ORIGINAL ARTICLE



Training strategies of Chinese and British multinational companies in Germany

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ABSTRACT

In the academic literature, the training strategies of the foreign branches of multinational companies have hardly been considered so far. Consequently, it is unclear how these subsidiaries meet their demand for skilled workers. Since the training cultures in the respective countries of origin are often different from those in the host country, research into this topic is of interest. This article is therefore dedicated to the question of how foreign companies from China and Great Britain behave when they come to Germany with the dual training system that dominates here. Based on 11 qualitative interviews, the training and recruitment strategies of these companies are analyzed as well as the effect of the influences on the adaptation to the German environment.

Key words: training strategies, vocational education, dual system, apprenticeships, Germany, Chinese companies, British companies

INTRODUCTION

In the course of internationalization, many multinational companies (MNCs) invest in Germany. Branches are being opened by foreign companies in Germany in a wide range of industries, employing around 3.8 million people.^[1] This extensive investment means that the foreign companies' branches in Germany need skilled workers with medium-level qualifications. Therefore the focus in this study lies on the intermediate skill level and includes dual apprenticeships as well as dual study courses, as they are of major importance within the German system of vocational education and training (VET) and higher VET.^[2] Many studies single out Germany for its dual training system in which the state and companies share responsibility for vocational training.^[3] Both stratification and standardization are categorized as "high" in Germany, while learning processes are geared to practice or actually form part of practice.^[4,5] In the dual training system in Germany,

young people spend about two-thirds of their training time, which in total usually encompasses 2.5 to 3.5 years, in the company. This in-company training is curricular interlinked with classes at vocational schools, where the remaining third of the training takes place. In addition, besides the state, also chambers, employers' organizations and trade unions take care of aspects like financing, organization, certification, curricular design and teaching staff.^[3,6] Dual study courses are also characterized by the combination of theory and practice and take place in cooperation between companies and polytechnics (Fachhochschulen), vocational academies (Berufsakademien) or universities at a bachelor's degree level.^[7] The fact that this form of training is attractive for companies but also for young people is shown by the fact that approximately 1.3 million young people are undergoing dual training.^[8,9] In addition, another 108,000 or so people are enrolled in dual studies, in which part of the training takes place in universities of applied sciences or vocational academies.^[10] However, the training of

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these skilled workers in the dual training system represents a special feature that is unusual in most other countries.^[11]

While the export of German training by MNCs has received attention in the academic literature the reverse has hardly been explored.^[12,13] There is little evidence, both in the academic literature and in statistical data, of how foreign MNCs train in Germany.^[14]

The research gap on how foreign MNCs meet their demand for skilled personnel should therefore be investigated more closely. Only countries whose MNCs make substantial investments in Germany and have a vocational training system that differs from Germany's are relevant here.^[15] In addition, the focus was on companies from two different home countries in order to be able to take into account possible differences with regard to the respective "training cultures" in the home countries.^[16] In the sense of a "Most Different Design", the present study examined branches of companies from China and Great Britain.^[17]

The ideal-typical classification of Chinese and British VET based on a typology makes the differences between the two countries clear, but also in relation to training in Germany.^[11] China can be seen as a country with strong state influence on VET.^[18,19] The clear separation of VET from general education and the limited opportunities for advancement within VET indicate a high degree of stratification.^[20-23] Standardization in VET is "high", but training is not very practice-oriented.^[19,24,25] In contrast, Gait Britain is seen as having a liberal approach with low state and company influence and high individual influence.^[26,27] Both stratification and standardization are described as "low".^[4] At the micro level, there is a strong practical link to learning by doing in the workplace when the more general higher education courses are excluded and the widespread model of skills development in the workplace is the focus.^[16,27,28] This paper therefore examines and compares how companies from China and Great Britain behave when they come to Germany with its dominant dual training system: Do the companies adapt to the German qualification strategy or do they bring practices from their home country?

