus) of this team. As the members did not know each other before project start, building relationships within the team was especially important to them. This active leadership work resulted in a friendly, cohesive and trustworthy team environment in which the team members identified with their common project task: *"I think there was 100% trust... There was no fragmentation of merit. There was a group merit…[and] because of her [Angelina] we had our own group little culture…"* (Interview: Marie) This open, trustful and constructive group environment enabled open and reflective discussions among team members by asking each other straight questions and requesting help, admitting difficulties or challenging feedback. Members felt confident when they had ideas which did not conform with the team's main body of thought, as Marie reported: *"You feel comfortable and creativity comes when… once you forget about all of the other things you have to think of in group work, then creativity comes, then it could be really creative, when you free your mind of other preoccupations you could have. And in my teamwork, I do not think we had this preoccupation."* (Interview: Marie).

Change-oriented role. Reflective discussions were again enforced by team members' intellectual stimulation behaviors. Ina was usually one of the team's leaders who engaged in intellectual stimulation: *"Ina was very challenging…She always had the question, 'I do not know, but…'"* (Interview: Marie). This team member encouraged the rest of the team to question their assumptions and to consider new points of view. Thus, collective insights were enforced by intellectual stimulation behaviors which inspired the team to question the status quo and to look at problems from different angles. One member acknowledged that Ina had the role of being, *"… the one who was always ready to see this or this could be improved, or 'I have a question here, can you explain this better because if I have a doubt maybe other people will have doubt, so it's better to clarify this'."* (Interview: Angelina)

Leadership Role	**Reflection** Developing Collective Insights		**Action** Implementing Gained Insights	
Task-oriented	Descriptive Effect	Illustrative Data	Descriptive Effect	Illustrative Data
Collective Planning	Team's need to plan stimulate members to discuss and reflect on project goals	"…clarify our understating of the task, whether we all have the same picture of it." (Interview: Mathias) "…we had this meeting and we discussed, we brainstormed and then…we saw exactly which parts were coming up." (Interview: Marie)	Codification of collective insights through preparation of working plan	"So, how should we proceed in general? I think we should have a timeline! I think it is better if we set a schedule." (Observation of team meeting) "So first we differentiated the different topics, [and] we made a list." (Interview: Angelina)
Clarifying, Reminding and Coordinating Team's Objectives	Based on members' clarification, other members add new perspectives	"Okay, now that we have decided these goals, we should go further and study what we want to do for this matter and this matter and this matter. And even in that, some of us said, 'Yes, I also think that we should add to this, we should also study this and this'." (Interview: Marie)	Reinforcement of implementing collectively generated and discussed ideas	"[Angelina] clarified it, so that it was ensured that everybody knew what he or she needed to do, what was expected, so that there was no double-work in tasks." (Interview: Mathias)
Collective Monitoring	Task related problems are detected and feedback is given through project update	"..we usually, always when we meet we use it to discuss the progress we have made in our part and what we are planning to do the following days. Everyone gives an update of his part, the others agree or disagree." (Interview: Marcus)	Enforcement of the action part of learning whether collective gained insights have been implemented	"So in the end, we were really controlling the different tasks of each single person and we were making progress in the general development of each task for each individual part of the project. That was really good because in this way you clearly saw that everybody was working, everybody was actively looking for information and everybody was involved…" (Interview: Angelina)
Relations-oriented				
Building and Maintaining Members' Relations	Open, trustful environment allows team members to conduct open reflective discussions	"You feel comfortable and creativity comes when… once you forget about all of the other things you have to think of in group work, then creativity comes, then it could be really creative, when you free your mind of other preoccupations you could have. And in my teamwork, I do not think we had this preoccupation." (Interview: Marie)		
Change-oriented				
Encourage Members to view points in a different way	Other team members consider new perspectives, reframe team's approach	"Ina was always making the questions that questioned what we had all decided. So, I think that was very challenging for the group." (Interview: Marie)		
Collective Boundary Spanning	Increase of team's insights when externally gained insights are shared among members	"It helped me a lot to see what was there and what she [Ina] had found, hence also to understand the market better. Thanks to her presentation, thanks to all the graphs!" (Interview: Marie)	Exchange is limited as these groups do not show high appreciation for collaboration	"Sorry, but it's impossible to meet." (E-mail received from member outside own boundaries)

Table 1: The role of shared leadership in team learning in team I

The change-oriented leadership role was additionally operationalized through collective boundary spanning, which increased the amount and variety of information that was available to this observed team. It was important for external information, which individual team members had scouted, to be shared among team members so that all members could benefit from these external insights. *"If I knew that some kind of information that was present in my interviews with an expert could be relevant to somebody else, I communicated this,"* (Interview: Angelina) noted Angelina. Although the team reflection part of learning appeared to be positively influenced by the team's boundary spanning activities, the action part of learning, particularly the activity of transferring new information to others, seemed to be only partially affected. While team members encouraged each other to share important information with others outside its boundary, this exchange was limited, as externals did not welcome a high degree of collaboration.

