Chapter 18
Germany: The School Leadership Research Base in Germany

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Over the past two to three decades, issues related to school leadership have become increasingly relevant in Germany. Studies about school leadership have been conducted on the macro level (the school system level) and on the micro level (the teaching and learning level), which includes references to the meso level (the organisational level of an individual school). Nonetheless, there are research gaps regarding educational leadership action, leadership competences as well as development measures that are needed to improve school leadership and finally regarding the working conditions of school leaders. Despite the existence of a few studies before the 1990s, empirical research on school leadership has only recently increased in number. Since around 2000, the state of research on school leadership has been improving.

The German School System

The German school system is under federal control. At a national level, independence in matters of education and culture lies with each state due to the federal principle. This means that each of the 16 federal states (the German 'Länder') has an individual school system ensured by jurisdictional and administrational laws. Each education administration is organised in a more or less centralised way, encompassing school structure, school types, curricula, etc. These administrations also encompass educational-policy goals, different education and administration traditions and unique regional characteristics. The organisation of the education

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administration in the individual states is the same as the organisation of the general administration. Even now, it has not lost its bureaucratic character, which it received in the first half of the nineteenth century when schools were integrated into the general administration. The minister or senator is head with a succession of subordinate institutions, at the end of which the schools function as the lowest unit. In large states like Bavaria, North Rhine-Westphalia and Baden-Württemberg, there is a four-level administrative organisation including the ministry, the regional administration, the school offices on the level of counties or county-independent cities and finally the school leadership at school level. In city-states (like Bremen, Hamburg, Berlin) the organisation is less complex. In Hamburg, for example, only two levels of administration exist.

The school types and school careers differ among the individual states. They share, however, a relatively similar structure: a common compulsory elementary school until fourth or sixth grade; secondary schools are differentiated into compulsory technical or vocational schools, secondary modern schools, grammar schools, etc. There are a relatively small number of comprehensive schools (ca. 5 %).

In order to unify the variations that exist in each of the states, the Conference of Ministers of Education ('Kultusministerkonferenz', KMK) was established. The influence of the KMK is sometimes very high and sometimes very low as it depends on the subject of debate and its political dimensions.

The Principalship in Germany

Compared to school leaders in many other countries, school leaders in Germany have limited authority due to bureaucratic traditions. They are basically not responsible for staff employment and dismissal; they have hardly any influence on the schools' curricula and have only very limited financial resources. Even though there have been recent attempts to change this situation and to shift responsibilities, their authority is still restricted. Nevertheless, school leaders are responsible for enforcing regulations and for the daily management of school life and lessons. Above all, they are in charge of all administrative tasks. Furthermore, they are responsible for representing the school, which includes keeping in contact with neighbouring schools and institutions as well as the community. Recently, further school-based responsibilities are emerging as more and more states try to decentralise decision-making processes, usually shifting them from federal state system level towards the organisational school level. School-based management has so far only been implemented in nearly all federal states during the last 10 years. However, the degree of decision-making power as well as the resources located to the school varies from federal state to federal state. Generally speaking, particularly comparing Germany with other countries from the OECD, new public management is still not implemented to this extent. Hence, school leaders' influence is restricted as teachers are quite free to make didactical and methodical decisions in their own right. This is called the 'Institut der pädagogischen Freiheit' (pedagogical freedom); in some

federal states, this freedom is legally guaranteed to the teachers. Furthermore, it can be argued that the true decision-making body in school is actually the staff conference (or the school community conference which consists of teachers and parents). Decisions made in the staff conference are obligatory for the school leader to implement and follow. In most of the different types of schools, the school leader conducts the regular official assessments of teachers which is for some of them new as, for example, in primary schools this was done by the school inspectors The school leader's teaching obligation depends on the kind of school, the number of classes and the number of pupils in her or his school. In a grammar school with over 1,000 pupils, the teaching obligation of a school leader is at least two lessons per week (the maximum is at 11 h a week in certain states); teachers at grammar schools teach – depending on the state – 23–27 h a week. School leaders in elementary schools have considerably more lessons to teach. In Bavaria, for example, 50 % of elementary school leaders teach 18 h or more.

School leaders are supported by vice school leaders and by other staff (e.g. the senior management team) who take over specific tasks, such as devising lesson plans, school career counselling, extracurricular tutorship, etc.

Vacant school leadership positions are announced publicly. Applicants' backgrounds are checked including an assessment of their past achievements and their teaching skills. A basic precondition for being appointed as a school leader is teacher training for, and teaching experience in, the respective school type. Moreover, additional qualifications are an advantage. These could be things like previous experiences as deputy school leader, in senior management teams, experiences as an instructor, who was in charge of the induction phase of teacher training, etc. Mostly, however, the state examinations after teacher training as well as the regular official assessments by superiors are the deciding factors. The candidates who are evaluated as most suitable are appointed school leader for life in a tenure track position of a civil servant.

Review Methods

In order to evaluate the state of research in Germany, numerous sources have been used (see the review of Huber for the German-speaking countries as Germany, Austria, Switzerland and Liechtenstein, 2012). The literature survey by Huber (2003) served as a basic starting point. To gain an overview of studies from 2003 onwards, various relevant German-speaking databases such as GESIS and FORS were consulted. Additionally, various Internet search engines as well as associated tools such as 'Google Scholar' and 'Google Books' were searched.

The results provided by 'Google Books' were examined in the online catalogue of the research library in Erfurt/Gotha (Germany). Additional sources referenced by relevant journals were added to the research findings as well. Additionally, programmes of conferences in the German-speaking countries over the last decade

were researched, and findings (projects with explicit reference to school leadership) were included in the research overview.

