

Problems of Teamwork as a Topic in Coaching

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A Real-Life Example: When Is Team Coaching Desired?

Felix has been a team leader of 12 employees for 6 months. The team was newly formed at the start of a completed merger. He has already worked with several members of this team, others joined in the merger process. At the beginning of his work, he clearly communicated that he valued quality and punctuality as important performance criteria. After a first interim review, he noticed that the performances of the team members varied substantially. Furthermore, coordination problems between team members exist as well as little support between team members coming from different pre-merger organizations. In daily communication, the orientation towards the past of team members is gaining more and more space. Since appeals on his part and a team meeting on the problems ended in an unproductive apportioning of blame, a coach was called in.

What Is Team Coaching?

According to Schreyögg (2015) the term coaching has been appearing in the management literature since the eighties. It is used and interpreted in many different ways. Initially often used as individual coaching, also group and team coaching is increasingly finding its way into organizations (despite all critics who regard coaching as a two-way relationship). In practice, these two settings are sometimes mixed up. We follow Rauen and define team coaching as a form of group coaching in which a group of people who are in a professional, functional context is coached

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in their organizational environment (see Rauen, 2002, p. 516). Brinkmann (2000, p. 82 ff.) describes as potential causes for team coaching, for example, personal conflicts in teams, stress and competitive pressure, lack of motivation/communication and cooperation, lack of willingness to deal with conflict, lack of decision-making ability, lack of sense of unity, insufficient knowledge of methods/instruments and unclear role definitions. Greif (2008) emphasizes the important role of self-reflection in coaching. For team coaching, this particularly concerns the self-concept of the “group.” In contrast to individual coaching, there are two main differences: on the one hand, the interaction/communication of the team members becomes relevant, which leads to a continuous dynamic change. On the other hand, the participation of both the individual and the group level and their alignment with organizational goals is an issue. The work of the team coach, therefore, focuses on *several levels and perspectives at the same time* and this with changing dependencies. To illustrate this further, Eidenschenk (2014) gives three different consulting foci with reference to Luhmann: The factual dimension, which includes the primary team task or goal, the social dimension as a dimension of cooperation, which is always to be seen in relation to the task, and the time dimension, which is connected with various paradoxes, i.e., contradictions, dilemmas, etc., and how to deal with them.

A common mistake in team coaching is the overrepresentation and processing of the social dimension by the coach. The coaching process (including analysis of the problem area, intervention, and evaluation) results in an almost infinite variety of methods due to the described multi-level approach and the three consulting dimensions. In practice, there are, for example, methods for setting group goals, clarifying relationships, and developing decision-making patterns and basic attitudes. Whether rather systemic approaches, NLP, provocative approaches or other models are used (see Schmidt-Tanger, 2003) depends on the coach and their theoretical foundation. Important (independent of the choice of the concrete method) are the two principles for effective group training according to Thornton (2010): Firstly “Keeping the group safe enough to enable learning” and secondly “Encouraging curiosity and exchange of views.”

This brief overview shows that team coaching is very popular. Depending on the basic approach and mission statement (e.g., NLP, systems theory, role theory, stress theory, change management, learning theory), there are many suggestions as to what should be measured and then done in each individual case. In the following, we focus on the central starting points for successful teamwork that have been identified in social and organizational psychological research.

Factors of Successful Teamwork

In organizational and social psychological research, various models for the best possible design and use of group work have been developed and empirically tested (Wegge, 2004, 2014; van Dick et al., 2018). A model that claims to be universally

