

VU Research Portal

The downside of communication: Complaining circles in group discussions Lehmann-Willenbrock, N.K.; Kauffeld, S.

published in

The handbook for working with difficult groups: How they are difficult, why they are difficult, what you can do 2010

Link to publication in VU Research Portal

citation for published version (APA)

Lehmann-Willenbrock, N. K., & Kauffeld, S. (2010). The downside of communication: Complaining circles in group discussions. In S. Schuman (Ed.), The handbook for working with difficult groups: How they are difficult, why they are difficult, what you can do (pp. 33-54). Jossey-Bass/Wiley.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
 You may freely distribute the URL identifying the publication in the public portal?

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

Download date: 22. May. 2021

Copyrighted material. Please cite as:

Lehmann-Willenbrock, N., & Kauffeld, S. (2010). The downside of communication: Complaining cycles in group discussions. In S. Schuman (Ed.), The handbook for working with difficult groups: How they are difficult, why they are difficult, what you can do (pp. 33-54). San Francisco, CA: Jossey-Bass/Wiley.

THE DOWNSIDE OF COMMUNICATION: COMPLAINING CIRCLES IN GROUP DISCUSSIONS

Nale Lehmann-Willenbrock & Simone Kauffeld

"It is my belief we developed language because of our deep inner need to complain."

- Lily Tomlin

Recent research has shown that group mood affects group members' behavior and impacts on social interaction (for an overview, see Kelly & Spoor, 2006). We analyze group interaction on the basis of group discussions (verbal behavior) by means of Advanced Interaction Analysis (Kauffeld, 2006a, b; Kauffeld & Lehmann-Willenbrock, subm.). We have gained some insights concerning positive verbal behavior (e.g., solution-oriented statements) as well as negative verbal behavior (e.g., complaining). In addition, we have found evidence that group mood develops through interaction. More specifically, we identified patterns of complaining behavior. Results by Kauffeld (2006b) demonstrate that negative interaction such as complaining has a negative impact on both team-level outcomes (e.g., satisfaction with the discussion) and organizational-level outcomes (e.g., productivity). Furthermore, our results hint at intervention opportunities for negative communicative behavior such as complaining. This chapter focuses on the detrimental effects of complaining circles as an indicator of negative group mood. A summary of theories and scientific evidence of group mood sets the course for a discussion of our research results concerning negative group mood, which we conceptualize as dysfunctional interaction. Implications of our findings and intervention opportunities, both in the context of group interaction and human resource development are deducted.

How the group is difficult:

1. Inefficient group discussions

Organizations have increasingly implemented teams or workgroups as a structuring principle over the last decades with the intention of taking advantage of the performance potential inherent in teams (e.g., Jordan, Lawrence, & Troth, 2006; Nielsen, Sundstrom, & Halfhill, 2005). Teams can enable an efficient exchange and an optimal combination of a wide spectrum of individual resources (Brodbeck, Anderson, & West, 2000). While the general notion is that teams improve organizational performance (e.g., Wheelan, 1999), not all teams achieve the performance expected of them (e.g., Sims, Salas, & Burke, 2005). Why do some teams develop and implement innovative ideas, while others fail to peruse the autonomy that is given to them by the organization?

There is a consensus among several models of team performance (e.g., Tannenbaum, Beard, & Salas, 1992; Gersick, 1991; Tuckman, 1965) that interaction between team members is crucial for high team performance. In practice, regular team meetings and group discussions have been implemented as a standard procedure in many contemporary organizations, for instance as part of the Continuous Improvement Process (CIP, e.g. Liker, 2006). Meetings and group discussion carry the potential of exchanging and building new knowledge in the team, discussing current problems and developing solutions and innovative ideas. Therefore, intrateam-communication plays an important role. One of the reasons why some teams do better than others in this aspect concerns the mood that is built within a team through interaction.

While there is some research on interaction in teams, the effect of team members' moods on interaction and subsequent performance has been rather neglected in the past (cf. Jordan, Lawrence, & Troth, 2006). Only recently have researchers begun to look into group mood as an influential factor for team performance. For example, Jordan et al. (2006) investigated student groups and found that negative mood compromised team processes and team performance. But do these findings hold true for real teams in the workplace?