Furthermore, relevant seminars and lectures of master's courses in Germany regarding leadership development possibilities within the field of education management were taken into account. Relevant studies presented during the school leadership symposia, organised by Huber in the years 2004, 2005, 2006 and 2009 (see www.Edulead.com and www.Schulleitungssymposium.net), were also included. Finally, around 40 colleagues working in the fields of school effectiveness, school improvement and school management were contacted in order to identify relevant studies in German-speaking context.

There may be further (theoretical and empirical) studies and also further evaluation studies; however, if they are not listed below, we were unable to identify them using the research methods described above.

Nevertheless, there are numerous studies in the field of education research that deal with school leadership (implicitly or explicitly), be it exclusively or along with other topics. Usually in empirical research about comprehensive schools or about specific school development projects, e.g. all-day schools, variables directly or indirectly linked to school leadership are collected, but they have not often been analysed with regard to a specific research question about school leadership (e.g. by Holtappels, see Holtappels 2004, 2007; Holtappels et al. 2008). Such studies have not been included in this survey.

Numerous smaller research projects about school leadership have been conducted in the context of master's courses for school leaders. Moreover, during other study courses at universities, several research-based papers (diploma theses, bachelor theses) have been written. These papers have not been included either, even though they may serve as a basis for PhD theses.

In this review, the studies are not presented in terms of a juxtaposition. Such a presentation following the criteria, (a) aim/research question, (b) methodological approach/design and (c) selected results, can be found on: www.bildungsmanagement.net/SL-Research. Instead, this review is structured according to several subjects deemed as central to the field of educational leadership research.

Research Base in Germany

Role, Functions, Tasks, Self-Concept, Attributes, Attitudes and the Workload of School Leadership

Among the few German research papers about school leadership from the 1980s to 1990s, the study by Nevermann (1982) is fundamental. It focused on the historical and legal aspects of school leadership.

Several studies around 1990 and 2000 focused on the role, tasks and the self-concept of school leaders. The job profiles of school leaders as well as the importance of their different tasks according to the time spent on them are usually the subject matter of older studies such as the non-representative study by Schmitz (1980), the representative survey of school leaders and teachers in Hessen by Haase and Rolff (1980), the qualitative study by Krüger (1983) and the analysis of school-internal administrative tasks of grammar school leaders in North Rhine-Westphalia by Wolfmeyer (1981).

Wissinger (1994) investigated the tasks of school leaders in Bavaria. Rosenbusch's (1994) formulation of a structurally disturbed relationship between school leaders and education authorities referred to the results of a study in Bavaria about the relationship between teachers, school leaders and education authorities. There were investigations by Baumert (1984) and Baumert and Leschinsky (1986) about the role definition of school leaders and a survey of newly appointed school leaders of secondary schools in Bavaria by Storath about how they define their roles (1994).

Rosenbusch et al. (2006) investigated the tasks of school leaders at Bavarian elementary schools and different types of secondary schools (Hauptschule and Realschule). In Lower Saxony, a job analysis was conducted (Vogel and Partner 2005).

Rosenbusch and Schlemmer (1997) researched the role of educational leadership in the context of new requirements for the individual school and its extended self-governance. Dalin and Rolff (1990) emphasised a dynamically and systemically oriented understanding of the school as an organisation with enhanced roles and tasks for school leaders. In the study by Neulinger (1990), the school leader was seen in a mediator and intermediator function. Thereby, the school leader was regarded as a system stabiliser rather than a system developer. Riedel (1998), however, in a comprehensive survey of school leaders of all of Berlin's public schools detected an overall agreement among the school leaders about the positive impact of decentralisation of responsibilities.

As part of the international research project 'Personnel Development as a Management Task of School Leaders', surveys of school leaders were conducted in Switzerland, Germany and Austria. Kansteiner-Schänzlin et al. (2012) published their results of the survey of school leaders from Baden-Württemberg (Germany).

The results of a study about the relationship between school leaders and teachers by Schmitz and Voreck (2006) showed that there was often a discrepancy between the expectations of school leaders and the fulfilment of those expectations by the teachers, especially in cases where the school leaders were predominantly committed to school administration and school rules.

In his theoretical paper, Szewczyk (2005) linked several approaches to describe and explain social change in order to identify areas of change and management processes of vocational schools.

In her theoretically oriented study, Spraul (2003) focused on school management, which requires navigating a tense relationship between educational tasks and

economic requirements. The author concluded that school leaders will increasingly have to take over management tasks. According to her, school management will hold a key position in the future regarding the strengthening and self-monitoring of the individual school. Furthermore, Spraul states that an integration of business practice methods is indispensable for the educational system.

Huber and Schneider (2007) provided a comparative overview of the changed descriptions of job requirements and job profiles of school leadership in all federal states of Germany. The results show that the central role of school leadership is becoming more and more focused on quality assurance and quality development. The recently established task profiles reflect the complexity of school leadership actions.

A study encompassing all 16 German state ministries (2008), published by the association 'Schule Wirtschaft' (School and Economy) and the Cologne Institute of Economic Research, also identified the school leader as a manager, comparing his/her role with the one in the business sector.

Harazd et al. (2009) identified teacher health care as a new task of school leaders. They illustrated how teacher stress can be reduced by health-oriented leadership action, which in turn increases school quality. Dadaczynski and Paul (2011) examined in an international online study, which importance school leaders ascribe to the mental health of teachers and students. Both studies will be presented in the next section as two of the exemplary projects described in more detail.