4.2.2 Case II

Team members' focus on few leaders. In this team, which experienced difficulties in both learning categories, a formal superior leader was appointed. This team leader position was induced by members of consulting II organization and included the role of boundary spanner, including the exchange of information between different expertise teams. Moreover, in team II, the official team leader took over a higher position than only the boundary spanning role and was allocated all project leadership responsibilities. Most of the team members relied completely on this member and waited for clear instructions what to do. This was not only observed in the first part of the project, but also in the second phase, when the leader position changed to a different member and excessive reliance of most team members on the team leader was observed in all areas. Only one other team member emerged as a co-leader in situations when this mate felt the need to do so. However, the rest of the team were reactive and waited for clear commandos related to the task. One of the members explained the team's leadership as follows: *"The others did their part when someone told them exactly what they were supposed to do. But, there was never anything from them which motivated us. They never showed initiative and responsibility. We [Nina and Thomas] needed to carry to them their responsibility…. I definitely did not perceive any leadership from the others."* (Interview: Thomas)

The role of leadership in team learning.

Task-oriented role. Basic project activities involving task leadership had been performed by team II. Despite this, the planning process of the team's project seemed to be underrepresented in this team. Instead, the team neglected to grasp its externally set goal and hence experienced difficulties to reach a common understanding of what this team was expected to do. Team II only gained superficial collective insights into the team's task and even felt lost in the project, as Xavier reported: *"Lost, we did not know where to go, where to find more information, what kind of solutions we could provide; in that sense, lost."* (Interview: Xavier) Due to this team's low level of grasping its goals, the team could not set clear directions that it could act on. On the contrary, team members acted on individually gained project understandings, and implemented only limited collective insights. Thomas described the actions of the team members as rather non-reflective deeds: "*We tried to present something in order to show that we had done some parts.*" (Interview: Thomas)

The team's inadequate planning process also negatively impacted their capacity to clarify roles and objectives as no clear direction was defined. Members regarded this project as unstructured. Although the leaders in both phases sporadically tried to

coordinate this project by defining clear tasks to their team, the members did not understand each other's responsibilities, which again led to misunderstandings and overlaps in the team's task, as Thomas described: *"[In the second phase] Vladimir was the group leader. He tried to coordinate the project, but to be honest, that was not real coordination. Again, everybody did a little bit, but nobody knew what the other members knew."* (Interview: Thomas)

Similar to their planning and clarification of roles and objectives, this team only engaged in rather basic monitoring activities. The team leader took charge of checking whether the written subprojects were submitted and whether members used the correct format in the presentation. As the specific content of the individual team members' subtasks was not collectively defined in advance, the team leader could not review if collective insights had been implemented. However, Xavier pointed to the need to monitor each other's subtask content rather than only correcting basic mistakes and formatting the presentation - as done in this team at the end of each project phase. In his own words: *"But we should have been more serious in what I said before, checking what the others did, not just to correct it, but to be able to give constructive feedback."* (Interview: Xavier)

Relations-oriented role. Only very few leadership activities were directed at building and maintaining relations between team members. At project start, the members took a good relationship for granted and focused mainly on their team's task. Yet, as project difficulties arose, the members' common demeanor broke into rather individual-oriented actions. In the interviews, members indicated a lack of group feeling for engaging in a common project which, in turn, seemed to result from the team's low level of engagement in building and maintaining relations between the members. This lack of team cohesiveness also influenced the team members' willingness to spend time and effort to help and discuss each others' subtasks, as Vladimir indicated, *"I did not receive any feedback. They said it is okay or I like that …but I did not receive any constructive feedback. And in that sense I got the impression that maybe they did not look at it carefully. …. So I am quite sure they did not put in a lot of effort. I think this was a problem of group feeling, at least in our team. Everybody did their work more or less in a quality way, but then people did not look at the work of the others…"* (Interview: Vladimir)

Change-oriented role. Nina and Thomas were the ones in the team who sporadically engaged in intellectual stimulation behavior aimed at encouraging the rest of the team to rethink its functioning. Thomas described this leadership activity as *"Nina and I tried to initiate conflicts – in order to stimulate their thoughts…"* (Interview: Thomas) This led to a change in the team members' understanding of working together and new, more collaborative perceptions of team functioning, yet only for a short time. It was observed that this team returned to its initial perception of team work and continued working more individually on the team project until the end of its life cycle.

