

Failure in Personnel Development

Simone Kauffeld and Ann-Christine Massenberg

Introduction

Personnel development is associated with lots of benefits for employees, teams, organizations, and society (Aguinis & Kraiger, 2009). Despite the personnel growth of skills and knowledge, training and development is supposed to increase job performance of individuals and teams, and thereby enlarge the outcome of organizations (Aguinis & Kraiger, 2009). Employees' personnel development is thus regarded as a key success factor for organizations to persist in today's challenging business world. Therefore, organizations spend a lot of time and money to develop their employees (e.g., Kauffeld, 2016). In the year 2014 organizations in the United States payed on average 1229.00 U.S. dollars per employee for training and development (Association for Talent Development, 2015). However, even if organizations spend that much money to develop their employees, it is questioned if indeed these training programs lead to the supposed benefits (e.g., Blume, Ford, Baldwin, & Huang, 2010). Employees are no longer send to training programs only as incentive—rather HR managers are asked to prove the added value of training and development to the organization (Kauffeld, 2016).

What could failure in personnel development mean? Organizations only benefit from the development of their employees if the employees apply what they have learned in the training program to the workplace (Laker & Powell, 2011), i.e. if a transfer of training content happens. Very early in the training transfer research, the so-called "transfer-problem" was identified (Michalak, 1981). Some researchers assume that only 62% of training participants apply something they have learned

S. Kauffeld (🖂)

A.-C. Massenberg Bertelsmann SE & Co. KGaA, Gütersloh, Germany e-mail: ann-christine.massenberg@bertelsmann.de

Institut für Psychologie, TU Braunschweig, Braunschweig, Germany e-mail: s.kauffeld@tu-bs.de

[©] Springer International Publishing AG, part of Springer Nature 2018

S. Kunert (ed.), *Strategies in Failure Management*, Management for Professionals, https://doi.org/10.1007/978-3-319-72757-8_8

in a training to the workplace (Saks & Belcourt, 2006). Other researchers suppose that only 10% of the newly acquired skills are transferred to the workplace (e.g., Baldwin & Ford, 1988; Georgenson, 1982; Khasawneh, Bates, & Holton, 2006). This lack of training transfer can be regarded as failure in personnel development: When employees do not change their behavior after attending a training program the investment of time and money is not worth it (Laker & Powell, 2011).

The Transfer-Problem: Literature Review

The identification of the transfer-problem led to a large body of research that identified factors that hinder and that foster the transfer of training (for an overview see Blume et al., 2010; Grossman & Salas, 2011; Huang, Blume, Ford, & Baldwin, 2015). Based on the early distinction of Baldwin and Ford (1988) these factors are related to the participant, to the training program itself, and to the work environment.

Important factors that were identified within the participant are motivational factors, self-efficacy, cognitive ability and the perceived utility of training (see Grossman & Salas, 2011; Huang et al., 2015). Motivation to learn determines the direction, duration, and intensity of learning (Kanfer, 1990), while motivation to transfer is defined as a *"trainee's desire to use the knowledge and skills mastered in the training program on the job"* (Noe, 1986, p. 503). Both kinds of motivational constructs were found to be crucial for a high level of training transfer (e.g., Gegenfurtner, Veermans, Festner, & Gruber, 2009; Weissbein, Huang, Ford, & Schmidt, 2011). Without motivation employees may simply choose not to change their behavior after a training program (e.g., Bauer, Orvis, Ely, & Surface, 2015; Latham, 2007).

A recent meta-analysis by Huang et al. (2015) on motivation to transfer showed that only typical transfer is affected by motivation to transfer but not maximum transfer. Typical transfer is defined as the application of newly gained skills "without prompts, typically over an extended period of time and without focusing on the fact that the skill transfer is being evaluated" (Huang et al., 2015, p. 710). By contrast, maximum transfer occurs when "trainees are given explicit or implicit prompts to maximize effort while demonstrating the skill transfer, typically for a short period of time" (Huang et al., 2015, p. 710). Usually, organizations are interested in typical transfer that is shown by the employees without being asked to transfer the training content and without being explicitly evaluated by somebody else. Motivation to transfer was found to play a special role in the training transfer process by mediating the influence of different factors and training transfer (e.g., Gegenfurtner et al., 2009; Massenberg & Kauffeld, 2015; Massenberg, Spurk, & Kauffeld, 2015) and should thereby be of special importance for organizations.