A study done by Bessoth (1982) focused on the school leader, her/his attitudes, interests and opinions as well as motives relevant to leadership. It was a standardised non-representative inquiry about the professional interests of school leadership personnel. Kischkel (1989) investigated work-related attitudes of school leaders and teachers holding leadership positions compared to those of teachers having no leadership or administrative tasks.

The self-concept of school leaders of all types of schools in Bavaria was the object of inquiry of a study by Wissinger (1996). Bonsen (2003) collected data about the conceptions of organisation and leadership of school leaders in North Rhine-Westphalia.

Languth (2006) studied the professional ethics of school leaders and classified five types of leaders: professional, resigning, programmatic, skeptical, and pragmatical. Warwas (2009, 2011) worked in a similar way by classifying school leaders in terms of performance types: generalist, teacher with administration tasks, educational leader, team leader and superior with educational responsibilities. Brauckmann (2014) analysed school leadership in the light of more autonomy on school level in decentralized German school systems.

In an explorative study, Hildebrandt (2008) examined the attitudes, actions and action sets of school leaders with regard to the learning processes of teachers over the course of their professional careers.

The self-concept of women in leadership roles was studied by Lutzau and Metz-Göckel (1996). Hoff (2005) compared the institutional backgrounds of individuals

in school leader careers in the 1960s and the 1990s. Using case studies, she was able to compare people in leadership roles by generation and by gender. In a theoretical paper, Stroot (2004) analysed the debate on women in leadership positions substantiating this debate with regard to the school context. Kansteiner-Schänzlin (2004) also researched gender issues regarding school leadership. Miller (2002) investigated the career of female school leaders in primary schools in North Rhine-Westphalia. One of the central findings was that female school leaders create networks in order to support each other.

Behr et al. (2003) interviewed school leaders of elementary and secondary schools about their workload and concluded that a high number of social conflicts, big schools and a high percentage of students with a foreign background intensify stress on school leaders. In 2013, Latk published 'The individual school system from a micro-political perspective' with particular regard to the role and function of the school leader.

In their school leadership study in the German-speaking countries, Huber (2013a, b), Huber and Reinhardt (2011) and Huber et al. (2013a, b, c, d) are currently analysing the work situation of school leaders in Germany (in four states: Baden-Württemberg, Saxony-Anhalt, Hesse and North Rhine-Westphalia) as well as in the German-speaking part of Switzerland; the study is also being carried out in Liechtenstein and Austria. This German-speaking school study in particular analyses person-related professional biographical as well as job context information, general aspects of stress as well as what school leaders like and what they experience as a burden. With a subsample, data about daily activities are gathered using an experience sampling approach with an end-of-day log. This study will be presented in the next section as one of the exemplary projects described in more detail.

School Leadership and the Effectiveness and Improvement of Schools

Since the turn of the century, research interests have turned towards the impact of school leadership on school effectiveness and improvement. Bonsen et al. (2002) analysed the causal relationship between school leadership and school quality, identifying goal-oriented leadership, innovativeness and perceived organisation skills as important features for successful school leadership. They presented, among other components, feedback as a central steering element of school leadership.

In the context of the PISA study, Rolff (2003) used the data collected for PISA in 2003 to further investigate the elements connected with school leadership. Wissinger (2002) compared the school leadership data of the results of the TIMS study and the PISA study.

Huber and Niederhuber (2004) interviewed teachers about their views on and experiences with school leadership impact following a succession in the school leadership.

Huber (2003) conducted a needs assessment for school leaders at schools in Berlin as preparation for the model project of self-governed schools. The results of this programme evaluation were presented by Huber (2006; recommendations were formulated by Huber et al. 2007).

Janke (2006) conducted a multi-level analysis on the social climate in schools from the perspective of teachers, school leaders and students. In the context of the Berlin project 'systematic classroom development by means of integrative quality management', a triangulative study 'leadership and educational quality development' has been conducted at vocational schools since 2008 (Wagner 2011). The study includes questionnaires about the perceived leadership action from the teachers' point of view as well as group discussions with leaders from individual schools about their understanding of leadership. In his effectiveness study about school leadership action in project schools of the region of Emsland, Lower Saxony, Lohmann researched the issue of quality of instruction by leadership (2013).

The introduction of a changed regulation procedure (new public management) was investigated between 2003 and 2006 by the joint project 'Governing of schools for adults in Hessen' (see www.rub.de/sfe-hessen). The implementation of this procedure was a particular challenge for school leaders, who were to a large extent responsible for its practical realisation – especially in mediating with the teachers' body. The effect on school management, therefore, was one of the central guiding questions of the project. Koch (2005) investigates in a quantitative analysis the structure of interweaving conditions that impact on the effectiveness of school leadership.

In the context of the evaluation of the project 'Self-Governing School', Rolff (2008) analysed school leadership and internal school organisation in North Rhine-Westphalia; Feldhoff and Rolff studied (2008) the effects of school leadership and steering group action and (2009) school leadership in self-governing schools.

Lämmerhirt (2011) analysed in his doctoral thesis the role and function of school leadership during the implementation (and institutionalisation) of innovation.

Huber and Muijs (2010) analysed school leader effectiveness within the context of international studies. Looking at the German context, Huber et al. (2011b) took into account regulation processes and change processes and focused on the role of school leadership and steering groups.

Huber et al. (2011a) compare studies in a meta-analysis, in which instruments that measure professional school leadership success are analysed. Their goal is to be able to present and compare different ways of operationalising 'school leadership success'.

Tulowitzki (2014) researched from a German researcher's perspective how French school leaders deal with school development issues and how much time they spend on school development.