After a brief introduction to group mood, we will present research findings from real teams in the workplace, linking employee interaction in group discussions to team and organizational performance outcomes.

Group mood

Moods have been described as low intensity, diffuse feeling states that usually do not have a precise antecedent (e.g., Forgas, 1992). They are longer in duration, less focused, and less intense than emotions (Watson & Tellegen, 1985). Group mood may be understood as synchronized moods of individuals (e.g., Hackman, 1992). Moods can be classified in various ways. The model we refer to was developed by Larsen and Diener (1992).

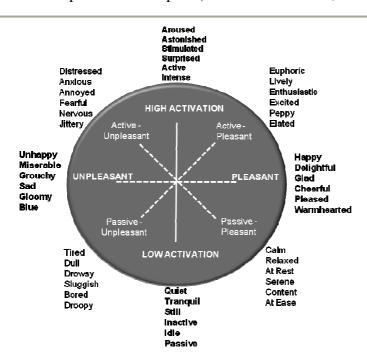


Figure 1: Group mood circumplex (cf. Larsen & Diener, 1992, p. 31)

In this model, moods are arranged circularly with their position depending on their similarity or polarity. This means that two aspects that are close to one another, such as "warmhearted" and "calm", are highly correlated. The various group moods are classified on two orthogonal or independent dimensions: (1) behavior willingness or activation (high – low activation) and (2) hedonistic value (pleasant – unpleasant).

Based on the fact that mood can be observed in terms of behavior (e.g., Barsade, 2002; Bartel & Saavedra, 2000), we look at a specific communicative behavior: Complaining. Within the model, complaining behavior can be described as an expression of an unpleasant mood (cf. Kauffeld, 2007; Kauffeld & Meyers, in press).

Complaining behavior in group discussions

Complaining is a rather common activity. It is socially accepted and even expected to complain about the weather, about politicians, government, and taxes. Complaining serves several functions (cf. Kauffeld & Meyers, in press):

- 1. Complaining provides a common ground in conversation and may serve as a subject for small talk.
- 2. When we complain, this can offer a vent for frustration and experienced inconvenience.
- 3. Complaining allows us to (apparently) make the best of a less than ideal situation and to share this with others.

Past research on complaining has focused primarily on interpersonal communication situations (Alberts & Driscoll, 1992; Hall, 1991; Newell & Stutman, 1988) and consumer dissatisfaction contexts (e.g., Brashers, 1991; Fornell & Wernerfelt, 1988; Garrett, Meyers, & West, 1996, 1997; Sellers, 1998). In general, complaints have been defined in both of these research domains as expressions of dissatisfaction.

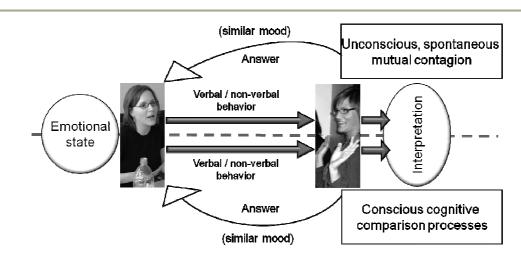
As has been shown by Kauffeld and Meyers (in press), dissatisfaction, along with complaining behavior, also occurs regularly in work teams. Moreover, not only do team members in the workplace complain, but complaining as an inhibitive function also leads to more complaining. This can result in self-maintaining complaining circles which we describe as an expression of group mood. An essential underlying process is emotional contagion.

Emotional contagion

Emotional contagion has been defined as 'The tendency to automatically mimic and synchronize facial expressions, vocalizations, postures, and movements with those of another person and, consequently, to converge emotionally' (Hatfield, Cacioppo, & Rapson, 1994, p. 5). This definition emphasizes the nonconscious process of emotional contagion. In conversations, people 'automatically' mimic the facial expressions, voices, postures and behaviours of others (Bavelas, Black, Lemery, & Mullett, 1987; Bernieri, Reznick, & Rosenthal, 1988), and that people's conscious experience may be shaped by such facial feedback (e.g. Laird, 1984).