Training characteristics that were found to be important are besides others a realistic training environment, and transfer design (e.g., Grohmann, Beller, & Kauffeld, 2014; Grossman & Salas, 2011). Transfer design is defined as the extent 'to which training has been designed and delivered to give trainees the ability to transfer learning to the job, and training instructions match job requirements'

(Holton, Bates, & Ruona, 2000, p. 345). Realizing a high transfer design, trainers uses methods and practices during training that are helpful for the trainees to transfer the gained skills to the workplace. Scenarios and simulations should be as similar to the work environment as possible to ensure a realistic training environment that was also found to be useful for training transfer (Grossman & Salas, 2011).

Besides characteristics of the trainees and the training, factors in the work environment were found to influence the application of training content to practice (for an overview see for example Blume et al., 2010). The consideration of the work environment is crucial because the situation and circumstances that surround a trainee at the workplace impact the training transfer even though they are not connected to the training in a direct way (e.g., Burke & Hutchins, 2007; Mathieu & Tesluk, 2010). Factors in the work environment that play an important role for training transfer are for example the social support a trainee receives, the opportunity to apply the training content to the workplace, and the consequences that trainees experience when they transfer the training content at work (see Grossman & Salas, 2011).

Social support can be provided by the supervisor and by colleagues and was found to be relevant for a high motivation to transfer and consequently for training transfer (e.g., Massenberg & Kauffeld, 2015; Massenberg et al., 2015; Nijman & Gelissen, 2011). Recent research (Schindler & Burkholder, 2014) found supervisor support to consist of four different dimensions: "mentoring (supporting, guiding, and facilitating an employee's career development), coaching (teaching an employee about the rules, goals, and politics of the organization), social support (assisting an employee with personal and professional challenges), and task support (assisting an employee with work assignments)" (p. 3).

The consequences that trainees experience after a training program are also important for successful training transfer. They might be positive when trainees are for example praised for transferring the training content to the workplace (Holton, Bates, Seyler, & Carvalho, 1997). At the same time negative consequences should occur when the trainee does not change anything at work (Kauffeld, 2016). These negative consequences are important to signal to the trainee the relevance of the training and to demonstrate that the management cares about the transfer of the training content.

Even though a lot of influencing factors on training transfer have been identified in the past, especially the work environment is still overlooked in practice. The next part enters into question how organisations are able to notice the failure of training transfer.

Diagnostics

As described before failure in personnel development means that employees do not transfer the training content to the workplace. How are organizations able to judge if a training program led to the desired outcome or in turn if it failed? First of all, organizations need to evaluate the training program appropriately. Most



Fig. 1 Four levels of training evaluation (Kirkpatrick, 1967, 1994)

organizations simply ask the participants directly after a training program about their satisfaction with the program, the trainer, and the circumstances (Kauffeld, 2016). Of course, these might be important questions to ask for the organization and administrations of training programs. However, a lot of questions remain open and the question whether the training program was successful could not be answered.

Kirkpatrick (1967) developed a four-level evaluation model that is widely used for evaluation in research and practice (Grohmann & Kauffeld, 2013; Kirkpatrick & Kirkpatrick, 2006; Salas & Cannon-Bowers, 2001). The four levels (Kirkpatrick, 1967; Kirkpatrick & Kirkpatrick, 2006) (see Fig. 1) are

- 1. reaction,
- 2. learning,
- 3. behaviour,
- 4. and results.

The level reaction measures whether the participant is satisfied with the training program and its result, as well as whether the participant regards the training as useful. The level learning refers to the question whether the participant gained new skills or was able to develop existing skills. Questions on both levels remain in the training environment and can be asked with low effort directly after a training program (Alliger, Tannenbaum, Bennett, Traver, & Shotland, 1997). However, to find out if the training program led to behaviour changes in the work environment and to changes in the results for the employees (e.g., performance) and for the organization (e.g., productivity) the other levels of the evaluation model need to be considered. Especially, because the originally assumed causality between the four levels (Kirkpatrick, 1967) could not be confirmed in following research (e.g., Arthur, Bennett, Edens, & Bell, 2003), i.e. no conclusions like "the more satisfied a trainee is with a training, the more he learned" or "the more the trainee learned in the training, the better he is able to apply the learning to the workplace" can be drawn.