Professionalisation of School Leadership: Leadership Development and Selection

There has been no specific research on the development and training of school leaders for a long time. Without current and concrete research about school leadership development, it is hardly possible to formulate well-grounded statements that can be used as a basis for creating programmes that meet current school leadership development needs let alone provide the basis for necessary modifications. For the 16 German federal states, Huber as early as in 1999 created a synopsis (juxtaposition), which makes the analysis of the leadership development practice in Germany possible (see Rosenbusch and Huber 2001; Huber 2002).

Aside from the school leadership development landscape in Germany, Huber (2003, 2004) also focused in a comparative study on the development of school leaders in 15 countries in Europe, Asia, Australia and North America. He identified changes across nations, tendencies of development and trends. From the analysis of the data, Huber generated a set of basic requirements for a development programme and provided recommendations for the design of future programmes.

Influenced by this prior research, conceptions of an ongoing professionalisation of educational leaders in schools, among others in Saxony, Saxony-Anhalt, Thuringia and Bremen as well as in the master's course school management at the University of Teacher Education Central Switzerland (PH Zug) have been created. These conceptions include measurements for the short-, medium- and long-term recruiting of new personnel as well as measurements of development and support for both newly appointed and experienced school leaders. As part of the development of the conception of the qualification of educational leaders for schools in Thuringia (2006), a needs analysis of the development and support for school leaders was conducted. The analysis and discussion of approaches to theories and considerations of the professionalisation of educational leaders in general (Huber and Schneider 2006) were the focus of two exploratory studies of the research group led by Huber.

Because studies show that school leadership is important for a decentralised development of the individual schools, the professionalisation of school leaders has become a key issue of educational politics. The OECD study Improving School Leadership took this aspect into account and organised national studies for the member states. Based on these reports, two extensive publications by the OECD in the form of a meta-analysis emerged. Austria took part in this study; Germany and Switzerland did not participate at that time. Huber functioned as an international expert for the study as a whole (Improving School Leadership, Volume 1: Policy and Practice) and worked on the case study about England (Huber et al. 2008: Improving School Leadership, Volume 2: Case Studies on System Leadership).

Witjes and Zimmermann (2009) carried out an evaluation of the project: 'school leadership coaching by senior experts in North Rhine-Westphalia', in which school leaders were taught about management knowledge by former or active leaders from the business world.

The criteria for the selection of school leadership personnel have barely been analysed at all in Germany up to this point. Hopes (1983) analysed the criteria for selection of school leaders, however, only for Hesse.

Rosenbusch et al. (2002) created a synopsis about the practice of personnel selection of school leaders in the German federal states. Huber and Gniechwitz (2006) actualised the synopsis. Huber and Pashiardis (2008) as well as Huber and Hiltmann (2010) investigated the international procedures and methods for the selection and recruitment of school leaders.

Huber and Hiltmann (2007, 2010) developed an online self-assessment tool for educational leaders (Competence Profile School Management, CPSM) based on psychological tests. The aim of CPSM is to offer a potential analysis for school leadership which serves as an orientation for teachers who are interested in school leadership tasks or as a basis for clarifying personal strengths and weaknesses for newly appointed and experienced members of school leadership teams. In close connection to the competence profile stands the interest-focused questionnaire by Huber and Zois (2011) and Huber et al. (2011e) for future school leaders.

Hancock and Müller (2010) compare the influence of possible motivators and inhibitors that impact teachers' decisions to become principals in the USA and in Germany.

The perception of school leaders of the professional development of teachers was examined by Huber et al. (2011c) in a study of all continuous professional development means in Saxony-Anhalt.

Gibitz and Roediger (2005) also used a potential analysis as an instrument for the recruitment of educational leaders in Hesse. They did so by highlighting a number of core competences for future school leaders and developing exercises to train them.

Huber (2010a, b) and Huber et al. (2011d) evaluated leadership development programmes in Bremen, Saxony, Saxony-Anhalt and Thuringia. For this, a theoretical frame model for theory-based empiric research was developed (Huber 2009b; Huber and Radisch 2010). This model forms the basis for several qualitative and quantitative evaluations, which besides the participants' point of view also include the opinions of the trainers (organisers, training staff) and the people responsible. The quality of teaching and learning arrangements are thus evaluated, as are individual learning processes and the transfer into practice.

Tenberg and Pfister (2012) investigate leadership approaches and theories with regard to their applicability to the structures of vocational schools, in order to collect in a standardised inquiry precise data about the wish of teachers in vocational schools to apply for leadership positions.

Exemplary Projects in More Detail

Project 'School Leadership Study 2012 in Germany, Austria, Switzerland and Liechtenstein: Job Preferences and Job Strains in School Leadership Practices'

This study in the German-speaking countries by Huber (2013a, b) and Huber et al. (2013a, b, c, d) aims to gain empirical insights in the work setting of school leaders. Its goal is to demonstrate which of their professional activities school leaders like to do (preferences) and which are a strain on them (strains). Moreover individual factors (e.g. aspects of one's occupational biography) as well as institutional factors (e.g. conditions of the work setting) were tested as predictors of job strain. For operationalisation purposes, Huber's (2008, 2009a, b) model of school leadership practices was used, and Böhm-Kasper's (2004) model of school-related strain was adapted to the contextual specifics of school leadership.