There is, however, a second way in which people may 'catch' another's emotions. Contagion may also occur via a conscious cognitive process by 'tuning in' to the emotions of others. This will be the case when individuals try to imagine how they would feel in the position of another, and, as a consequence, experience the same feelings. Thus, the realization that another person is happy or sad may trigger memories of the times we have felt that way, and these reveries may spark similar emotions (Hsee, Hatfield, & Chemtomb, 1992). Figure 2 shows the two ways in which emotional contagion may occur. The top route is the above described unconscious, spontaneous mutual contagion that automatically occurs in interaction. The bottom route is conscious and driven by cognitive comparison processes, whereby we actively adjust to the mood exhibited by our interaction partner(s).

Figure 2: Emotional contagion through interaction



Regardless of why such contagion might occur, researchers from a wide range of disciplines have described phenomena that suggest that emotional contagion does exist (see Hatfield et al. 1994; McIntosh, Druckman, & Zajonc, 1994, for overviews).

How does emotional contagion apply to complaining in group discussions? Suppose that group member A makes a complaining statement such as, "No one cares about our ideas". Group member B may have been in a positive or neutral state before. Upon hearing this statement though, he or she is likely to start thinking about all the events in the past where that statement may have been true. An adaptation of mood will follow whereby group member B adopts a similarly negative mood as has been exposed by group member A. This adaptation will then support group member A and give the impression that this is an acceptable, socially desired behavior. The unconscious contagion in this example would concern the fact that

group member B does not make a conscious choice as to changing his or her mood. The conscious cognitive process in this example concerns the reasoning that sets in upon hearing the statement: Why does group member A feel that way? What happened in the past that led to this emotion? Why is it reasonable to feel the same way?

This example demonstrates that while complaining may fulfill a "normal" human need, it can also cause group members to bring each other down. In the following we will report some empirical evidence for this phenomenon.

Why the group is difficult

2. Observable negative group mood: complaining circles

Kauffeld and Meyers (in press) showed that complaining in work groups occurs in communicative cycles, that is, complaining leads to more complaining (as opposed to solution-oriented verbal behavior) and eventually causes a negative group mood. As mentioned above, complaining would be characterized as an active-unpleasant affective state within the circumplex model. Complaining statements tend to focus on the perceived negative and unchangeable actual state as well as the perceived role of victim. Complaining is often expressed by using killer phrases such as "nothing could be done," or "nothing works." Such statements are not facilitative to the group's decision-making process, and in fact, will inhibit progress toward the solution or group goal.

To examine whether complaining really leads to more complaining in groups, we examine real groups in the workplace. These are autonomous groups who have usually worked together for years. Group discussions are a regular part of their work routine. When we videotape their discussions, there is no supervisor present and anonymity is guaranteed to ensure acquisition of data that are realistic. Occurrences such as backbiting the absent supervisor, answering cell phone calls etc. indicate that this seems to be the case (cf. Kauffeld, 2006b). To evaluate these discussions, we use a process-analytical instrument named Advanced Interaction Analysis (act4teams, Kauffeld & Lehmann-Willenbrock, subm.). With act4teams, we can measure groups' work-related interaction when completing a real, relevant optimization task (e.g., how to improve material sourcing in production teams). The instrument comprises 44 observation categories which represent 12 competence aspects and

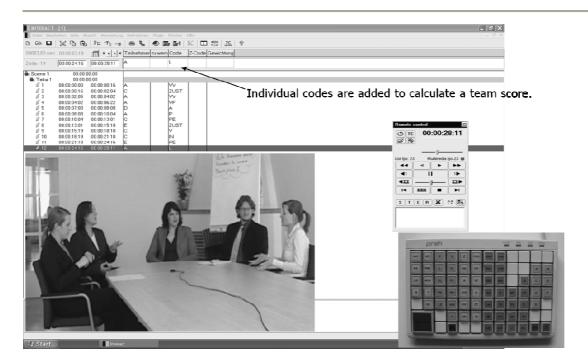
one aggregate value. It has been psychometrically validated and shows excellent inter-rater reliability. Table 1 shows the four competence facets, the comprising aspects, and the criteria.