THEORETICAL APPROACH

As discussed above, branches of MNCs abroad do not consistently behave in the same way as in their home country with regard to their training practices.^[29] Nevertheless, it is clear that MNCs are influenced by the vocational training culture of their home country in the design of training.^[16] Consequently, the companies find themselves in a field of tension between the local environment and the environment in the home country. This situation has the consequence that a training strategy is chosen that is accepted locally and thus leads to legitimacy in the environment.^[30] The decision whether and how to train skilled workers is therefore not made by companies independently of this environment, but is influenced by the values, norms and ideals of good practice in their environment, which form the cultural framework.^[31] From a VET research perspective it therefore makes sense to take a theoretical approach here based on neo-institutionalism.^[32] Scott accordingly notes: "The institutional environment is generally defined to include both the rules and belief systems and the systems of relationships that occur in the broader social context."^[33] These institutions can be described as social rules and are expressed in different ways. They define the institutional environment and determine the benefits, tasks and formal structures of organizations (e.g. companies) in an environment.^[34]

In summary, it can be said that the companies are caught in the tension between the German environment on the one hand and the environment in the home country on the other. This is because the practices common in the home country also influence the subsidiaries through the influence of the parent company. The consideration of the influences from these two social environments in which organizations, in this case companies, are embedded is described as a duality in the environment and is dealt with below in the context of the research focus outlined above.^[35]

RESEARCH DESIGN

The investigation mainly refers to companies with a genuine history of the establishment (greenfield investments), as it can be assumed here that the German education system was new to the companies when they arrived. In the case of companies included in the study that have already bought up existing German branches, a deliberate retrospective look was taken at a possible change and a focus was placed on the current decisionmaking structures. Small, medium-sized and large companies were included in the analysis, whereby the branches predominantly employed more than 20 people and had a maximum of 1500 employees. In addition, both young and longer-established companies were taken into account, as different levels of familiarity with the German training system can be assumed here. In addition, an open sectoral approach was chosen, but sectors such as manufacturing were taken into account, which basically have needs at a medium qualification level (Table 1). Specifically, the companies were selected using various approaches. An initial selection was made using a database with data on direct investments (fDi Markets). In addition, further companies were identified

Items		From Great Britain	From China	Total
Size (Number of employees)	Micro & small (0-49)	0	3	3
	Medium (50-249)	1	2	3
	Large (250 and more)	4	1	5
	Total	5	6	11
Duration of business activity	0-5 years	0	0	0
	6-14 years	1	5	6
	15+ years	4	1	5
	Total	5	6	11

Table 1: Number of companies by country of origin, size and duration of business a	activity in Germany
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via a web search. Both approaches were used to identify unknown, smaller companies as well as important foreign companies that act as large and well-known employers in Germany. Unfortunately, the willingness to participate was very low, probably also due to the pandemic. Therefore, the data collected here cannot be generalized (see below in detail).

In order to do justice to the still unexplored topic and the companies as individual cases, semi-structured expert interviews were conducted.^[36] Experts responsible for training and/or recruiting skilled workers were selected as interview partners. Depending on the structure of the companies, these were branch managers, personnel managers, training managers or corresponding employees. In order to remain deliberately open in the approach and especially in order to gain access to companies that do not provide training themselves, the approach was generally focused on meeting the demand for skilled workers at an intermediate level of qualification. The key questions posed in the interview were based on the theoretical approaches of neo-institutionalism and existing findings on the training activities of foreign companies in a global context (see above). All key questions were optimized in advance with VET research experts and tested in a pilot study.

Field access proved difficult and the interviews were conducted as virtual interviews due to the Corona pandemic. While most interviews were with one interviewee, there were also individual interviews with several interviewees. Only one interviewee was from the respective home country (China). The remaining interview partners were socialized in Germany. The interview guide included questions on the needs for skilled workers, the training of junior staff, recruitment measures of skilled workers and the corresponding decisions and the associated cooperation with the parent company.