The School Leadership Study is conducted in the following steps:

1. An exploratory study comprising 20 individual interviews with school leaders of all school types was conducted to identify relevant factors that were to be inquired in the written survey.
2. A general inquiry using a web-based questionnaire. It focused on, e.g. the occupational biography, the school-related work setting and general and specific stressful work life conditions.
3. In the third step, the daily professional practices and activities of school leaders were recorded via an end-of-day log covering three work weeks distributed across the school year (in which the participants entered their activities during the day every evening, indicating what they had done, when, with whom, for how long and where).
4. In the fourth step, interviews were conducted with school leaders focusing on the one hand on areas of pressure and tension in school leadership practice, which may lead to strong stress experiences and on the other hand on the interrelations of stress patterns of highly strained school leaders.
5. In a further step, job profile analyses were conducted, to investigate into national and regional-specific (i.e. federal states or cantons) demands on school leadership.

Altogether 5,394 school leaders participated in the general inquiry (which is a response rate of 49 %). The sample consisted of 3,764 school leaders from Germany, 741 from Austria and 889 from Switzerland and Liechtenstein. The school leaders are between 25 and 66 years old ($M = 52.45$; $SD = 7.75$). For the analysis of quantitative data, structure equation modelling and path analysis were used.

The analysis of the specific strain experiences, which is the strain by specific activities, types of activities and areas of practices clearly gives evidence that organisational and administrative activities are perceived as particularly stressful and disliked most. Activities closely connected with teaching and education (such as teaching in a class, talking with students, exchange with colleagues, one's own professional development) proved to be very popular and were perceived as only little stressful. The same pattern can be found in the analysis of the types of activities: all school leaders experience activities that are close to education, close to classroom teaching and professional exchange with colleagues as less stressful than others.

In general it can be stated: school leaders who experience an activity as stressful do not like to perform this activity as much as activities perceived as not (or less) stressful, which, in turn, are more popular. However, there are also some exceptions, which theoretically speaking makes sense because even activities you like can lead to stress.

However, the following tendency has become obvious: tasks that belong to the traditional range of tasks of teachers are more popular among school leaders and are experienced as less stressful than tasks that have been added to school leadership responsibilities only recently through changes in the school system as a consequence of decentralisation (new public management). Compared to their Swiss colleagues, German school leaders demonstrate a lower job satisfaction and a higher occupational stress and emotional exhaustion.

A path-model was conducted to analyse the predictors of job strain and job satisfaction. We found a model, which fits the data well. Emotional exhaustion and occupational stress were used as operationalisation for job strain (Fig. 18.2). A multigroup analysis proofed the model to be valid for school leaders in Germany and Austria as well as in Switzerland and Lichtenstein. The analysis of the conditioning factors for job strain as well as job satisfaction showed the strongest effects for the individual stress resilience and the social support by colleagues. The higher the individual stress resilience and the higher the social support by colleagues are, the lower the individual's occupational stress and emotional exhaustion are perceived to be, and the higher the job satisfaction experienced by school leaders is. Beyond, a good infrastructure can help to reduce the job strain of school leaders. Interestingly, a high motivation for the job is related to higher levels of job strain. School leaders, which are highly motivated, seem to ask too much of themselves. A good social climate predicts less job strain, as well a higher job satisfaction. However the social support by colleagues is more important than the social climate at the work place concerning both, job strain and job satisfaction.

The findings of the end-of-day log show that organisational and administrative activities require most of the time of a school leader's work day. School leaders invest on average a third of their time in these activities. About a quarter of the time is used for activities concerning one's own class room teaching with huge variation according to the size and type of school (elementary/secondary). With nearly 1 h per day, education and guidance and personnel are in the midrange.
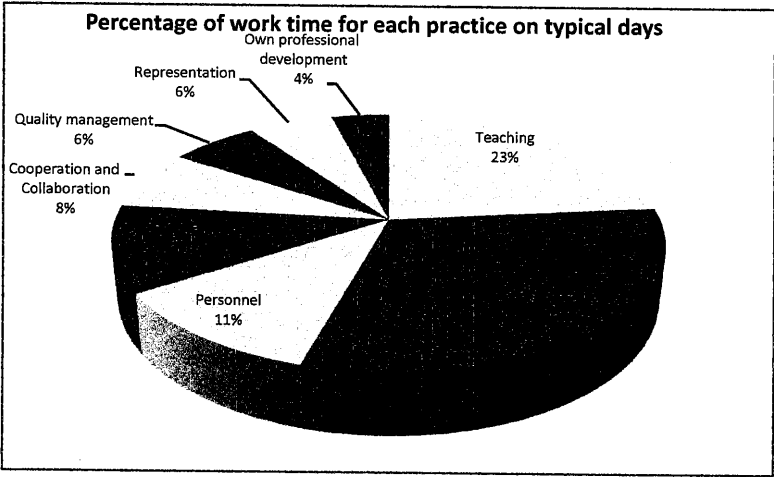
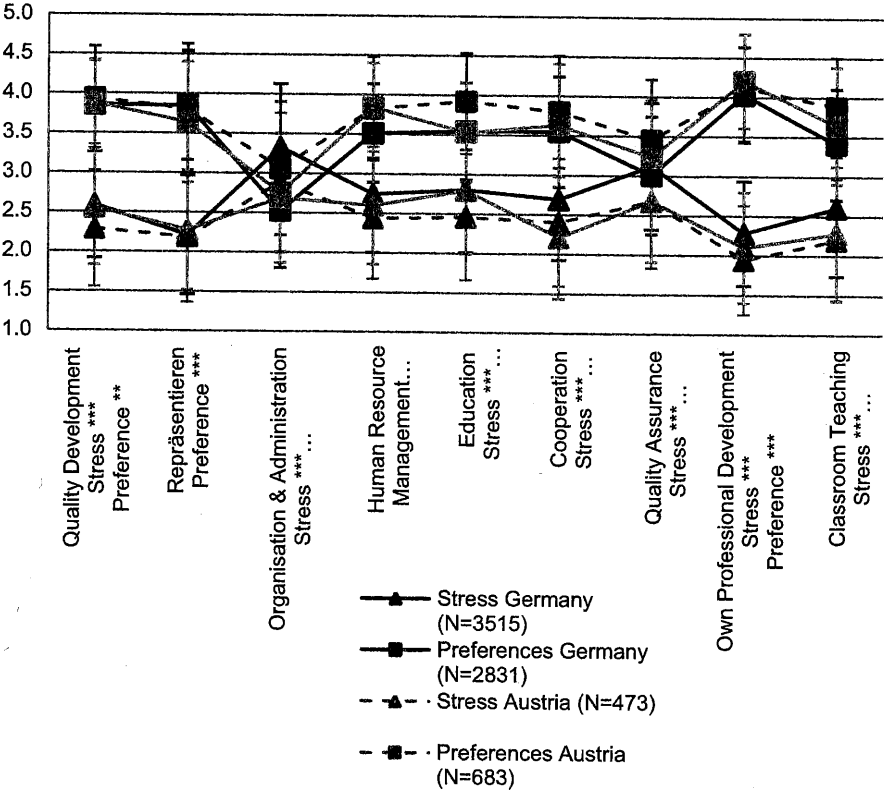**Fig. 18.1** Percentage of work time for each practice on typical days

