School Principals' Work Stress in an Era of New Education Governance

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Abstract: The worldwide implementation of school governance reforms over the last decades has changed the function and roles of school principals. Now identified as key players, these changes expose them to new health risks. International research has established the principalship to be highly demanding and stressful. This study addresses work stress, its main causes and coping strategies among school principals in French-speaking Switzerland. While they are most frequently bothered by time stressors, coping efforts are primarily directed at reducing or preventing conflictual interpersonal relations.

Keywords: education governance, school principal, professional stress, coping strategies

Le stress au travail des directeurs d'école au temps de la nouvelle gouvernance éducative

Résumé: Les réformes de la gouvernance éducative qu'on observe autour du monde ont transformé la fonction et le rôle des directeurs scolaires. Désormais identifiés comme acteurs clés, ce changement introduit aussi des risques pour leur santé. La littérature internationale désigne en effet la direction scolaire comme étant exigeante et stressante. Cette étude porte sur le stress au travail, ses principales causes et les stratégies d'ajustement des directeurs en Suisse romande. Alors qu'ils soient le plus souvent dérangés par des stresseurs liés au temps, leurs efforts d'ajustement visent d'abord à réduire ou empêcher les conflits interpersonnels.

Mots-clés: gouvernance éducative, directeur scolaire, stress professionnel, stratégies d'ajustement

Arbeitsstress von Schulleitern in der Ära der neuen Schulgovernance

Zusammenfassung: Die in mehreren Ländern beobachteten Reformen der Bildungspolitik hat die Funktion und Rolle der Schulleiter verändert, die nun als Schlüsselpersonen identifiziert wurden. Dieser Wandel bringt jedoch auch neue Gesundheitsrisiken mit sich. In der Tat wird in der internationalen Literatur die Schulleitung als sehr anspruchsvoll und stressig bezeichnet. Diese Studie befasst sich mit Arbeitsstress, seinen Hauptursachen und Bewältigungsstrategien bei Schulleitern in der Westschweiz. Während sie am häufigsten durch zeitliche Stressoren gestört werden, zielen ihre Anpassungsmaßnahmen in erster Linie darauf ab, zwischenmenschliche Konflikte zu reduzieren oder zu verhindern.

Schlüsselwörter: Schulgovernance, Schulleiter, Arbeitsstress, Bewältigungsstrategien

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1   Introduction

Over the last few decades, many countries around the world have pursued reforms of their education systems, altogether with varying modalities and progress depending on the country. On the one hand, we have been witnessing a trend towards increasing globalisation of education policies, one in which school systems are progressively harmonising their objectives and structures, while being enrolled in procedures to allow for the comparison of their performance. This so-called "transnational regulation" (Barroso 2005) derives from the various discourses, instruments, indicators and standards defined by international bodies such as the OECD, the World Bank or the Council of Europe and results in some sort of contamination, a borrowing of models and policies implemented in other education systems.

Under its influence, several countries have simultaneously set in motion a seemingly contradictory process of decentralisation of their education systems, thus transferring decision-making powers to lower organisational levels, promoting school autonomy and, consequently, assigning responsibility and accountability of the actors working within them (Barroso 2000; Maroy 2005; Mons 2007). The rationale behind these decentralisation efforts is the promise that, by bringing decision-making closer to the actual school sites, educational services provided will be more effective and efficient. Local decision-making would allow for a better understanding of local needs and tailor-made responses to meet these needs. In addition, it may foster the diversification of the educational offer, if not competition between schools, which is, rightly or wrongly, expected to reduce persistent inequalities (Felouzis et al. 2013). And finally, school autonomy would encourage teacher (and, in some cases, student) participation in decision-making processes, as well as parental and community involvement in school life (Duru-Bellat and Meuret 2001).

Switzerland has also known its share of school governance reforms, although in a somewhat different direction (Huber 2011; Mons 2007). As a multilingual and federalist country, responsibility for compulsory education in Switzerland lies primarily with the 26 cantons, each canton having its own parliament, legislation, State Councillor and/or department responsible for education. Ever since the 1970s, Swiss cantons have made consistent efforts, though, to strengthen coordination and cooperation at the federal level, as well as between cantons belonging to the different linguistic communities. These efforts are exemplified by the ratification in 2006 of the HarmoS concordat, an intercantonal agreement that obliges acceding cantons, among other things, to align the structure and objectives of compulsory education. Reforms of the Swiss education system, unlike those in "newly" decentralised countries, thus are partially characterised by a centralising trend. Switzerland does nevertheless subscribe to the common trend of promoting more local decision-making by granting schools more autonomy and responsibility.