Most of the interviews lasted about one hour. The fully transcribed interviews were analyzed with the help of qualitative content analysis according to Kuckartz.^[37] By inductively forming categories from the material, the

different activities of the companies become clear. By means of individual examples, however, the concrete cases could also be taken into account. In addition, on the basis of access *via* Scott, factors influencing the decision were identified as initial explanatory approaches for the training activity.^[38]

PRESENTATION OF FINDINGS

The data revealed three different practices that the Chinese and Great Britain subsidiaries use in Germany to meet their demand for skilled workers (Figure 1). The companies can each be assigned to a practice that they predominantly use.

Strategy: own dual training activities

The first solution is to offer dual training and, in some cases, dual studies. In these cases, the demand at a medium qualification level is mainly covered by the company's own training and in some cases additionally by a dual study programme.

One interviewee reported: "Well, we train for our needs. Well, thanks to Corona that is of course quite nice, but before Corona we also took on all of them. So, in some cases we couldn't cover the entire demand with the trainees, but it is also always a cost factor training." (Great Britain 1). The companies pursue a medium-term training strategy that also takes into account the need for training due to fluctuation and the retirement of older employees. A British company explains: "The decision is made in England, but the proposals come from Germany, because we are located there, and we say we need so many training places. This means that we have to provide apprenticeships on the basis of investment alone, but also in line with demand, so that more apprenticeships are provided on top" (Great Britain 1).

Depending on the type of establishment, the companies provide training in industrial-technical and/or commercial occupations. In the majority of British companies that provide training themselves, training in Germany has already existed for years. Nevertheless, in



Figure 1. Overview of the different strategies of Chinese and British companies in Germany to meet their demand for skilled labor.

many cases annual planning is reported, which records current as well as future needs. Based on this, the offer is adapted again and again. In addition, the costs and budgets for training also play a role. It is reported: "Yes, let's put it that way—within the framework of the annual budget planning, I always fight for a certain share that I can then plan for our own employees in some way. There is some human resources management software with annual costs for some staff events that we want to hold here. But these are all things that I have already fought for to a large extent. In that respect, we actually have a very comfortable situation there" (Great Britain 3).

Strategy: recruitment of trained professionals

Other companies follow a practice that does not provide for their own initial training of skilled workers and the needs are covered by recruiting different groups of applicants. Consequently, the companies here do not offer any training themselves as initial training, neither in the dual system nor in any other form. Their needs for skilled workers, which exist to varying degrees, are met through external recruitment. Here, even for entry-level positions, already trained persons with dual training or a completed degree, often at a bachelor's level, are recruited. The already trained professionals are then, with induction, directly employed in positions for (junior) professionals. While many companies deliberately use skilled workers with completed training for the corresponding positions, some companies specifically hire graduates for these positions. This contrasts with other companies that show no interest in hiring academics for the corresponding tasks, but instead emphasize the good fit of the qualification through dual training: "We are already very satisfied with our colleagues here, because they have already had a reasonable education and that is already enough for our tasks. They don't need a university education...for service technicians it is more manual and also this knowledge in mechatronics is important for the tasks in the company" (China 4). In addition, individual

companies are open and explicitly include both degrees as a requirement in their advertisements. They also make no distinction in hiring and see both ways of prior qualification as equivalent.

Strategy: on-the-job training in companies

In one individual case, another practice has emerged. In one company extensive on-the-job training is planned in the company. From the point of view of the company in question, it is irrelevant what previous education the applicants have, or it is even important for them that the junior staff do not yet have extensive previous knowledge or experience in other companies, as one interviewee makes clear: "In the end, we just have to see who fits best, even though they may not have all the qualifications, but we know that we can train them" (Great Britain 2). In the company, later entry without recognized initial training is also pushed through internal training: "It is not demanded that the curriculum vitae is straight, because it is simply not our goal to have only straight people" (Great Britain 2). The extensive training, some of which lasts for years, takes place exclusively in the company. It is not just a short introductory course, which almost all companies offer, but a more comprehensive training in which the participants either learn a specific area very intensively or deliberately get to know different areas. It is in the interest of these companies to keep those participants in the company and to offer them long-term career perspectives. Thus, the company also offers originally unskilled employees the opportunity to get into positions for skilled workers through internal training. In the case of vacant positions, internal applicants are even given preference regardless of their previous education and are qualified for the new tasks as a matter of priority through.