Fig. 18.2 Comparison between preferences and stress in the different fields of activities in Germany, Austria and Switzerland

Project 'Mental Health of Teachers and Students in the Perception of School Leaders'

The international study about school leaders deals with mental health and well-being. It is application oriented and is based on a cooperation of the International Alliance for Child and Adolescent Mental Health and Schools (Intercamhs) and the International Confederation of Principals (ICP). This summary presents the results of the German part of the study by Dadaczynski and Paulus (2011).

The goal of the study is to measure perceptions and attitudes of school leaders concerning the mental health of pupils and teachers of their schools. It also aims at finding out which support requirements the respondents have.

Eight hundred forty school leaders took part in the quantitative survey, which was conducted via an online questionnaire. The data were collected between September 2008 and December 2008. Besides socio-demographic aspects, the survey covered subjective perceptions of mental problems of pupils and teachers from the viewpoint of the school leaders. School leaders were asked to rate the importance of selected mental problems on a 5-stage scale. Furthermore, the school leaders were asked to rate the relevance (regarding their practical work) of different resources for different subject areas of mental health. The selection of those subject areas was based on a holistic approach of health promotion in schools. This approach encompassed behaviour-related aspects, environmental preventive measures and included fields of the school environment.

The results show that externalising problems are jugded as more significant than internalising problems. Those supporting resources that offer concrete help for the schools are seen as most helpful by the school leaders. The ANOVA shows a main effect for gender. After the exclusion of the primary schools, where the distribution of gender is very uneven, internalising mental problems of pupils are jugded as more relevant by female school leaders compared to male school leaders. The resources for support 'concrete help for schools' and 'health-promoting school development' are rated as more important by the female school leaders.

The authors attribute the fact that externalising mental problems are perceived as more important than internalising mental problems to the fact that internalising problems are rather hidden problems. Besides, the authors explain this result by pointing out the fact that externalising problems are more relevant in the school's logic, because they impede successful work. The authors assume that school leaders underestimate internalising problems. Dadaczynski and Paulus presume that possible causes might be a lack of diagnostic competence or a low level of interconnectedness with relevant persons like school psychologists or students' counsellors. This corresponds with the fact that school leaders wish for more competences in the early diagnosis of symptoms of mental problems and see cooperation with school external partners as a potential support.

Project 'Health Management in Schools'

Published in 2009, Health Management in Schools – Teachers' Health – a New School Leadership Task by Harazd, Gieske and Rolff is part of the cooperation project 'effect of new leadership concepts on the quality of schools' of the Institute for School Development Research (IFS) at TU Dortmund University. This research project is funded by the Unfallkasse NRW, an insurance company. The main focus of the project is to determine the effects of school leadership on the quality of schools and the health of teachers. Furthermore, it describes and compares the experience of stress in various tasks of school leaders and teachers.

The study uses a quantitative as well as a qualitative approach. School leaders and teachers of 125 schools filled in an online questionnaire. This group consists of 33 primary schools, 24 secondary schools, 23 comprehensive schools and 45 vocational colleges. In advance, 32 school leaders were interviewed. In total, 3,359 teachers and 118 school leaders in North Rhine-Westphalia participated in this study.

In order to measure emotional exhaustion as a negative consequence of stress, a shortened version of the Maslach Burnout Inventory was used (translation by Barth). As a result, school leaders are less emotionally exhausted than teachers. Positive consequences of stress were also part of this study, operationalised by the emotional, physical and cognitive well-being as a part of the WHO-5 well-being index. Again the school leaders showed significantly better values than the teachers. The authors of this research assume potential reasons: school leaders may have more offensive strategies to solve problems, fewer tendencies towards resignation, a much stronger ability to distance themselves from the workload, a greater autonomy or a more diverse range of tasks. Another reason could be the assumption that particularly teachers with an effective health management aspire school leadership positions. In addition, the impacts of various tasks were analysed. The authors conclude that school leaders are most of all stressed by administrative tasks and the implementation of ministerial regulations.

The assessment of various tasks is different with regard to the school type. First of all, school leaders at primary schools differ from those of other school types: primary school leaders describe tasks such as cooperation with parents, public relations, administrative tasks or human resource management as more difficult and exhausting than secondary school leaders do.