When team members engaged in boundary spanning activities, this external information was rarely shared among the team members. Likewise, this team could not partake in insights gained from the team's official coordinator role within consulting II as the team leader did not proactively distribute this information to the rest of the team, as Thomas reported, *"It would be very interesting for me to know how it was in these meetings. He always returned with nothing. We asked: 'What did you discuss?' 'Nothing…'."* (Interview: Thomas) Hence, the few boundary spanning activities engaged in only rarely increased the team's insights because the members seldom shared these

externally gained insights. Additionally, the action part of learning, in particular the transfer of knowledge to others, was rather underrepresented as the official team leader engaged in a rather reserved role in consulting II.

Leadership Role	**Reflection** Developing Collective Insights		**Action** Implementing Gained Insights	
Task-oriented	Descriptive Effect	Illustrative Data	Descriptive Effect	Illustrative Data
Collective Planning	Team neglect to grasp externally set clear goal, no gain of collective insights	"Lost, we did not know where to go, where to find more information, what kind of solutions we could provide, in that sense, lost." (Interview: Xavier)	Team could not set clear directions it could act on	"At the end, it got even worse. Actually, because we did not have any clue where we wanted to go and what we wanted to achieve. We met several times, without any kind of results!" (Interview: Nina)
Clarifying, Reminding and Coordinating Team's Objectives			No enforcement of team's action result from members' discussion	"Vladimir was the group leader. He tried to coordinate the project, but to be honest, that was not real coordination. Again, everybody did a little bit, but nobody knew what the other members knew." (Interview: Thomas) "…we were 'up in the air' and did not know what to do." (Interview: Thomas)
Collective Monitoring	No collective detection of task-related problems	"It would have been helpful if we had read the other members' parts in order to see what was in disorder and where there might be potential." (Interview: Thomas)	Basic monitoring on action taken by individuals	"But we should have been more serious in what I said before, checking what the others did, not just to correct it, but to be able to give constructive feedback." (Interview: Xavier)
Relations-oriented				
Building and Maintaining Relations between the Members	Lack of team cohesiveness led to lack of collective discussions	"I did not receive any feedback. They said it is okay, or I like it, or I like it very much, but I did not receive any constructive feedback. And in that sense I got the impression that maybe they did not look at it carefully. …. So I am quite sure they did not put in a lot of effort. I think this is a problem of group feeling, at least in our team. Everybody did their work more or less in a quality way, but then people did not look at the others' work…" (Interview: Vladimir)		
Change-oriented				
Encouraging Members to view points in a different way	Intellectual stimulation activities encouraged members to rethink team's functioning	"Nina and I tried to initiate conflicts – in order to stimulate their thoughts…" (Interview: Thomas)		
Collective Boundary Spanning	Team members did not participate in individual boundary spanning	"It would be very interesting for me to know how it was in these meetings. He always returned with nothing. We asked: 'What did you discuss?' 'Nothing…'." (Interview: Thomas)		

Table 2: The role of shared leadership in team learning in team II

5 DISCUSSION AND CONCLUSION

To summarize the lessons of this study, we draw from our analysis of two business consulting teams to suggest the usefulness of the construct of shared leadership in understanding team learning. Our paper makes four main contributions to the literature of leadership and learning at the team level of analysis.

First, we examined the emergence and development of shared leadership in newly formed teams. Although an official team leader was designated in both observed teams, the team leader of team I did not take a superior position. On the contrary, in this team, the members continuously partook the leadership process and emerged as natural co-leaders. This finding complements previous research which indicated that shared leadership can occur in teams with a designated formal leader or without any superior in the team (Carson et al., 2007; Mehra et al., 2006). Contrary to the successful team I, the members of team II relied mainly on the team leader for leadership activities and waited for clear instructions as to what to do. Only one further member contributed to the team's leadership process when this member felt the need to do so. Although the official team leader position changed at the midpoint of the project, only one member was engaged in leadership at a time. This is contrary to team I which was characterized by a continuous increase in team members' engaging in the team's leadership over the life span of the team. This finding is conform with recent studies which argue that teams relying on multiple members performed better than those teams with individual focused leadership (Carson et al., 2007; Ensley, Hmielski, & Pearce, 2006; Taggar, Hacket, & Saha, 1999). It is, however, important to mention the time factor at this point. Most empirical studies measured shared leadership cross-sectionally (Carson et al., 2007). So far in existing studies, it has not been considered whether team leadership is based on several members at the same time in the team's life cycle, but rather only if the team relied on more than one person for team leadership in the whole team project. However, our findings point to the importance of having more than one team member involved in the team leadership process at any one time rather than different members at different points in the team's life span, which, in line with recent scholars (Carson et al., 2007; Yukl, 2010), suggests longitudinal designs over time for further studying this collective phenomenon.