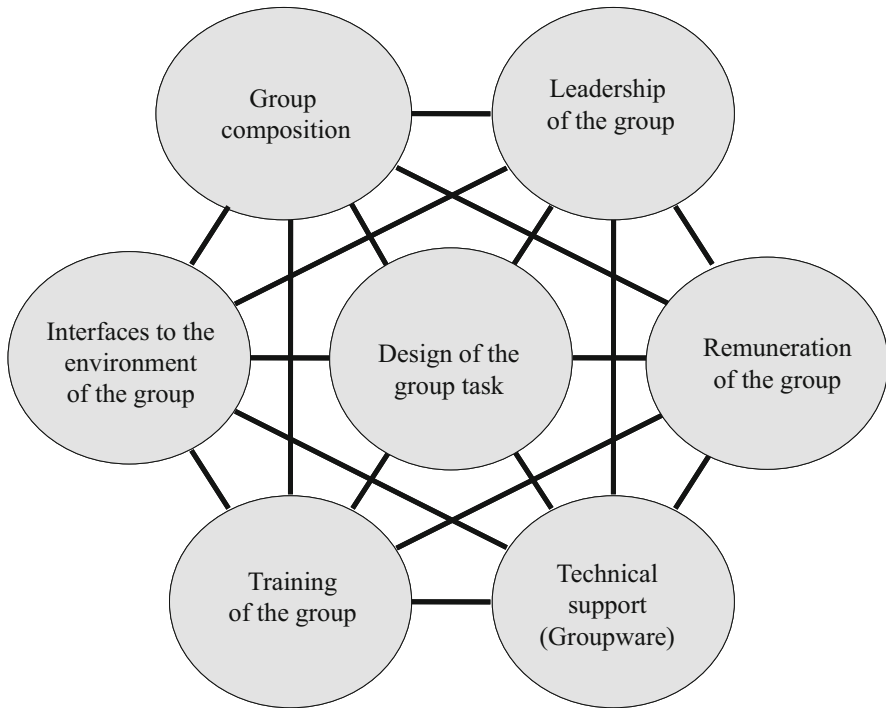


Fig. 1 Central starting points for the design of group work according to Wegge (2014)

valid was presented by Scholl (2003). He proposes that each working group will benefit from the use of participatory goal setting as well as professional moderation and continuous reflection on the results and work processes achieved. There are numerous findings for the correctness of this statement (DeChurch & Mesmer-Magnus, 2010). Among other things, it has been proven that groups achieve better performance when they communicate previously undivided (not known to all) task-relevant knowledge in an open and structured way and when—as a consequence—shared mental models and knowledge about the knowledge of the other group members are created. In line with Scholl’s view, the design areas listed in Fig. 1 are to be regarded as further, central parameters which should be taken into account for the best possible design of all forms of group work (see Wegge, 2014).

For an overview of the effectiveness of team training, the meta-analysis of Salas et al. (2008) is relevant, in which findings from 45 studies were evaluated. Here, for example, average effect sizes ($r = 0.33$) were shown for team performance, whereby these were greater in intact teams ($r = 0.49$) than in “ad hoc” teams of previously unknown persons ($r = 0.31$). Teams with more than 5 members benefited from team training more ($r = 0.44$) than smaller teams ($r = 0.28$ for dyads and $r = 0.34$ for teams with 3–5 people). Overall, according to the results of this meta-analysis,

Table 1 General advantages and disadvantages of group work as a starting point for promoting work motivation, health and performance (after Wegge, 2004, 2014)

	Advantages	Disadvantages
Division of labor	<ul style="list-style-type: none"> – Reduction of individual demands due to division of labour (type division) – Use of expertise through the use of specific roles – Reduction of strain 	<ul style="list-style-type: none"> – Production blockades – Unnecessary duplication of work and synchronization problems – Error escalation due to too close technical coupling
Information processing	<ul style="list-style-type: none"> – Error compensation through the aggregation of opinions – Active error correction and cognitive conflicts – Learning by observation – Formation of transactive memory structures 	<ul style="list-style-type: none"> – High interaction complexity in larger groups – Group polarization and group thinking – Consistency in decision errors – Late (sparse) communication of undivided knowledge
Motivation processes	<ul style="list-style-type: none"> – Promotion of motivation by the presence of others (spectator; co-actor) – Koehler effect – Sacrifice oneself for a bad group – Competition with other groups (social laboring) 	<ul style="list-style-type: none"> – Abuse of power – Social anxiety – Social loafing – Free-riding – Not wanting to be the sucker – Soldiering

12–19% of the variance in team performance is explained by team training (whereby “outdoor” training was not included in this analysis).