COMPARATIVE ANALYSIS

Based on the findings generated in this study, differences

can be identified according to the country of origin. The Chinese companies in our study do not provide training, although two companies explicitly plan to implement dual training in the near future. The British companies, on the other hand, pursue other training strategies. Four of the five companies surveyed provide training in the dual system. An individual case that is not suitable for generalization is a British company that does not offer dual training and therefore trains its own junior staff independently of formal training. In summary, the companies surveyed in the study can each be ideally assigned to a practice, despite certain differences in detail in implementation (Figure 2).

Despite the non-participation of Chinese companies in the dual training system in this study to date, a great interest in this form of training can be indicated and specific reasons can be named as to why training is currently not yet being implemented. In principle, the cost/benefit ratio plays a decisive role for the branches of Chinese companies in Germany when deciding whether to offer dual training activities. In this context, the interviewed business and personnel managers place particular emphasis on the organizational and time expenditure of such activities, while purely monetary cost considerations are not given priority. These assessments should be seen in the context of the dynamic growth or change processes in the branches under consideration at the time of the interviews. The reasons for these situations are seen by the interviewees, on the one hand in the dependent role of the branch office in the international corporate construct and, on the other hand in particular in the age of most of the branch offices considered, which is seen as quite young.

This aspect is described by a person responsible for human resources in the branch of a Chinese company, which has been located in Germany for more than 10 years: "After settling here, we first had to make sure that we established ourselves, gained market share and made ourselves known in general. And then that meant hard work for each individual. And you didn't have the time, or haven't had the time yet, to really train as a trainer or to have the time. Because that means extra work, as you can see. And you have to compensate or balance this somehow in addition to the actual task you have in the company. So, from that point of view, it hasn't come up yet" (China 2).

The interviewees of both the Chinese and British companies were almost all socialized within the German labor market and training system and showed a positive familiarity with German dual training practices. Some of them had also undergone dual vocational training themselves. For example, the human resource (HR) manager from the branch of the Chinese company described her open-mindedness and familiarity with the system and her dual training considerations as follows: "What we have thought about and will certainly make possible next, and have already taken the first steps towards this, is an apprenticeship opportunity in the warehouse. So that one simply says, 'we could also train someone ourselves as a warehouse logistician'. And we have already had the first talks with the Chamber of Industry and Commerce. And we listened to what it looks like, what is needed, what are the prerequisites. And in the end, we already have the license, so to speak. And we could more or less start tomorrow" (China 3).

The majority of companies from both countries mentioned a difficult German labor market for the subsidiary in connection with the recruitment of skilled workers as a reason for considering the establishment or already realized implementation of dual training opportunities. Other reasons cited were a potential longterm employment relationship and the possibility of teaching company-specific content. The person from the management of the branch of a Chinese electronics company quoted above describes it as follows: "Of course, it is also very good for us when we...have trainees. They get to know the company from the ground up. We can use them here later. So, in itself, I think it's a good thing" (China 5).

If these considerations are viewed in the context of German labor market regulations and dynamics, as well as the overall situation of the subsidiaries described above, an adaptation to national structures and dynamics seems to be emerging over time.

Overall, the decision-making autonomy regarding training activities is particularly high compared to other areas in human resources. This extensive independence from the corporate mothers regarding the training strategy is also documented in the following quote. "The HR department in Britain doesn't really have anything to do with us. If they would say—'Do it the way we do it', we would say—'That doesn't work in Germany'. In Germany, we have guidelines that we have to follow. We have a well-developed education system that we have to follow, and it wouldn't be good for us to adapt training from Great Britain" (Great Britain 4).