Table 1: Advanced Interaction Analysis (act4teams)

D 1	3.6.4.1.1.1.2.2.2.2	C 1 1	D 1 .
Remarks concerning content	Methodological remarks	Social remarks	Remarks concerning participation
differentiation problem problem	positive remarks concerning the structuring of the discussion	positive socio-emotional remarks addressing someone in	positive remarks concerning participation
identifying a (partial) problem describing a problem illustrating problems cross-linkage problem Connections with problems e.g. naming causes and effects differentiation solution	goal orientation pointing out the topic or to leading back to it concretization ensuring contributions are to the point, clarifying procedural suggestion suggestions for further procedure procedural question questions about further	an encouraging way e.g. addressing the quiet participants support agreeing to suggestions, ideas etc. active listening signalizing interest ("mmh", "yes") refusal contradiction based on facts	interest in change signaling interest personal responsibility taking on responsibility planning of measures agreeing upon tasks to be carried out
defining target vision, description of requirements	prioritizing stressing main topics time management	feedback e.g. signaling whether something is new or already known	negative remarks concerning participation
solution identifying (partial) solutions description of a solution illustrating solutions cross-linkage solutions problem with a solution objection to a solution connections with solutions e.g. naming advantages of solutions remarks about the organization organizational	reference to time task distribution delegating tasks during the discussion visualization using flip chart and similar tools weighing up costs/benefits economical thinking summary summarizing results	lightening the atmosphere e.g. jokes differentiation bety opinions and facts marking one's own opinion as an opinion not as a fact feelings mentioning feelings like anger or joy praise e.g. positive remarks about other people	no interest in change e.g. denial of optimization opportunities complaining emphasis on the negative status quo, pessimism, killer phrases platitude empty talk seeking someone to blame personalizing problems emphasizing authoritarian elements pointing out hierarchies and competencies terminating discussion ending or trying to end the
knowledge knowledge about organization and process	concerning the structuring of the discussion	negative socio-emotional remarks	discussion early
remarks about knowledge management knowing who reference to specialists question questions about opinions, content, experience	losing the train of thought in details and examples examples which are not relevant to the goal, monologues	criticism/running someone down making disparaging comments about others interruption cutting someone off while speaking lateral talk starting or getting involved in lateral talk reputation pointing out work experience, duration of employment at this company etc.	

To evaluate a videotaped group discussion, every verbal statement or sense unit uttered by any individual group members is ascribed an *act4teams* category. A sense unit is defined as a communication which, in context, may be understood by another group member as equivalent to one single simple sentence of the discussion (Bales, 1950). To facilitate the coding, we use the Interact software by Mangold (2005) as well as a specially designed keyboard (see Figure 3).

Figure 3: Coding group discussions with act4teams: Interact software and keyboard



In this chapter, we focus on the negative aspect of self competence, i.e., remarks concerning participation. Self competence concerns a groups' willingness to actively create conditions for improving their work. Participation-oriented behavior can be described as proactive behavior. Positive remarks concerning participation can be coded with the categories "interest in change", "personal responsibility", and "planning of measures". On the other hand, the following categories describe the negative aspect of self competence "no interest in change", "complaining", "platitude" (which only wastes time and does not lead to progress in the discussion), "seeking someone to blame" (instead of tackling the underlying causes of a problem), "emphasizing authoritarian elements" (by distracting attention away from one's own area of responsibility), and "terminating discussion" (not using the time available).

Complaining is part of the negative aspect of self competence. However, as this is only one category out of the 44, one might suspect that complaining does not have much of an impact

on the discussion outcome or the group-level competence in general. While this is intuitively plausible, our findings consistently show a very different picture.

In a large study of N=59 groups from 19 companies in Germany, Kauffeld (2006b) demonstrated that complaining has a statistically significant, strong negative impact not only on the discussion outcome (group member satisfaction and applicability of the solutions that were developed in the discussion), but also on organizational outcomes such as corporate success and corporate innovation. Table 2 shows the correlations between complaining and these outcomes (cf. Kauffeld, 2006b).

Table 2: Pearson's correlations between complaining behavior and success measures

	Group member ratings		Observer ratings	Management ratings	
	Satisfaction with the discussion	Applicability of solutions	Implication of solutions in the workplace	Corporate success	Corporate innovation
Complaining	32**	37**	69**	41*	46*

As these results show, complaining is not just an everyday habit that we like to cultivate, but is rather harmful not only for the group, but even for the company as a whole. Why is it that complaining has such a strong impact? Suppose that complaining is not something that is uttered by individual team members every once in a while, but rather a collective phenomenon in terms of the expression of a negative group mood. As we explained above, emotional contagion describes the process by which complaining may lead to more complaining. While this makes sense intuitively, we also found empirical support for this process.