As the playing field changes, so do the players. Indeed, these important changes in school governance cannot remain without its consequences for the functions and roles of education professionals. This is particularly true for school principals, who, both in Switzerland and elsewhere, are now more than ever identified as key players in school performance and student success (e. g., Hallinger and Heck 1998; Pont et al. 2008). School principals have always been and still are expected to be effective school site *managers*, but this no longer seems enough (Murphy et al. 2000). Today's school principals are also expected to act as *leaders*, to successfully implement reforms imposed from the outside and conceive improvement strategies from the bottom-up. And although these changes may be embraced by many as a challenge and an opportunity for personal and professional growth, they also introduce new risks, not in the least for school principals' health.

2 Besieged: The School Principal under Pressure

Ever since the 1980s, international literature on education leadership tells us that the school principal is "at risk" (DeLuca et al. 1997), and that the school principal-ship has become "a job too big for one" (Grubb and Flessa 2006) or, according to Nora Carr (2003), "the toughest job in America today." In the same regard, Rich (2010) warns against the overwhelming duties and responsibilities school principals are facing in French-speaking countries as well. In fact, all over the world, school systems are experiencing difficulties to find and recruit qualified candidates, to keep them in place and, in good health. These difficulties are mainly attributed to the sheer volume, scope and complexity of school principals' tasks and responsibilities as well as of the expectations towards them and can eventually lead to frustration, fatigue, if not physical and emotional exhaustion (Whitaker 2003; Chapman 2005).

Past research on occupational health of school principals has primarily focused on work stress and mostly reports moderate to high levels of stress. For instance, in an Australian study on principal health and wellbeing (Riley 2018), principals are reported to experience significantly higher levels of stress symptoms (1.7 times higher) and cognitive stress (1.5 times) when compared to the general population. In a study involving head teachers from 36 primary schools in West Midlands-East Anglia region, 55% of the respondents considered their job very or extremely stressful, and 88% reported feeling stressed most of the time (Chaplain 2001). Cubitt and Burt (2002) carried out a study examining the relationship between leadership style, loneliness and stress in a sample of 293 New Zealand primary school principals and they found that 89% of respondents considered their job stressful. In a study involving Irish primary school principals (Darmody and Smyth 2016), 70% of the respondents reported feeling stressed by their job. Similar results have been found in the United States. Boyland (2011) surveyed 193 Indiana elementary school

principals, of which 38.5% reported high job stress. Of the 212 Florida school principals who participated in Chandler's study (2001), 45% reported high levels of work stress. In a study of 414 Maine school principals, 85% of the respondents thought their job was stressful and 51% feared excessive job demands would lead to exhaustion, if not burnout (Buckingham et al. 2005).

What causes these relatively high levels of work stress among school principals? Professional isolation and work overload were the main culprits in the Cubitt and Burt study (2002) on New Zealand school principals. An excessive workload was also the main cause of stress for Australian (Riley 2018) and English (Chaplain 2001) school principals, although the latter also mentioned role conflicts and handling relationships with (teaching) staff as major stressors. And much alike their New Zealand counterparts, Maine school principals were mostly troubled by professional isolation, unrealistic expectations, an excessive workload and a perceived lack of recognition and proper reward (Buckingham 2004).

In order to identify school principals' occupational stressors, numerous studies, mostly carried out in North America, have used the Administration Stress Index, a questionnaire developed by Gmelch and Swent (1981; 1982; Swent and Gmelch 1977) for this specific purpose (cf. infra). Results of their survey of 1156 Oregon school administrators and of consecutive surveys in, among others, Pennsylvania (Czerniakowski 1995), South (Flynn 2000) and North Carolina (Welmers 2005) consistently indicate that school principals are above all troubled by administrative constraints, a category of stressors mainly related to time. School principals thus feel that meetings are time-consuming, that they have too much to do in too little time, that meeting deadlines is cumbersome, that they have to spend too much time on outside school activities and finally, that their work time is too frequently interrupted. These findings are echoed outside of the United States. After surveying 641 school principals in British Columbia, Allison (1995) establishes administrative constraints to be the most bothersome category of stressors and another more recent Canadian study (Poirel 2009) comes to the same conclusion with regard to occupational stressors among school principals in the province of Quebec. The only exception seems to be a study of 50 principals of secondary schools in Kuala Lumpur carried out by Abdul Muthalib (2003) where administrative responsibilities precede administrative constraints as the most important stressor category.