A comprehensive discussion of the other design fields in Fig. 1 is not possible here for reasons of space. We refer to the relevant reviews (Wegge, 2014; van Dick et al., 2018). In the following, we take a closer look at the general advantages and disadvantages of group work, because these will often be a topic in the context of team coaching (see Table 1).

Division of Labor

According to Hacker (2005) two basic types of division of labor can be described: the quantity division and the type division. With quantity division, the entire workload is broken down into similar subtasks, which are then processed by several people. If the same work order is divided into different subtasks and given to different persons for processing, it is called a type division. With this form of division of labor, advantages are to be expected when the work orders become very complex but can be divided in a sensible way, and when the demands on individual skills and knowledge of the working persons become too high without a type division of the order. A skillful use of different skills, knowledge (expertise) and needs of individual group members results in performance advantages compared to individual work. The successful execution of the work activity in a team can also

lead to a reduction in individual demands (compared to the undivided work), which can be reflected, for example, in fewer musculoskeletal disorders. The intelligent planning and implementation of efficient forms of quantity and type division of work as well as the best possible organizational support for their effectiveness (e.g., through personnel selection, training, machines, and tools) have therefore been a central concern of research since the beginnings of ergonomics and work psychology. If, on the other hand, mistakes are made in the division of labor within the team, production blockades (e.g., because required tools are used by others) or unnecessary duplication of work occurs. Furthermore, a (too) close technical coupling between workstations can be a problem because the compensation of errors that have occurred is not easily achieved, and disturbances then propagate quickly in the system (error escalation).

Information Processing

The possibility of dividing work into groups can lead to groups achieving results that cannot be provided by a *single* person or the same number of people at the same time. It is therefore hardly surprising that such group advantages were also expected for task types in which the processing of information is in the foreground, e.g., joint brainstorming or problem-solving. However, here too, research shows that there can be both advantages and disadvantages compared to individual work. Possible advantages arise from processes of error compensation (by aggregating individual opinions in estimation tasks) and error correction (by an appropriate discussion of different opinions). In addition, teams can benefit from information processing through observational learning and the formation of transactive memory structures (this is shared knowledge about who performs a subtask particularly well or poorly). On the other hand, the complexity of interaction in working groups increases exponentially with the number of members. If all members of a group are to communicate with each other, the formula " $n(n - 1)/2$ " results in ten different interactions in groups of five people, in groups of ten people there are already 45 and in groups of 15 people there are already 105 different interactions. There is also ample evidence that groups tend to make more extreme or risky decisions than individuals under certain conditions. Many experiments have also investigated the question of how "correct" knowledge should be *distributed* in a group so that it is ultimately reflected appropriately in the group result. According to this, groups tend to communicate very intensively about the knowledge already shared by everyone beforehand, although it would generally be more beneficial for performance in problem-solving if undivided information from the group members had been expressed by them.

Loss of Motivation and Gains in Motivation

Based on the current findings, four specific types of motivation gains in groups can be identified. These are defined in such a way that a direct comparison between individual and group with otherwise identical tasks results in an increase in individual work motivation in the group situation. These four phenomena are:

- The “*mere presence*” effect, a promotion of motivation solely through the presence of others, especially for simple, well-practiced tasks.
- The “*Koehler effect*,” a contagion or build-up effect in direct cooperation when the strong person is about 25% better than the weak person.
- The “*social compensation*” effect of sacrificing oneself for a poor group when the reasons for the poor performance of team members are acceptable, and.
- The “*social laboring*” effect, a motivating factor based on the fact that as a team you want to be better than another group with which you are in competition.