This autonomy relates above all to the design within the framework conditions. Within the framework of this relatively free decision, the HR managers, who are usually socialized in Germany, prefer dual training and sometimes also dual studies as a suitable solution. Even in those companies where there is more extensive consultation with the parent company in the home country, training and recruitment is ultimately carried out according to the forms of training customary in Germany. For example, a Chinese company that does not yet offer any training itself, but consciously recruits

Dual training and dual study

4 companies from Great Britain

Recruitment of dual-trained skilled workers

(dual system or university graduates)

6 companies from China

Own training

1 company from Great Britain

Figure 2. Allocation of Chinese and British companies to practices.

craftsmen/specialists trained in the dual system, reports that close consultation about the candidate with the head office in China takes place for every recruitment, "Of course we have a very different perspective on people...in China there is no one training system. In China, there is no real training for an electrician, for example, it is understood there as a bit of learning by doing, and accordingly, training as an electrician alone is a bit, that would probably not necessarily be enough to impress my colleagues..." (China 1). In this case, the German branch manager is responsible for explaining these local circumstances in the discussions with his direct colleague, the Chinese branch manager and the head office, and for arguing why the education and experience of the selected candidate fits the needs. For even if there is no extensive import of practices from the home country, the duality of the corporate branch environment is perceptible in the exchange between the contacts in Germany and the parent company in the home country. This duality is evident in influences from the parent company, but also from the German local environment and institutions.[38]

In summary, it can be seen that the influences on the decision on the design of training practices are multilayered and that the companies are well aware of the duality of their environment between home and host country. The fact that, despite the influences from the home country, dual forms of training or even already professionally trained skilled workers are often resorted to makes the local German influence clear. The influence of the local German training system is also particularly evident in the fact that the Chinese and British companies in Germany, which differ greatly in terms of training culture in their home countries, both use this influence positively for their own training strategy. This dominance of local influences on the company training strategy was also found in other countries that do not correspond to the German training typology (see above).^[29]

CONCLUSION

The evaluation shows that companies from China and

Great Britain over time very often adapt their activities to local conditions in Germany. It becomes clear that when training activities are offered as initial training for junior staff, they fall back on German dual training/dual studies. In contrast to the studies on German companies abroad, here no extensive training is imported from abroad and only in individual cases is training offered outside the system at all.^[12,18] Other studies on training and other practices in HR showed a stronger adaptation of the strategy to the two environments in solutions that partly also include hybrid solutions.^[39] However, the fact that such hybrid solutions do not show up in this study does not mean that there are no influences from the home country at all. A closer look at the influences on this decision shows that despite the predominant use of the dual system as a form of training, the branches still do not act "like German" companies in their internal decisions and the influences from the home country partly become apparent in intensive negotiation processes with the parent company. Thus, in the agreements and exchanges with the parent company, the different systems with the underlying rules, norms and cultural aspects anchored in the institutional environment become clear. The existence of this duality has also been highlighted by Kostova and Roth.^[35] Differences in the expectations of junior staff in the recruitment process were shown, for example, by Zenner-Höffkes et al. for companies in Germany, Australia and the USA.^[40]

The evaluation shows initial results on a small scale. Through a more extensive sample and comparison with German companies, more detailed statements about differences in practices could be made in the future, if necessary, and the influences from Germany and the home country could be worked out in a more differentiated way.

As a limitation, it must also be pointed out that the perspective of international comparative vocational training research was primarily taken here and that theories and approaches from corporate strategy research as well as pure cross-cultural research were largely ignored. However, such a broadening would have led to a level of complexity that could hardly be handled scientifically and may have resulted in findings that were not very focused. The typology approach that is recognized internationally in VET research should also be understood in this sense. Although this enables a clear focus, this abstraction always also includes the consideration of deviating phenomena.^[41]

An in-depth analysis and a general discussion of different training cultures based on this cannot be provided here, nor can a detailed individual case analysis, which could differentiate the respective corporate strategies more clearly. These scientific activities are therefore reserved for further studies in the future.

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Author contributions

Pilz M: Conceptualization, Writing—Original draft preparation, Writing—Reviewing and Editing.

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Ethical approval

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Conflict of interest

Matthias Pilz is an Editorial Board Member of the journal. The article was subject to the journal's standard procedures, with peer review handled independently of the member and his research group.

Data availability statement

No additional data.