An instrument that can be used to measure the success of a training program and that is based on the four-level evaluation model of Kirkpatrick (1967) is the "Questionnaire for Professional Training Evaluation" (Q4TE, Grohmann & Kauffeld, 2013). The Q4TE comprises the scales satisfaction, utility, knowledge,

application to practice, individual organizational results, and global organizational results. Using two items for each scale that are answered from 0% (completely disagree) to 100% (completely agree), the Q4TE is a very economic, time-efficient instrument. Additionally, to measure the training transfer in a more detailed way, participants can be asked about the numbers of actions they planned to implement after the training program and about the degree of conversion for each action (Kauffeld, 2016; Kauffeld, Brennecke, & Strack, 2009).

However, even if an organization measures all four levels by Kirkpatrick, what happens if the assessment of behavioural change and results are not satisfying, i.e. if the evaluation shows that personnel development failed? How could an organization identify reasons for this failure and get to know which aspects they need to optimize to enhance training transfer and training outcomes?

Interventions

To answer questions about factors that foster and that hinder the training transfer after personnel development, organizations need to be aware of the importance of the learning transfer system. The learning transfer system comprises "all factors in a person, training, and organization that influence transfer of learning and job performance" (Holton, 2005, p. 44). Or in other words: Failure in personnel development can have a lot of different causes. To identify these causes and to decide how to optimize the learning transfer system organizations need to evaluate on two levels: They need to implement an evaluation of the four-level model (Kirkpatrick, 1967) described in the last section and additionally, they need to evaluate the learning transfer system to find out barriers in the training transfer process (see Fig. 2). Moreover, since e-learning and blended learning (i.e., a combination of e-learning and face-to-face-learning) are getting more and more important (e.g., Noe, Clarke, & Klein, 2014), despite the traditional influencing factor groups identified by Baldwin and Ford (1988) the technical conditions might also influence the training transfer.

To measure the learning transfer system, Holton et al. (2000) developed the Learning Transfer System Inventory (LTSI) that is validated in many different languages (e.g., Bates, Kauffeld, & Holton III, 2007; Kauffeld, Bates, Holton, & Müller, 2008; Velada, Caetano, Bates, & Holton, 2009). The learning transfer system comprises 16 factors that are shown in Table 1. The factors are separated in specific factors that are related to the training program (e.g., motivation to transfer, transfer design, social support), and more general factors (e.g., self-efficacy, feedback; Holton et al., 2000). The general factors are not related to a specific training program but influence the training transfer. For example, the feedback culture that exist within a team might have no connection to a training program that one team member attends. However, when the team member gets back to the workplace, tries out what he or she has learned in the training program, and receives no feedback from his or her colleagues this might hinder the application of the trained skills.

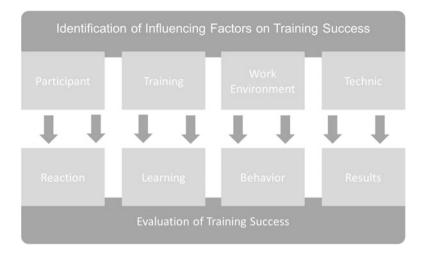


Fig. 2 Integration of evaluation of training success and influencing factors (see also Kauffeld, 2016)

For the identification of transfer barriers organizations should apply the LTSI at different points in the development and implementation process of training programs (Kauffeld, 2016):

As part of a pilot training program the assessment of the learning transfer system leads to hints about how to improve the training program and the transfer climate before the program is rolled-out (Holton & Baldwin, 2003). As a consequence of the analysis, the training program can be improved and the costs and benefits might be evaluated. Additionally, conversations with the trainees should show how realisable, and accepted the training program is (Kauffeld, 2016). Assessing the learning transfer system in this early stage of development, the organization could save money by improving the training as well as circumstances at work before a large and costly roll-out takes place.

Before a training program starts the LTSI could be used to identify possible transfer problems regarding the participants and the work environment (e.g., Holton & Baldwin, 2003; Kauffeld, 2016). Massenberg, Schulte, and Kauffeld (2016) found out that the motivation to transfer before a training program is influenced by the learning transfer system before a training program. Moreover, they found the level of motivation to transfer before the training to be important for the motivation to transfer after the training (Massenberg et al., 2016). Therefore, it is important for organizations to deal with the learning transfer system before a program even started. Doing so, organizations are able to identify possible transfer problems early and to ensure a high level of motivation to transfer after the training by solving these transfer problems.