Complaining circles can be defined as sequences of complaining statements (complaining – complaining – complaining) or sequences of complaining, support, and subsequent further complaining (complaining – support – complaining). Here are some examples for these communication patterns:

Group member A: "We've tried to do that like five times now and nothing ever

changed." (Complaining)

Group member B: "Whatever you try in this company, nothing ever happens."

(Complaining)

Group member C: "It's like, we've had all these ideas and they've never gone

anywhere." (Complaining)

Group member B: "No one cares about our problems." (Complaining)

Group member A: "Yeah, exactly." (Support)

Group member C: "It's like you don't count at all." (Complaining)

The second example points out the potentially deleterious effect of support. In our opinion, supporting a complaining statement should be seen as complaining itself because it can lead to a complaining circle and thereby build a negative group mood.

Kauffeld and Meyers (in press) examined 33 group discussions with video recordings and *act4teams* coding. To determine whether complaining circles actually exist, they used lag sequential analysis. This statistical method determines the likelihood of specific statements following one another. They found that indeed, complaining circles as communication patterns occur significantly above chance. Moreover, sequence analysis showed that complaining statements inhibited subsequent solution-oriented statements which are crucial for discussion and team success. We have replicated these findings with other samples. Complaining circles seem to be pervasive in all kinds of groups and business branches. Considering the results of Kauffeld (2006b) as shown in Table 2, it becomes evident that complaining circles are dysfunctional not only in terms of group mood and team member satisfaction, but also in terms of team-level and organizational outcomes. So what can be done to counteract this dysfunctional communication pattern?

What you can do

3. Counteracting complaining circles

Complaining circles may be "tackled" in several ways. First of all, methodological or structuring statements can be used to consciously break up complaining patterns and get back to the topic. Second, the employing organization can take measures to design work in a way that puts more emphasis on employees' ideas and innovation potential.

Our research has demonstrated that methodological statements inhibit complaining behavior. Sensitizing a team for these matters may include facilitator training for one or all group members. Third, an external consultant or group facilitator can be useful for reflecting upon the team situation and developing towards a more constructive group mood. Teams can be educated about the negative effects of complaining behavior not only on the discussion, but

also on team and organizational outcomes. We will elaborate these three possibilities a little further.

a) Methodological statements against complaining

Before turning to team consulting or coaching, there is a simple way for team members to break up complaining circles.

In sequence analysis, we have not only examined complaining circles, but have also taken a closer look at other statements preceding or following complaining statements. Research results by Kauffeld (2006b) and Kauffeld and Meyers (in press) demonstrate that one way to break up complaining circles is to make a methodological statement. In *act4teams*, positive methodological remarks comprise the following criteria (cf. Table 1):

- Goal orientation (e.g., "Let's get back to our topic, which is...")
- Clarification/ concretization (e.g., finishing the sentence for someone who is missing a word)
- Procedural suggestion (e.g., "Let's hear what everyone thinks about this one")
- Procedural question (e.g., "Should we move on to the next point on our agenda?")
- Prioritizing (e.g., "Let's talk about this first, that's more important")
- Time management (e.g., "We only have five minutes left to talk now")
- Task distribution (e.g., "Please write that down")
- Visualization (e.g., using a flip chart)
- Weighing up costs and benefits (e.g., "If we take the time to do this properly, we can save a lot of time in the long run")
- Summary (e.g., "So far, we've talked about ...")

b) Organizational design against complaining

When employees complain, this does not necessarily mean that they have a bad attitude, but it may actually be due to an unfavorable work environment. Within the conceptualization of *act4teams*, complaining statements are characterized by an emphasis on the negative status quo, by pessimism, and killer phrases. Representative of a negative and unpleasant mood, complaining is an expression of a pessimistic perspective. While team members differ in their amount of complaining in a discussion, they often share experiences where they indeed have

not been able to make a change or optimize their work according to their ideas. For example, a team can have many insights and improvement suggestions concerning their work processes, but if they have a supervisor who does not support these ideas, they tend not to go very far. Our facilitation experience has shown over and over again that while the management may be well aware of the benefits of teamwork, the immediate supervisors of work teams often are not and will not support their teams appropriately.