REFERENCES

- 1. Germany Trade and Invest. GTAI FDI Report 2021. GTAI: 2022.
- Ryan P. Introduction: Comparative research on vocational education and training international. In: Ryan P, ed. International comparisons of vocational education and training for intermediate skills. Falmer Press; 1991: 1-22.
- Fürstenau B, Pilz M, Gonon P. The Dual System of Vocational Education and Training in Germany: What Can Be Learnt About Education for (Other) Professions. In: Billett S, Harteis C, Gruber H, eds. International Handbook of Research in Professional and Practice-based Learning. Springer; 2014: 427-460.
- 4. Müller W, Shavit Y. The Institutional Embeddedness of the Stratification Process: A Comparative Study of Qualifications and Occupations in Thirteen Countries. In: Müller W, Shavit, Y, eds. *From*

School to Work: A Comparative Study of Educational Qualifications and Occupational Destinations. Clarendon Press; 1998: 1-48.

- Pilz M, Fürstenau B. Duality and Learning Fields in Vocational Education and Training: Pedagogy, Curriculum, and Assessment. In: Guile D, Unwin L, eds. *The Wiley Handbook of Vocational Education and Training.* 2019:311-327.
- Bosch G, Charest J. Vocational training and the labour market in liberal and coordinated economies. *Ind Relat J.* 2008;39(5):428-447.
- Ertl H. Dual study programmes in Germany: blurring the boundaries between higher education and vocational training? Oxf Rev Educ. 2019;46:1+79-95.
- Pilz M, Ebner C, Edeling S. University? No thanks! An empirical study of why German apprentices with the Abitur choose not to go to university. Oxf Rev Educ. 2020;46(6):770-787.
- 9. Bundesinstitut für Berufsbildung. Datenreport zum Berufsbildungsbericht 2020. In: Informationen und Analysen zur Entwicklung der beruflichen Bildung. BIBB; 2020: 96.
- Leo Joyce S. Duales Studium in Zahlen: Revision der AusbildungPlus-Fächersystematik. Hintergründe. BBIB; 2021.
- 11. Pilz M. Typologies in comparative vocational education: existing models and a new approach. *Vocat Learn.* 2016;9(3):295-314.
- Pilz M, Wiemann K. Does Dual Training Make the World Go Round? Training Models in German Companies in China, India and Mexico. *Vocat Learn.* 2021;14(1):95-114.
- 13. Li J, Pilz M. International transfer of vocational education and training: a literature review. *J Vocat Educ Train*. 2023;75(2):185-218.
- Fuchs M, Westermeyer J, Finken L, Pilz M. Training activities in subsidiaries of foreign multinational companies: Local embeddedness in Germany? *Int J Train Dev.* 2021;25(4):414-432.
- Sunesen ER, Hansen MM, Brown J. Characteristics and impacts of foreign-owned firms in Germany. In: *The impact of foreign-owned firms in the EU and Germany*. Bertelsmann Stiftung; 2020: 33-42.
- Pilz M. Initial Vocational Training from a Company Perspective: A Comparison of British and German In-House Training Cultures. *Vocat Learn.* 2009;2(1):57-74.
- Gerring J. Case selection for case-study analysis: Qualitative and quantitative techniques. In: Box-Steffensmeier JM, Brady HE, Collier D, eds. *The Oxford Handbook of Political Methodology*. Oxford University Press; 2008: 645-684.
- Pilz M, Li J. Tracing Teutonic footprints in VET around the world? The skills development strategies of German companies in the USA, China and India. *Eur J Train Dev.* 2014;38(8):745-763.
- Li J, Wiemann K, Shi W, Wang Y, Pilz M. Vocational education and training in Chinese and German companies in China: a "home international" comparison. *Int J Train Dev.* 2019;23(2):153-168.
- Shi W. Development of TVET in China: Issues and Challenges. In: Pilz M, ed. *The Future of Vocational Education and Training in a Changing World*. Springer; 2012: 85-95.
- Hao T, Pilz M. Attractiveness of VET in China: A study on secondary vocational students and their parents. J Educ Work. 2021;34(4):472-487.
- 22. Pilz M, Krisanthan B, Michalik B, Zenner L, Li J. Learning for life and/ or work—the status quo of pre-vocational education in India, China, Germany and the USA. *Res Compa Int Educ.* 2016;11(2):117-134.
- Pilz M, Chen P, Mies R, Rumpold H, Greimel-Fuhrmann B. Economic knowledge among pupils in Austria, India and China: Empirical evidence and cross-country comparison. *Res Comp Int Educ.* 2022;17(2):328-350.
- Guo H, Pilz M. A comparative study of teaching and learning in German and Chinese vocational education and training schools: A classroom observation study. *Res Comp Int Educ.* 2020;15(4):391-413.
- Chen P, Goncharova A, Pilz M. International Curriculum Comparison in Vocational Education and Training: A Collaborative Development of an Analysis Instrument. *Int J Res Voca Educ Train.* 2021;8(4):16-43.
- Busemeyer M, Trampusch C. The Comparative Political Economy of Collective Skill Formation. In: Busemeyer M, Trampusch C, eds. *The*