Regularly after training programs an evaluation using the LTSI could be used to monitor the learning transfer system of the participants and to develop actions to improve the training transfer (e.g., Kauffeld, 2016). Moreover, the LTSI can be used

s for improvement of training transfer
 Specification of training goals, training content, and training structure as well as written information for participants prior to the training Participants need to apply to attend the training program. They need to argue why they are the best to attend the training Meeting between trainer and participants prior to the training program
 Planning specific steps during the training for application of gained skills at the workplace Letters with ideas and commitment for implementation of training content that are send to the participants few weeks after training Transfer day after a few weeks Transfer coaching at the workplace after the training Telephone coaching by trainers Contact to a 'sparring partner' of the training group to reflect the training transfer Communication of evaluation results regarding the training Learning diaries: Defining SMART actions (specific, measurable, attractive, realistic, terminated) which should be implemented after the training. Prioritization of the actions regarding their contribution to transfer success Transfer project Fixing appointments for training transfer directly into participants' calendar Giving positive examples of application of training content to other participants
 Realistic exercises: participants' case studies Anticipating resistance and developing possible solutions during training Interval training: phases of learning and of application in turns Follow-up-Modules to exchange experiences about training transfer, to make transfer success visible, to name transfer barriers, and to find solutions in the peer group to enhance the application of gained skills Telephone coaching by trainer or sparring partner after training Allocation of sparring partners for the implementation phase
 Training with 'real' subjects Training in 'real' teams Analysis of the organization and of the tasks the employees' tasks Questionnaire to ask about desired content for training Demonstrating the relevance of the training content by the trainer or even better by former participants
 Developing a system to receive a return (What was the training good for?) Demonstrating achievement (continued)

Table 1 Ideas for optimization of influencing factors on training transfer (Referring to Kauffeld,2016)

(continued)

	Rewards (e.g., praise or financial benefits)Bonus system
Personal outcomes negative	 Comparison between a training group and a control group Evaluation by superiors after a successful application of what has been learned in training
Peer support	 Fostering a common interest in learning Meeting with participants and colleagues (information sharing, agreements on implementation) Order by the team to the participant Participants' report about the training
Supervisor support	 Individual identification of training needs for each employee by the supervisor Definition of personal learning goals prior to a training together with the trainee Definition of requirements for the application of gained skills Making an agreement about the application of training content Assigning an active role to the supervisor for the employees' training transfer Transfer meetings
Supervisor sanctions	 Defining training and development of the employees to be a management task Involving supervisors in training needs assessment Knowledge about the training content Allowing supervisors the possibility to participate in the training
Personal capacity to transfer	 To free up space for training transfer by supervisors Creating time for reflection
Opportunity to use	 To allocate the necessary resources (e.g. materials for moderation after a training in moderation methods)
General ideas for impr	ovement of training transfer
Participant	
Self-efficacy	 Demonstrating employees' success Adapting the training content to the competence level of the participants
Performance expectations	 Team members with successful training experiences as example Comparison to other groups that already attended the training program Control of results
Outcome expectations	 Giving signals by the management that learning is honored Choosing the right employees for the training Commitment of the employees to define learning goals
Working environment	
Openness to change	 Training the entire team Workshops regarding norms in the team
Feedback	 Regular appraisal interviews 360° feedback Customer contact

Table 1 (continued)

to identify reasons for known transfer problems. Assessing the entire learning transfer system is crucial because relationships between influencing factors cannot be found when only assessing single factors or factor groups (Massenberg et al., 2016). Furthermore, assessing the entire LTSI persons responsible for the training program might demonstrate that the training itself is not the reason for unsatisfying training outputs. Low results in training transfer might be easily accredited to the training concept or the trainer. However, often the barriers lie in the work environment and are not related to the training itself. Therefore, the results of the LTSI can be used to justify the own work of trainers and employees who are responsible for training concepts (Kauffeld, 2016).

No matter at what point in the development and conduction of training programs, organizations assess the LTSI, it is crucial to analyse the entire learning transfer system (e.g., Massenberg et al., 2016). Simple conclusions like "the higher a factor the better the training transfer" seem not to be realistic (Kauffeld, 2016). Instead, organisations need to analyse combination of factors. Moreover, as each organisation is different, has different cultures, different training programs, and different participants, reasons for low training transfer in one organisation cannot be transferred automatically to another organisation. Some ideas for improvements of each LTSI factor can be found in Table 1. In the following a case of low training transfer after a leadership training is described.