One important job design factor that can help increase positive self-competence (i.e., interest in change, personal responsibility, and measure planning in a discussion) and help diminish the negative aspect of self-competence (e.g., complaining) is job autonomy. There is a substantial amount of research demonstrating the beneficial effects of giving more autonomy to work teams (for an overview, see Sundstrom, McIntyre, Halfhill, & Richards, 2000). Kauffeld (2006a) found that the work characteristics participation, formal team communication, continuous improvement process, training and team-oriented tasks were beneficial in self-directed work teams. It can be deducted that giving employees the opportunity to actively participate in and autonomously improve their work processes is a promising approach for triggering the initially described potential inherent in teams.

c) Reflection workshop against complaining: towards more positive participation

When the organizational environment is designed in a way that gives autonomy and responsibility to the teams, but they do not use this freedom in terms of improving their work where possible, a team trainer or consultant may help. In an ongoing longitudinal study, we have conducted a workshop with each of the 54 teams involved that was designed to foster the positive aspect of self competence. The constituting criteria "interest in change", "personal responsibility", and "planning of measures" have been demonstrated to have a strong positive impact on team-level and organizational outcomes (cf. Kauffeld, 2006b). The workshops started out with an exercise that shows the benefits of teamwork over individual work units. Next was an assessment of the team's current situation: (1) What is going well in our work? (2) What isn't working/where do we have problems? And (3) Where and how do we want to improve?

This assessment was followed by in-depth discussions that were aimed at pointing out ways in which the teams themselves can make a difference in their work (rather than waiting for supervisors or other departments to make a change, for example). We also included some simple team-building exercises to enhance the team climate.

Over time, we found a significant positive impact of these workshops on the self competence of the teams involved. That is, in group discussions some months after the workshops, teams who participated in the workshops were voicing more interest in change, were taking more personal responsibility for the solutions they discussed, and were planning more measures than those teams who did not receive a workshop¹. Likewise, teams who participated in a workshop were showing significantly less negative remarks concerning participation after the workshop (cf. Neininger & Kauffeld, in press).

These preliminary findings demonstrate that it is indeed possible to address dysfunctional communication in teams by team consultation. Future research will show whether the effects we found can hold in a follow-up design.

d) Team coaching with act4teams as a continuous process

How can team members be sensitized to complaining circles and the chance to break these with structuring statements? While team members are probably not too excited about looking into methods such as sequence analysis, we have made good experiences with examples taken from group discussions such as the two examples described above. Team members usually benefit from such examples if they are close enough to their own discussion. They are then presented with a good starting point for reflecting about their own interaction processes. It can also be useful to present the findings by Kauffeld (2006b) as depicted in Table 2. These results underline the fact that it does matter a great deal what goes on in a group discussion and what the team members make of their ideas and solutions afterwards. The sensitization for the importance of these processes could be implemented as part of the standard group facilitator training in companies, or it could be included in team-building workshops. In any case, it should be considered that teams as a whole need to be sensitized towards these processes. If, for example, only the team leader receives this knowledge, there will probably very little acceptance in the team for insights about complaining circles as dysfunctional interaction. Moreover, when educating a team about these negative communication patterns, it should be made very clear that these occur in all kinds of groups, and at all levels of an organization rather than leaving them with a feeling of being picked out for bad communication. Finally, successful team coaching requires a continuous process. In the context of interaction, this should involve an initial interaction assessment, subsequent reflection and optimization periods, and process and result evaluations with act4teams.

¹ We used a pilot group – waiting group design. Teams who functioned as waiting group during the first phase of the study received a workshop in the second phase.

All these measures are aimed at helping a team get out of the "complaining loop" and turn to solution-oriented interaction instead. This does not mean that complaining should be prohibited per se. Complaining may be useful at the beginning of team interventions or change processes, for example, to give everyone a chance to "vent". However, team members should then commit themselves to the convention that complaining is out of place in optimization discussions. When team members succeed to make this shift to solution orientation, they can rise to their full potential of tackling their problems, optimizing their work processes, and being more productive and innovative than any individual alone.