Political Economy of Collective Skill Formation. Oxford University Press; 2011: 3-38.

- 27. Fortwengel J, Gospel H, Toner P. Varieties of institutional renewal: the case of apprenticeship in the US, England, and Australia. J Voca Educ Train. 2021;73(1):71-94.
- Lahiff A, Li J, Zenner-Höffkes L, Unwin L, Pilz M. Industrial Standardisation as a Driver for Cross-national Convergence in Training Processes: Aviation Apprenticeships in England and Germany. *Eur J Train Dev.* 2019;43(7/8):752-766.
- Vogelsang B, Pilz M. Conditional factors for training activities in Chinese, Indian and Mexican subsidiaries of German companies. *Eur J Train Dev.* 2020;45(4/5):419-435.
- DiMaggio PJ, Powell WW. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *Am Sociol Rev.* 1983;48(2):147-160.
- Winterton J. Training, Development, and Competence. In: Boxall P, Purcell J, Wright P, eds. *The Oxford Handbook of Human Resource Management*. Oxford University Press; 2009: 324-343.
- Kostova T, Roth K, Dacin MT. Institutional Theory in the Study of Multinational Corporations: A Critique and New Directions. *Acad Manag Rev.* 2008;33(4):994-1006.
- Scott WR. Introduction: From Technology to Environment. In: Meyer JW, Scott WR, eds. Organizational Environments. Ritual and Rationality,

Updated edition. SAGE; 1992: 13-17+154.

- Scott WR, Meyer JW, Boli J. Institutional environments and organizations: Structural complexity and individualism. SAGE; 1994: 3.
- Kostova T, Roth K. Adoption of an Organizational Practice by Subsidiaries of Multinational Corporations: Institutional and Relational Effects. *Acad Manag J.* 2002;45(2):215-233.
- Gläser, J, Laudel G. On Interviewing "Good" and "Bad" Experts. In: Bogner A., Littig B., Menz W, eds. *Interviewing Experts: Research Methods Series*. Palgrave Macmillan; 2009:117-137.
- Kuckartz U, R\u00e4diker S. Qualitative Content Analysis: Methods, Practice and Software. 4th ed. Beltz Juventa: 2018.
- Scott WR. Institutions and organizations. Ideas, interests and identities. 4th ed. SAGE: 2014.
- Stavrou E, Parry E, Gooderham P, Morley M, Lazarova M. Institutional duality and human resource management practice in foreign subsidiaries of multinationals. *Hum Resour Manag J.* 2021;33(1):69-94.
- Zenner-Höffkes L, Harris R, Zirkle C, Pilz M. A comparative study of the expectations of SME employers recruiting young people in Germany, Australia and the United States. *Int J Train Dev.* 2021;25(2):124-143.
- Frommberger D, Porcher C. On the limited usefulness of comparative politics modelling for understanding VET systems. *J Voca Educ Train.* 2023. (Online first)