Case Study

A medium-sized company conducts an employee survey within the scope of a large organizational development. For one team the results about leadership are remarkable low. The supervisor is not accepted by his team neither does the team believe in his leadership skills. Especially some employees are very unsatisfied with the supervisor and his way to lead the team.¹

As the management takes the results of the employee survey seriously they prompt the supervisor to participate in a leadership training. Moreover, they finance a continuous coaching session for the supervisor. In the training he first learns about different leadership styles, roles within a team, and how to make the most of the resources he has in his team. During the following coaching sessions, he reflects about his own role as a leader and about ways in communication with his employees. Together with his coach he works on possible ways to apply the gained skills to the workplace.

He starts to change his way to lead his employees in every day work by trying to apply the methods that he has learned during the training and for that he has discussed their application in the coaching sessions. He, for example, starts to define goals with his employees regarding their different projects and to praise his employees for good results. However, the team's satisfaction with the supervisor does not increase by these actions. In contrast, the employees react in a resistant way and do not experience the changes as authentic. When their supervisor praise

¹See also Moccia (2018).

them for good results they say things like 'This is not him. He only acts this way because he was told to do so. He wants to please the management that is why he changes his behaviour. Not because now he cares about our team.'.

Even though the employees were not satisfied with the former behaviour of their supervisor they do not accept the changed behaviour neither. The supervisor therefore experiences no positive consequences when applying the training content to the workplace and resigns after a while. He has the impression that no matter what he is doing, his team does not accept him as supervisor.

What went wrong in this case? Why did the transfer of the leadership training failed even if the team was not satisfied with its supervisor before and the supervisor was open to develop personally? Support is a very important factor in the learning transfer system and in the present case support by the employees was missing. In many other cases support by peers or by supervisors was found to be one of the most important reasons for failed training transfer. However, for leadership trainings and the transfer of training support by subordinates might be important, too.

What should have been done differently for successful training transfer in this case? The management took the results of the employee survey seriously and prompted the supervisor to develop his leadership skills. However, they missed the importance of the work environment for successful training transfer. Especially a supportive surrounding is very important for the application of trained skills at the workplace. The management should have felt responsible for the support which the supervisor receives from his employees.

First of all, the awareness of the importance of support needs to be raised in the team. Therefore the employees should be informed about the training and coaching their supervisor is participating in. Together they should discuss about ways to support the supervisor on his improvement on leadership skills as the employees criticized his actual skills. The team could communicate desires for improvement to the supervisor, which he could use for his goal setting. Moreover, they should learn to be patient with their supervisor when he tries to apply the gained skills to the workplace. When they experience improvements, they should also praise their supervisor and reinforce him.

All these actions would have been important in the described case for a successful development of leadership skills and especially for the application of these skills in practice. It is not enough for organization and management to prompt employees to participate in training and development—they also need to take care about the circumstances at the workplace and to ensure a "transfer-friendly" environment.

Conclusion

Failure in personnel development might have many different reasons and does not necessarily need to be caused by the trainee. Even though factors in the participant and training factors are important for successful training transfer, factors of the work environment are crucial, too. Only when the trainees' surrounding is a transfer-friendly one, success of training transfer is possible. Organizations need to be aware of this learning transfer system to identify possible barriers for training transfer and to find solutions to solve these problems. To analyse the training transfer system is not only important after a training program. It could also be measured before a training program or prior to a pilot of a training program. To be successful, personnel development needs to be related to organizational development and to be thereby more strategically oriented.

As shown in the case described at the end of this chapter, it is not enough if the management prompts employees to attend a training program—they also need to ensure a supportive environment and to create the circumstances that trainees need to best apply the training content to the workplace.