There exists today a broad consensus about the existence of multiple direct and indirect ways in which work stress may affect individual and organisational health. These associations have also been found in research on occupational stress among school principals. For instance, using the Maslach Burnout Inventory (Maslach and Jackson 1986) to investigate the consequences of occupational stress on school principals' health, several studies (e. g., Whitaker 1992; Czerniakowski 1995; Flynn 2000) all come to the same worrisome conclusion: a varying, but important number of school principals suffer from moderate to high levels of emotional exhaustion

and depersonalisation, even though most of them also experience high levels of personal accomplishment. Furthermore, Australia (Gronn and Rawlings-Sanaei 2003), France (Dutercq 2012), Germany (Weber et al. 2005), and the United States (Whitaker 2003; Gadja and Militello 2008; Hewitt et al. 2011) are some among many countries facing increasing difficulties in finding, recruiting and retaining qualified people willing to take up the job of school principal due to its stressful nature. In Allison's survey (1995) of school principals in British Columbia, for instance, 46% of respondents had thought about quitting their job in the past year because of high levels of stress and 26% of participants in a Colorado study (Whitaker 1992) did not plan on staying on the job up until the age of retirement for that reason. These findings are particularly bothersome in light of the recent emphasis placed on the principal's role in school effectiveness and success.

This brief review of the international literature on school principals' occupational stress thus establishes principalship as a stressful job. To our knowledge, research into work stress among Swiss school principals is relatively scarce and the few studies that we know of mainly concern the German-speaking part of Switzerland (e. g., Wiederkehr 1998; Nido et al. 2008; Huber et al. 2013). Furthermore, the findings of these studies give us very little reason to believe that school principalship in Switzerland may be an exception to the worldwide trend of being highly demanding and stressful. The aim of this study is therefore to advance our knowledge about work stress among school principals in French-speaking Switzerland by examining its main causes and the ways school principals try and deal with them.

3   Work Stress

Ever since Selye's pioneering work, (work) stress has received increasing attention, both scientific as by the large public. According to Selye (1936; 1946), the human body, as any biological organism, will initially respond to a harmful stimulus by an almost instantaneous physiological reaction (i.e., the alarm stage). As exposure to the aggression continues, the body enters a resistance phase and will draw on its adaptive resources to restore its normal functioning. Continued exposure to a sufficiently harmful stimulus may, however, lead to the depletion of these adaptive resources, and the body will thus enter the stage of exhaustion. At this point, its initial adaptation will be reversed, and it will become prone to adverse health effects. Selye initially coined this three-stage response the "General Adaptation Syndrome". It was only later that he adopted the term stress, initially to designate the stimulus and later to designate a body's reaction to the stimulus (Selye 1973).

Building upon Selye's work, stress research has further elaborated and refined the stress concept. In organisational studies on work stress, the predominant Person-Environment Fit model no longer sees stress as a stimulus or a response,

but as the result of a lack of fit between the demands of the organisation and the worker's ability to meet these demands, or between the worker's needs and the organisation's resources to meet these needs (Caplan 1987). Over the years, studies using the Person-Environment Fit model have uncovered a great number of personal and organisational characteristics that play a more or less important role in work stress and how it affects the worker. According to Karasek and Theorell's influential job demand-control-support model (Karasek 1979; Theorell and Karasek 1996), though, job strain does not result from an aggregated list of "stressors", but from the interaction of three types of job characteristics: the demands of the work situation, on the one hand, and, on the other hand, the range of decision-making freedom and the amount of social support available to the worker facing those demands. A third model, the Effort-Reward imbalance model (Siegrist 1996), focuses on the reciprocity of exchange in occupational life. In this way, a lack of reciprocity, characteristic of high effort/low reward work conditions, is considered particularly stressful.