Five different types of *loss of motivation* in group work can also be differentiated. In a direct comparison between individual and group, a reduction in individual work motivation in the group situation can be observed for otherwise identical tasks. These five phenomena are:

- *Social loafing*, a rather non-intentional reduction of one’s own work motivation with little self-regulation in a situation in which one’s own contributions to the group result are not or at least hardly identifiable and assessable.
- *Social anxiety*, a reduction in work motivation and performance due to inhibitions and disorders, induced by the presence of other (important) people who can evaluate the person’s behavior.
- *Free riding*, a more deliberate form of motivation and performance reduction due to the person’s decision not to make any further effort, because it is assumed that their own performance results are superfluous or unimportant for the group result.
- “*not wanting to be the sucker*” (“sucker effect”), a decrease in one’s own work motivation and performance due to the observation that other members of one’s own group show (over a longer period of time) the behavior of free riders.
- *Soldiering*, a deliberate reduction in motivation and performance as an expression of protest against a person or group that makes unjustified performance demands.

How to influence working groups in practice in such a way that the possible advantages of teamwork in terms of division of labor, information processing and work motivation become more likely and the corresponding disadvantages are prevented is a really complex problem. However, there is a great deal of evidence on what the most important approaches and instruments are:

- The design of the group task.
- The composition of the group.
- The continuous measurement of relevant team processes.
- The agreement on performance goals and continuous performance feedback.
- The intensity and nature of communication and reflection in the team.

- The promotion of identification with the team.
- Developing and rewarding appropriate group standards.
- The technical support and training of the group.
- The design of interfaces and competition with other groups.
- Improving the constructive handling of conflicts in teams.
- The use of modern forms of leadership (e.g., shared leadership).

Finally, we present a rather complex intervention, Participatory Productivity Management (PPM), which is capable of positively influencing a number of these processes. This intervention uses key findings on the impact of goals and feedback at work. In line with the many findings on the goal-setting theory for human task performance (Wegge, 2015), it aims to get the group to set difficult, specific group goals and to pursue these goals in the long term.

PPM To Promote Learning, Work Motivation, and Productivity in Teamwork

The application of goal setting in teams requires an appropriate measurement of the team's work performance. This is by no means trivial, especially in the case of complex group tasks with a multitude of performance facets. First, it is important to *fully* map all performance facets relevant to teamwork using suitable indicators. Because what is not measured cannot be reported back and agreed on in goals. In order to achieve this, it is necessary first to disclose the most important organizational goals in quantitative and qualitative terms and to establish a consensus on the evaluation or priority of these goals, so that it is clear to every member of the team whether or to what extent, for example, the quantity or quality of performance is more important. Also, what should *not* happen should be clarified here. Finally, it is crucial that employees have continuous feedback at work that shows them how their behavior should be changed accordingly. The use of the PPM management system offers the best prerequisites for ensuring that the discussion process required for this in the organization is successful and that a long-term increase in productivity and quality occurs in working groups. The basic idea of this system is shown in Fig. 2.

To develop a PPM system with *one* working group, several group discussions are necessary. Average values from several projects show that this requires about 30 working hours with the entire group. Once the measurement system is in place, data on these indicators of group productivity will be collected. They are discussed jointly in the group based on regularly provided feedback reports. The PPM method has been applied in numerous professional fields (industry, administration, services) and in various organizational contexts. Scientifically sound evaluation results on productivity effects in a before-and-after comparison are available from 83 use cases. In a meta-analysis of these studies, an average effect strength of $d = 1.44$ could be determined (Pritchard et al., 2008). Furthermore, it was found that the productivity effects of PPM remain constant over time.