References

- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, 60, 451–474. https://doi.org/10.1146/ annurev.psych.60.110707.163505.
- Alliger, G. M., Tannenbaum, S. I., Bennett, J. R. W., Traver, H., & Shotland, A. (1997). A metaanalysis of the relations among training criteria. *Personnel Psychology*, 50(2), 341–358. https:// doi.org/10.1111/j.1744-6570.1997.tb00911.x.
- Arthur, W., Bennett, W., Edens, P. S., & Bell, S. T. (2003). Effectiveness of training in organizations: A meta-analysis of design and evaluation features. *Journal of Applied Psychol*ogy, 88, 234–245.
- Association for Talent Development. (2015). *State of the industry report*. Retrieved from https:// www.td.org/Professional-Resources/State-Of-The-Industry-Report.
- Baldwin, T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, 41(1), 63–105. https://doi.org/10.1111/j.1744-6570.1988.tb00632.x.
- Bates, R., Kauffeld, S., & Holton, E. F., III. (2007). Examining the factor structure and predictive ability of the German-version of the Learning Transfer Systems Inventory. *Journal of European Industrial Training*, 31(3), 195–211. https://doi.org/10.1108/03090590710739278.
- Bauer, K. N., Orvis, K. A., Ely, K., & Surface, E. A. (2015). Re-examination of motivation in learning contexts: Metaanalytically investigating the role type of motivation plays in the prediction of key training outcomes. *Journal of Business and Psychology*, 31(1), 1–18.
- Blume, B. D., Ford, J. K., Baldwin, T. T., & Huang, J. L. (2010). Transfer of training: A metaanalytic review. *Journal of Management*, 36(4), 1065–1105. https://doi.org/10.1177/ 0149206309352880.
- Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human Resource Development Review*, 6(3), 263–296. https://doi.org/10.1177/1534484307303035.
- Gegenfurtner, A., Veermans, K., Festner, D., & Gruber, H. (2009). Motivation to transfer training: An integrative literature review. *Human Resource Development Review*, 8(3), 403–423. https:// doi.org/10.1177/1534484309335970.

- Georgenson, D. L. (1982). The problem of transfer calls for partnership. *Training and Development Journal*, 36(10), 75–78.
- Grohmann, A., & Kauffeld, S. (2013). Evaluating training programs: Development and correlates of the questionnaire for professional training evaluation. *International Journal of Training and Development*, 17(2), 135–155.
- Grohmann, A., Beller, J., & Kauffeld, S. (2014). Exploring the critical role of motivation to transfer in the training transfer process. *International Journal of Training and Development*, 18(2), 84–103.
- Grossman, R., & Salas, E. (2011). The transfer of training: What really matters. *International Journal of Training and Development*, 15(2), 103–120. https://doi.org/10.1111/j.1468-2419. 2011.00373.x.
- Holton, E. F. (2005). Holton's evaluation model: New evidence and construct elaborations. *Advances in Developing Human Resources*, 7(1), 37–54.
- Holton, E. F., & Baldwin, T. T. (2003). Improving learning transfer in organizations. San Francisco, CA: Jossey-Bass.
- Holton, E. F., Bates, R. A., Seyler, D. L., & Carvalho, M. B. (1997). Toward construct validation of a transfer climate instrument. *Human Resource Development Quarterly*, 8(2), 95–113.
- Holton, E. F., Bates, R. A., & Ruona, W. E. A. (2000). Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly*, 11(4), 333–360.
- Huang, J. L., Blume, B. D., Ford, J. K., & Baldwin, T. T. (2015). A tale of two transfers: Disentangling maximum and typical transfer and their respective predictors. *Journal of Business* and Psychology, 30(4), 1–24. https://doi.org/10.1007/s10869-014-9394-1.
- Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology. Volume 1. Theory in industrial and organizational psychology* (pp. 75–170). Palo Alto, CA: Consulting Psychologists Press.
- Kauffeld, S. (2016). Nachhaltige Personalentwicklung und Weiterbildung: Betriebliche Seminare und Trainings entwickeln, Erfolge messen, Transfer sichern [Sustainable human resource development and training: Developing, evaluating, and transferring professional training courses]. Berlin/Heidelberg: Springer.
- Kauffeld, S., Bates, R., Holton, E. F., & Müller, A. C. (2008). Das deutsche Lerntransfer-System-Inventar (GLTSI): psychometrische Überprüfung der deutschsprachigen Version [the German version of the Learning Transfer System Inventory (GLTSI): Psychometric validation]. Zeitschrift für Personalpsychologie, 7(2), 50–69. https://doi.org/10.1026/1617-6391.7.2.50.
- Kauffeld, S., Brennecke, J., & Strack, M. (2009). Erfolge sichtbar machen: Das Maßnahmen-Erfolgs-Inventar (MEI) [Visualizing training outcomes: The MEI for training evaluations]. In S. Kauffeld, S. Grote, & E. Frieling (Eds.), *Handbuch Kompetenzentwicklung* (pp. 55–79). Stuttgart: Schäffer-Poeschel.
- Khasawneh, S., Bates, R., & Holton, E. F. (2006). Construct validation of an Arabic version of the Learning Transfer System Inventory for use in Joran. *International Journal of Training and Development*, 10(3), 180–250.
- Kirkpatrick, D. L. (1967). Evaluation of training. In R. L. Craig & L. R. Bittel (Eds.), Training and development handbook (pp. 87–112). New York: McGraw Hill.
- Kirkpatrick, D. L. (1994). *Evaluating training programs: The four levels*. San Francisco, CA: Berrett-Koehler.
- Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating training programs: The four levels* (3rd ed.). San Francisco, CA: Berrett-Koehler.
- Laker, D. R., & Powell, J. L. (2011). The differences between hard and soft skills and their relative impact on training transfer. *Human Resource Development Quarterly*, 22(1), 111–122. https:// doi.org/10.1002/hrdq.20063.
- Latham, G. P. (2007). Work motivation: History, theory, research, and practice. Thousand Oaks, CA: Sage.