Key terms

<u>Advanced Interaction Analysis (act4teams):</u>

An instrument based on process analysis for coding group discussions. Individual remarks or sense units are classified by one of the comprehensive 44 categories. Discussions can be analyzed concerning positive and negative interaction. Research has linked assessments of discussions with *act4teams* to outcomes such as satisfaction, applicability of generated solutions, productivity, and corporate innovation.

Complaining circles:

A pattern of complaining and support statements commonly found in group discussions. Complaining circles may be understood as a negative group mood. They have a strong negative impact on the discussion outcome and group member satisfaction. Moreover, they diminish team-level and organizational success in the long run.

Emotional contagion:

In group research, a process in which one group member's mood, expressed through interaction, "wears off" on other group members. These others adopt the initial mood unconsciously or via conscious comparison processes, and follow with similar remarks. Emotional contagion can explain the development of complaining circles.

Group mood:

Synchronized moods of individuals. Group mood can emerge through verbal interaction between group members. The underlying process is emotional contagion.

Sequence analysis:

A statistical procedure to calculate transition probabilities between different events. In group interaction, sequence analysis can be used to determine whether certain communication patterns such as complaining circles occur significantly above chance.

References

- Alberts, J. K., & Driscoll, G. (1992). Containment versus escalation: The trajectory of couples' conversational complaints. *Western Journal of Communication*, *56*, 394-412.
- Bales, R. F. (1950). *Interaction process analysis: A method for the study of small groups*. Chicago: University of Chicago press.
- Barsade, S.G.(2002). The ripple effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly*, 47, 644-675.
- Bartel, C.A., & Saavedra, R.(2000). The collective construction of work group moods. Administrative Science Quarterly, 45, 197-231.
- Bavelas, J. B., Black, A., Lemery, C. R., & Mullett, J. (1987). Motor mimicry as primitive empathy. In: N. Eisenberg & J. Strayer (Eds.), *Empathy and its development. Cambridge studies in social and emotional development*. New York: Cambridge University Press, pp. 317-338.
- Bernieri, F. J., Reznick, J. S., & Rosenthal, R. (1988). Synchrony, pseudosynchrony, and dissynchrony: Measuring the entrainment process in mother-infant dyads. *Journal of Personality and Social Psychology*, *54*, 243-253.
- Brashers, D. E. (1991). Argument and organizational complaints: Application of the Structuration coding scheme. In D. W. Parsons (Ed.), *Argument in controversy: Proceedings of the seventh SCA/AFA conference on argumentation* (pp. 147-153). Annandale, VA: SCA.
- Brodbeck, F., Anderson, N. & West, M. (2000). *TKI Teamklima-Inventar*. Göttingen: Hogrefe.
- Forgas, J. P. (1992). On mood and peculiar people: Affect and person typicality in impression formation. *Journal of Personality and Social Psychology*, 62, 863-875.
- Fornell, C., & Wernerfelt, B. (1988). A model for customer complaint management. *Marketing Science*, 7, 287-298.
- Garrett, D. E., Meyers, R. A., & West, L. (1996). Comparing the communication characteristics of high competence and low competence customer service representatives. *Journal of Consumer Satisfaction/Dissatisfaction and Complaining Behavior*, 9, 64-74.
- Garrett, D. E., Meyers, R. A., & West, L. (1997). Sex differences and consumer complaints:

 Do men and women communicate differently when they complain to customer service

- representatives? *Journal of Consumer Satisfaction/Dissatisfaction and Complaining Behavior*, 10, 116-130.
- Gersick, C. J. G. (1991). Revolutionary change theories: A multilevel exploration of the punctuated equilibrium paradigm. *Academy of Management Review*, *16*, 10-36.
- Hackman, J. R. (1992). Group influences on individuals in organizations. In: M. D: Dunnette
 & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 199-267). Palo Alto, CA: Consulting Psychologists Press.
- Hatfield E., Cacioppo J.T. & Rapson R.L. (1994). *Emotional Contagion*. New York: Cambridge University Press.
- Hsee, C. K., Hatfield, E., & Chemtomb, C. (1992). Assessments of the emotional states of others: Conscious judgments versus emotional contagion. *Journal of Social and Clinical Psychology*, 11, 119-128.
- Jordan, P. J., Lawrence, S. A., & Troth, A. C. (2006). The impact of negative mood on team performance. *Journal of Management & Organization*, 12, 131-145.
- Kauffeld, S. (2006a). Self-directed work groups and their impact on team competence. *Journal of Occupational and Organizational Psychology*, 79, 1-21.
- Kauffeld, S. (2006b). *Kompetenzen messen, bewerten, entwickeln* [Measuring, evaluating, and developing competencies]. Stuttgart: Schäffer-Poeschel.
- Kauffeld, S. (2007). Jammern oder Lösungsexploration Eine sequenzanalytische Betrachtung des Interaktionsprozesses in betrieblichen Gruppen bei der Bewältigung von Optimierungsaufgaben. Zeitschrift für Arbeits- und Organisationspsychologie, 51, 55-67.
- Kauffeld, S. & Lehmann-Willenbrock, N. (subm). Advanced interaction analysis: A process analytical methodology for assessing team competence. Manuscript submitted for publication.
- Kauffeld, S., & Meyers, R. A. (in press). Complaint and solution-oriented circles: Interaction patterns in work group discussions. *European Journal of Work and Organizational Psychology*.
- Kelly, J. R., & Spoor, J. R. (2006). Affective influences in groups. In J. Forgas (Ed.), *Affect in social thinking and behavior* (pp. 311-325). NY: Psychology Press.
- Laird, J. D. (1984) The real role of facial response in the experience of emotion: A reply to Tourangeau and Ellsworth, and others. *Journal of Personality and Social Psychology*, 47, 909–917.
- Larsen, R. J., & Diener, E. (1992). Problems and promises with the circumplex model of emotion. *Review of Personality and Social Psychology*, *13*, 25-59.

- Liker, J. (2006). The Toyota way fieldbook. New York, NY: McGraw-Hill.
- Mangold, P. (2005). *Interact. Unpublished handbook*. Arnstorf: Mangold Software & Consulting.
- McIntosh, D.N., Druckman, D., & Zajonc, R.B. (1994). Socially-induced affect. In D. Druckman & R.A. Bjork (Eds.), *Learning, remembering, believing: Enhancing human performance* (pp. 251–276, 364–371). Washington, DC: National Academy Press.
- Neininger, A., & Kauffeld, S. (in press). Kompetenzen durch Reflexionen im Team? ein Beispiel aus der Produktion. In S. Kauffeld (Ed.), *Handbuch Kompetenzentwicklung*. Stuttgart: Schäffer-Poeschel.
- Nielsen, T. M., Sundstrom, E. D., & Halfhill, T. R. (2005). Group dynamics and effectiveness five years of applied research. In S. Wheelan (Ed.), *The handbook of group research and practice* (pp. 285-311). Thousand Oaks, CA: Sage.
- Newell, S. E., & Stutman, R. K. (1988). The social confrontation episode. *Communication Monographs*, 55, 266-285.
- Sellers, P. (1988). Tapping into gripes and profits. *Management Review*, 77, 51-53.
- Sims, D. E., Salas, E., & Burke, C. S. (2005). Promoting effective team performance through training. In S. Wheelan (Ed.), *The handbook of group research and practice* (pp. 407-425). Thousand Oaks, CA: Sage.
- Sundstrom, E., McIntyre, M., Halfhill, T., & Richards, H. (2000). Work groups: From the Hawthorne studies to work teams of the 1990s and beyond. *Group Dynamics: Theory, Research, and Practice, 4,* 44–67.
- Tannenbaum, S. I., Beard, R. L., & Salas, E. (1992). Team building and its influence on team effectiveness: An examination of conceptual and empirical developments. In K. Kelley (Ed.), *Issues, theory, and research in industrial/organizational psychology*, 82 (117-153). Amsterdam: Elsevier Science.
- Tschan, F. (2000). *Produktivität in Kleingruppen. Was machen productive Gruppen anders und besser?* Bern: Huber.
- Tuckman, B.W. (1965). Developmental sequence in small groups. *Psychological Bulletin*, 63, 384-389.
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, 98, 219-235.
- Wheelan, S. A. (1999). Creating effective teams. Thousand Oaks, CA: Sage.