Second, besides the number of members engaged in the leadership process, we also looked into what kinds of leadership activities team members were engaged in. We applied the leadership understanding of Yukl (2010) who regards effective leadership as a combination of three non-substitutable roles, namely task, relations and change. Team I performed activities in all three dimensions. The official team leader took over the coordinator role and additionally built and maintained the members' relations, resulting in a friendly team climate. All members were engaged in further task oriented behaviors, including planning the team's goals and monitoring the team's performance. Additionally, the change oriented role stemmed from the team. One of the members was highly involved in intellectual stimulation behavior which was supplemented by boundary spanning activities performed by the whole team. Our findings indicate that the shared leadership activities in these three roles complemented and amplified one another and led to rather positive effects in group dynamics. In contrast, the leader of team II engaged mainly in basic leadership activities in the team's project task, including monitoring, if the task was submitted. Moreover, this team omitted to plan its project steps, which impacted negatively on the team's whole project approach. The members became frustrated; and conflicts emerged among members which were not resolved. This team experience resulted in more individual approaches to performing

basic project tasks. This kind of negative spiral effect and its amplification caused by leadership behaviors was already demonstrated by Amabile, Schatzel, Moneta and Kramer (2004), though in teams led by one single manager. This study showed that leadership behaviors of vertical leaders can either lead to positive or negative spirals in team dynamics which again become amplified over time.

Third, the current study shows how leadership activities play a role in enhancing team learning, hence contributing to the gap in literature between leadership and team learning. (Berson et al., 2006; Burke et al., 2006) This current research is the first we know of which establishes that shared leadership is important for team learning. By applying Yukl's (2010) three-role tradition of leadership, we showed that each of these leadership activities stimulated reflection and action, yet in different ways. Task-oriented leadership, particularly planning activities, enforced reflective discussions. A lack of planning activities was shown to diminish the team's overall learning as no common set of references was established for the team members to reflect and work upon. This goes in line with Kayes (2004) who studies the breakdown of learning due to lack of adequate goal setting. The leadership activities of monitoring and clarifying roles and objectives were shown to be positively related to team learning as both primarily enforced the action part of learning, ensuring that gained insights were implemented by the team members. The relations side of leadership, especially building and maintaining relations among members, facilitated an open and safe team climate which, in turn, enabled the team members to openly reflect on their project. This relationship is in accordance with Edmondson's stream of research which points to the importance of a psychologically safe team climate for supporting learning in teams. Our findings also demonstrated that intellectual stimulation, activities of the change oriented role, enhanced the team's reflection; this was similarly suggested by Schippers et al. (2008), who tested the link between transformational single leaders and team reflexivity. Yet, these few existing studies that focus on the links between leadership and learning at the team level of analysis, focus only briefly on a single leadership role, although effective leadership is based on three leadership roles, namely task, relations, and change (Yukl, 2010). The need to study relationships from more than one side of leadership crystallizes when looking at the various complementary effects of leadership activities on reflection and action in the observed teams. Relations-oriented leadership activities rather formed the basis for learning to occur through the creation of a friendly environment, whereas change-oriented behavior, in particular intellectual stimulation, encouraged everyone in the team to think. Task-oriented behavior tended to focus more on the action part of learning to guarantee that collectively gained insights were really implemented.

These complementary relationships between leadership activities and team learning led to our fourth contribution to the literature of team learning. In accordance with Edmondson (2002), we regard reflection and action as non-substitutable subcategories of team learning. In previous studies, teams were evaluated as learning teams when they were engaged in activities such as asking questions, sharing information or questioning their team's functioning (Edmondson, 1999; Schippers et al., 2008).Team II was characterized by some reflective behaviors as to how the team functioned, yet no action was taken to implement self-identified weaknesses. Due to the distinction between reflection and action, we could identify the team that only looked like a reflective team, but did not actually learn from its mistakes. Hence, in accordance with Edmondson (2002), we identified that mere reflection is not sufficient evidence for learning.

The results of this study represent the first step towards understanding the relationship between shared leadership and team learning. At the same time, however, it has several limitations and future research possibilities emerge from it. First, this study was conducted as an exploratory study in which relationships were identified rather than tested. Second, we studied graduate business student teams who were involved in real consulting assignments and were responsible for delivering a team consulting project. It is, however, possible that shared leadership emerges differently in teams of members who are full-time employees of organizations. For future research, we suggest studying the emergence of shared leadership in teams within real organizations. It would then be interesting to observe differences between 1) teams that are newly formed and include members who do not know each other at the beginning, and 2) team projects in which members are acquainted from previous projects. Additionally, an interesting future research opportunity would be to understand antecedent conditions of the emergence of shared leadership, such as team design, or members' motivation for feeling responsible for leadership. Further, a future research option results from the theory building approach we took to analyze relationships: the relationships between leadership activities and reflection and action are worth testing systematically in future research.

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