The authors also identified a correlation between the experience of stress made by the teachers and actions of the school leaders: the teachers' experience of stress is directly or indirectly influenced by the work of the school leader. Various aspects that influence the quality of a school also are important for a healthy school. These aspects are in particular clear objectives, an orderly learning environment, participation, cooperation, transparency, social support and feedback. In particular, salutogenic leadership is regarded by the authors as promoting teachers' health. Besides,

personal resources such as the expectation of self-efficacy can be influenced by the working conditions and are crucial for dealing with stress. Harazd et al. (2009) conclude that school management that offers the features mentioned above has both a positive influence on the effectiveness of the school and the health of the teachers.

Conclusion

Research in the field of school leadership has a relatively young tradition in Germany as in all German-speaking countries (as it does in many other countries, too). Since 2000, the research base has improved. In particular, the research teams of Rosenbusch, Rolff, Wissinger, Huber and Bonsen have published several studies on school leadership. Aside from the research by these researchers, most of the studies have been undertaken by researchers who only did one study as a qualification study. Unfortunately, groups who could use an interdisciplinary approach, such as research consortia, for example, seem rather scarce in the German-speaking countries.

However, a certain degree of internationality can be seen, and the international literature is increasingly being used to inform research into school leadership in Germany as well as in all German-speaking countries. It is also noticeable that funding for research programmes with a focus on school leadership/school management is extremely scarce or not existing at all.

This article is based on a literature review in all German-speaking countries, which comprised 119 studies. For this review, 80 studies from Germany were used (see also Table 18.1). Apart from these studies, there are further studies with different research questions, which along with their primary focus either implicitly or explicitly include school leadership. As stated before, such studies have not been included in this article.

In comparison with other German-speaking countries, it seems noteworthy that quantitatively more research has been conducted in Germany. However, given the size of this country, there are relatively speaking not that many more research projects. In the area of role, functions, tasks, self-concepts, attributes and attitudes, the difference in numbers is higher. Hence, we can assume that in Germany, more research is conducted in this area than in other German-speaking countries.

Table 18.1 Areas of School Leadership Research and Number of Studies

Area	Number of Studies
Role, functions, tasks, self-concept, attributes, attitudes and the workload of school leadership	39
School leadership and the effectiveness and improvement of schools	18
Professionalisation of school leadership: leadership development and selection	23

In the 1970–1990s, issues such as the role, functions, tasks, self-concepts, attributes and attitudes of school leadership prevailed. Besides, school leaders' relationship with the staff, legal aspects of school leadership and gender aspects have been focused on. Still scarce are studies regarding the effectiveness of school leadership. Research into the development, the workload and the health of school leaders has not been a focus so far. Evaluations of development programmes have always been conducted, yet mostly not been published.

The role of school leadership in large German states with different governance models, self-governing schools and education regions, new governance models with school networks and cooperations with other education institutions and non-formal education is an issue that needs more attention. In contrast to Switzerland, large systems should be looked at more closely. Small schools, however, deserve more attention as well.

Also deserving of more extensive research is the largely untapped field of differences between the states in Germany. As the federal states and their education systems differ, there is a high potential for learning from these variations. At the same time, the many differences and the fact that each state's education system evolves at its own pace (with political shifts sometimes causing sudden, unforeseen changes) might well act as a deterrent for researchers.

As Germany historically used to have several secondary school types, a lot of the research was focused on the different school types. This seems to be no longer the case with more and more research happening across various school types or being conducted within one type of school, but focussing on a general research subject (going beyond that type of school).

A rather new field of educational development and of educational research is shaped by the growing number school working more closely and systematically together with other schools as well as other institutions. Popular terms in this context are 'school networks' (when several schools link up together to create a better, more coherent learning environment) and 'educational landscapes' or networked systems (when schools and other education and non-education institutions link up to create a better more coherent learning environment). Of particular interest for researchers are questions of successful implementation (how can these networks be created successfully?) and effectiveness (are educational networks successful and under which conditions and how?).

The research desiderata that exist internationally (see below) also hold true for the German-speaking countries. Moreover, results from international research (particularly from the Anglo-American context) certainly cannot be simply adopted and applied, but they can be used for conducting replicative studies. This would be a rewarding and challenging task as when it comes to adapting the research instruments, for example, simply translating them into German would of course be insufficient. Such replicative studies could provide interesting comparative perspectives.

Based on this brief research review, further research desiderata become apparent, which will be outlined briefly:

There is still some need for further basic research into tasks of and demands on school leadership in German-speaking countries. Among these should be surveys and possibly observational studies of school leadership recognised as 'good' and 'bad' according to various outcome criteria on the organisation level as well as the individual level by teachers and pupils, for example. Of particular interest is the impact of school leadership on improving teaching and learning. Teaching and learning, or education and instruction, are the core activities of schools. In terms of an organisational-educational approach, it is from this that the core purpose of school leadership must be derived: what should school leadership activities be like in order to have the best possible effect on classroom instruction in a twofold sense; providing the best possible organisational conditions on the one hand and having an (immediate) effect on classroom instruction and classroom development on the other hand?

Moreover, research on stress, burn-out, and on coping strategies of school leaders is needed. In addition, research about school leaders' values, interests, the tasks they like and how all this is linked to various other factors such as personal aspects or elements of the organisational context could be illuminating and also how this is changing over time as school leadership is professionalised (moving away from 'primus inter pares' to professional leadership and management with high decision-making power).