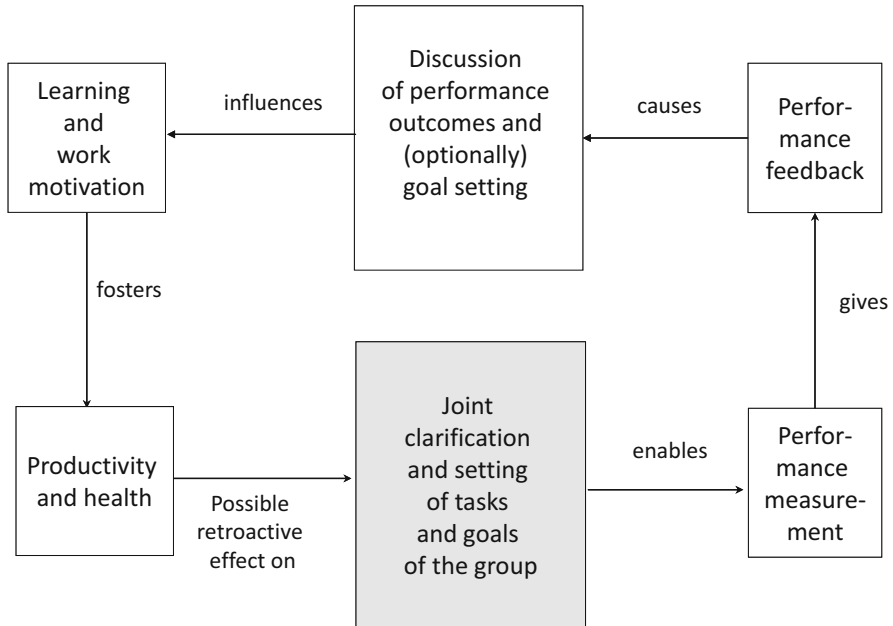


Fig. 2 Illustration of the assumed mechanisms of action of PPM (after Wegge, 2004)

Research on PPM has also identified conditions that are both conducive and obstructive to the success of this complex intervention. PPM works particularly well if you have stable groups with little interdependence, in companies with rather little decision autonomy (“high centralization”), if meaningful group tasks are available and if the basic PPM model is adhered to. Rather obstructive are limited room for maneuver of the working groups, competing feedback systems (like remuneration), “clumsy” moderation, a low desire for personal responsibility, more frequent changes in the feedback system and when companies find themselves in situations of upheaval. Nevertheless, if the conditions for using PPM are favorable, it is probably one of the most powerful management systems for teams known and tested today. The great success of PPM in group work can be easily explained if one considers that the system contains elements that can sustainably promote work motivation in groups (like participation of employees, agreement on challenging goals, continuous feedback) as well as elements that support independent learning within the group, like by encouraging the group to discuss and try out efficient work strategies. PPM enables working groups to determine, in a largely self-organized manner, how their path towards the goals jointly agreed by the group and management must be shaped. The introduction or use of PPM should therefore also be considered as a possible intervention in team coaching.

Outlook and Open Questions

Even well-designed teamwork is associated with numerous problems that can be successfully tackled by coaching the team. To cope with and prevent such problems, it is important to use methods and tools that best suit the team's circumstances. Unfortunately, to the best of our knowledge, no systematic research has yet been conducted into which methods work best for which teams under which conditions. The development of such findings will also by no means be easy, since in group research—for good reason—at least 42 different forms of teamwork must be differentiated (Hollenbeck et al., 2012). As a rule, the specifics of individual team forms should therefore always be considered before applying certain findings on the determinants of effective group work in coaching practice. In our practical example presented in the introduction, it would be advisable to first obtain an overview of the most urgent problems in the team on the basis of the three general starting points for promoting work motivation, health and learning in teams (division of labor, information processing, motivation). A complex intervention such as PPM should not be proposed or used until it has been checked whether the necessary boundary conditions are suitable. Other, less complex and also more short-term interventions designed to improve the division of labor and role clarity, the exchange of information and reflection, as well as to reduce motivation losses and increase motivation gains in the team are described in more detail both in team research and in other chapters of this volume (e.g., the chapters by Grant & Antoni or West et al.) For future research, we would like to see systematic comparisons made here. As long as research on team coaching is still in its infancy (at least the first meta-analyses for dyadic coaching are already available), we believe that great caution is necessary. A simple transfer of successful methods and approaches from the dyadic level to the team level is not justified (see Wegge, 2004).

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