- Massenberg, A.-C., & Kauffeld, S. (2015). Hilf mir (nicht immer) Eine moderierte Mediationsanalyse zum Einfluss der Unterstützung durch die Führungskraft auf Transfermotivation und Lerntransfer [Help me (but not always): A moderated mediation analysis of the effect of support by senior staff on transfer motivation and the transfer of learning]. Zeitschrift für Erziehungswissenschaft, 18(1), 145–167. https://doi.org/10.1007/ s11618-014-0603-5.
- Massenberg, A.-C., Spurk, D., & Kauffeld, S. (2015). Social support at the workplace, motivation to transfer and training transfer: A multilevel indirect effects model. *International Journal of Training and Development*, 19(3), 161–178. https://doi.org/10.1111/ijtd.12054.
- Massenberg, A.-C., Schulte, E.-M., & Kauffeld, S. (2016). Never too early: Learning transfer system factors affecting motivation to transfer before and after training programs. *Human Resource Development Quarterly*, 28(1), 55–85. Advance online publication. https://doi.org/ 10.1002/hrdq.21256.
- Mathieu, J. E., & Tesluk, P. E. (2010). A multilevel perspective on training and effectiveness. In S. W. J. Kozlowski & E. Salas (Eds.), *Learning, training, and development in organizations* (pp. 405–440). Routledge/Taylor & Francis Group: New York, NY.
- Michalak, D. F. (1981). The neglected half of training. *Training and Development Journal*, 35(5), 22–28.
- Moccia, S. (2018). Failure of leadership. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools.* Heidelberg: Springer.
- Nijman, D.-J., & Gelissen, J. (2011). Direct and indirect effects of supervisor support on transfer of training. In R. F. Poell & M. Woerkom (Eds.), *Supporting workplace learning* (pp. 89–106). Dordrecht: Springer Netherlands.
- Noe, R. A. (1986). Trainees' attributes and attitudes: Neglected influences on training effectiveness. Academy of Management Review, 11(4), 736–749. https://doi.org/10.5465/AMR.1986. 4283922.
- Noe, R. A., Clarke, A., & Klein, H. J. (2014). Learning in the twenty-first-century workplace. Annual Review of Organizational Psychology & Organizational Behavior, 1(1), 245–275. https://doi.org/10.1146/annurev-orgpsych-031413-091321.
- Saks, A. M., & Belcourt, M. (2006). An investigation of training activities and transfer of training in organizations. *Human Resource Management*, 45(4), 629–648. https://doi.org/10.1002/hrm. 20135.
- Salas, E., & Cannon-Bowers, J. A. (2001). The science of training: A decade of progress. Annual Review of Psychology, 52(1), 471–499.
- Schindler, L. A., & Burkholder, G. J. (2014). A mixed methods examination of the influence of dimensions of support on training transfer. *Journal of Mixed Methods Research*, 7, 1–19. https:// doi.org/10.1177/1558689814557132.
- Velada, R., Caetano, A., Bates, R., & Holton, E. (2009). Learning transfer Validation of the learning transfer system inventory in Portugal. *Journal of European Industrial Training*, 33(7), 635–656. https://doi.org/10.1108/03090590910985390.
- Weissbein, D. A., Huang, J. L., Ford, J. K., & Schmidt, A. M. (2011). Influencing learning states to enhance trainee motivation and improve training transfer. *Journal of Business and Psychology*, 26(4), 423–435.

Online Resources

On the book website, additional content on failure is provided. Please visit: www.artop.de/en/failure