It is necessary to conduct analyses regarding the training and development needs of school leaders at different career steps and in different school contexts. Specific research has to be carried out to determine the ways school leaders develop competences which lead to successful leadership with a high impact on key variables. How do they generate knowledge? How do they develop expertise? How can the transition of the knowledge acquired in the development programme into practice be improved? How does this change across the various career stages? What is considered helpful? International comparative studies, particularly concerning the effectiveness of programmes should be conducted. This will provide insights in the quality and sustainability of development programmes. A standardised research design would be desirable not only for a meta-study in this context. There should also be educational-economic studies on the efficiency of training and development programmes. These could provide information for educational-policy decisions concerning the overall efforts taken. Moreover, it would be interesting to investigate how the development of individual school leaders could be linked effectively to the development of individual schools in terms of qualifying school leadership teams and other change agents in the individual schools (including studies of schools that have realised alternative leadership possibilities such as shared leadership, etc.).

The importance of researching the selection and recruitment of school leaders and its connection with school leader development should be emphasised.

Obviously, much more can be researched; it is about specific issues of research within the different academic disciplines which can be applied in the specific field. Psychology emphasises social aspects, motivation, decision-making processes,

contingency issues, etc. Other disciplines such as sociology or political sciences or economics or others will have fruitful research questions and additional fields and approaches.

That the research base is not as strong as one might expect reflects not just a dearth of research but also deficiencies in research designs. Moreover, as to the data we have so far, there is a strong overreliance of self-report in leadership studies in the German-speaking countries where the most common form of research design is either a survey or interviews, usually of a limited number of school leaders. Studies are almost always post hoc, trying to work backwards with a retrospective view on the research object. This practice is clearly limited. Both survey- and interview-based methodologies, while highly useful, have some severe limitations, when used as the sole means of data collection. Post hoc interviews are heavily prone to attributional bias (the tendency to attribute to ourselves positive outcomes, while negative outcomes are externally attributed), as well as to self-presentation bias and interviewer expectancy effects (the tendency to give those answers that might be expected by the interviewer).

Survey questionnaires are likewise limited, especially where they are cross-sectional, as only correlational data can be collected. The issues of expectancy effects and bias exist here as well, as does attributional bias, for example. These limitations mean it is often hard to make strong statements either about impact or about processes.

The quantitative methodologies used need to be longitudinal more often and to take advantage of quasi-experimental designs and even of field trials of new leadership methods. Moreover, there is a need to gather data not only from the school leaders but also from teachers and others (to add additional views from an external perception to the self-reports from a self-perception).

Additionally, observations, although cost intensive and not easy to implement as they most often intervene with the day-to-day practice which should be observed, might help move research towards multi-perspectivity and triangulation.

Qualitative approaches likewise need to be more multi-perspective and longitudinal. They need to employ methods and instruments that allow more in-depth interrogation of processes such as ethnographic studies and genuine long-term case studies as well as the methods currently being used.

Researchers have begun developing mixed methods designs. Combining different approaches can in many ways be fruitful either in an explanative or in an explanatory way. Firstly, it is clear that researchers and scholars within the field of educational leadership need to be more explicit about the theories applied, the constructs used, and to have a conceptual awareness, meaning that the underlying assumptions guiding the research are identified. What is obvious is that the complexity of leadership processes and their impact require the use of research designs which take this complexity into account. The research needs to be conducted in a coherent way, integrating research questions, conceptual framework, methods, analysis and conclusions and critically engaging in a discussion of the research results, including the limitations of the study conducted and the implications for leadership practice (see Yanchar and Williams 2006).

It is also interesting to see how alternative data-gathering methods might illuminate the complexity of organisation and leadership context, as, e.g. Huber (2008, 2009b) uses Social Network Analysis, Life Curve Analysis, such as pictures and metaphors.

In addition to more complex data-gathering methods, there is also a need for more refined methods of data analysis such as multi-level, growth models, structure equation modelling.

Moreover, research that takes the context and the contingency into account needs to be undertaken. However, these expected pieces of research are highly demanding. There are obvious contextual differences in terms of leadership such as the extent of autonomy school leaders have within the educational system, their appointment and selection criteria and many other less easily accessible cultural differences. It is about the culture of organisations and systems and the more general professional and general culture of a field and of countries. Carefully designed comparisons with other fields and other countries between the German-speaking countries as well as between other European and non-European countries would be very illuminating.

This means that the tendency to move straight to prescription becomes potentially even more harmful where the research base is from an entirely different (cultural) context, where school leadership will operate under different circumstances and conditions.

To summarise: while leadership research has made important contributions to the field of education, which have had practical benefits, if we are genuinely to move both research and practice forward, we need to perform more rigorous quantitative and qualitative research, aimed at both measuring impact and exploring processes, taking into account the complexity of schools as organisations and refraining from an overly prescriptive approach that, on the basis of very limited research, posits absolute truths about good practice. Last but not least, we need to create better 'fits' of theories, empirical research and experienced practice. Hence, besides all methodological and methodical questions and desired modified research practice, there is also a need to refine theoretical models and theories (whether with a very focused or with a broader approach). Empirical research should lead to further developed theories, and theoretical assumptions should guide further empirical work.

Obviously, feasibility is also restricting the research (our own and that and of our colleagues), and therefore the research designs should have the appropriate funding to make new kinds of research possible. Proper funding for research is an important aspect. There is a clear need for research grants which are large enough to allow cooperative research arrangements and to develop more sophisticated multi-perspective and longitudinal research designs.

National and international experiences should be considered and integrated, and international research cooperations should be promoted. As a basis for this, national and international networks should be developed further. In these networks, educationalists and practitioners should have a forum for the exchange of ideas and for cooperation.

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