Despite their undeniable merits in furthering our knowledge on work stress, all of these models largely ignore the ways in which individuals appraise environmental demands and how they try to deal with them. These two components are, however, the core of Lazarus and Folkman's transactional theory of stress. According to Lazarus and Folkman, psychological stress is "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (1984, 19). Cognitive appraisal thus is crucial to their model and is to be understood as the process of evaluating an event in relation to one's present or future well-being. Lazarus and Folkman distinguish two forms of appraisal. Primary appraisal refers to the categorisation of an event as irrelevant, benign-positive, or stressful. In the first case, the individual considers the event to be of no importance or inconsequential to his or her well-being. The event is appraised as benign-positive when its outcome is expected to enhance, or at least preserve, one's well-being. In the latter case, when the event is appraised as stressful, its outcome represents a harm/loss, a threat, or a challenge. Harm/loss implies the individual has already incurred some damage as a result of the event. Threats to one's well-being concern expected harms and losses that may not yet have taken place or whose damaging impact has yet to be fully appreciated. Threat and challenge appraisals are somewhat alike, but the last focuses on the potential benefits for the individual and will generally provoke such positive emotions as joy or excitement, whereas threat (and harm/loss) appraisals bring about fear and anxiety, among other negative emotions.

Primary appraisals thus basically answer the question of what is at stake. Secondary appraisals, on the other hand, evaluate what might and can be done about it. When facing a stressful situation, the individual will evaluate his or her coping options. The outcome of this second form of appraisal will largely depend on the personal and social resources at hand, and on what Bandura (1977) calls

outcome and efficacy expectancies: the individual's estimate of his or her capacity to carry through a given coping option and the likelihood that it will bring about the expected/desired outcomes.

As stated by Lazarus and Folkman (1984), primary and secondary appraisals are inextricably linked. Together, they will not only determine the degree of stress and the strength and quality of the resulting emotional reaction, but also be a guiding principle in choosing some coping strategy or strategies while discarding others. Coping, another central concept of the transactional stress model, is defined as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus and Folkman 1984, 141). The number of possible coping strategies can seem practically infinite which is why they are classified according to their coping function. Some coping strategies are directed at managing or altering the cause of the distress (i. e., problem-focused coping), while others are directed at regulating the emotional reaction to the problem (emotion-focused coping). When the individual feels there is nothing he or she can do to modify a stressful situation, he or she will be more likely to resort to emotion-focused strategies (e. g., avoidance, denial, venting anger, having a drink with friends). On the other hand, events that are appraised as manageable will more likely call for problem-focused strategies directed at the self (e. g., learning new skills) or at the environment (e. g., toning down environmental demands). These coping efforts will alter the relationship between the person and the environment, and lead to its reappraisal. This way, stress is ultimately a continuous and dynamic process of appraisal and adjustment.

In order to examine work stress of school principals in French-speaking Switzerland, we thus aim to identify school principals' main work stressors and the most important coping strategies they use in order to deal with work stress.

4   Methods

In order to gain a better understanding of school principals' work activities and stress, several authors (Guilbert and Lancry 2007; Poirel et al. 2013) have recommended the use of both quantitative and qualitative methods. In our study, we used a mixed methods design combining data collected through an online survey and data from semi-directive interviews.

The latter were collected as part of a larger research project carried out by the CADRE[1] research group in order to examine the work activity of school principals in French-speaking Switzerland (Gather Thurler et al. 2017b). Over a period of

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1   Collectif d'Analyse des Directions Romandes d'Etablissements

several years, CADRE conducted individual interviews with 39 school principals[2]. During a first interview, principals were asked to describe the path that led them to their current position, their work context and their activities as a school principal. A second interview addressed the difficulties, constraints and challenges they faced as a school principal, as well as the ways of dealing with these difficulties. In addition, seventeen participants agreed to being observed during a workweek, after which they were interviewed a third time. A total of 89 interviews were thus conducted by the CADRE research group and analysed for the specific purposes of this study, that is, to gain a more complete picture of school principal's work stressors and coping strategies, and a better understanding of the interplay between them.

Quantitative data were collected through an online questionnaire as part of a doctoral research on school principal work stress.

4.1   Assessment and Measures

The questionnaire collected some general information on how stressful school principals considered their job to be, on the perceived impact of work stress on their health, their professional and personal life and finally, their propensity to stay in the job. Information about factors of stress was obtained by using the Administration Stress Index (hereafter: ASI). The ASI questionnaire was developed in the 1980s in North America by Gmelch and Swent (Swent and Gmelch 1977; Gmelch and Swent 1981) to) to specifically identify sources of occupational stress among school administrators. 35 potentially stressful situations were identified and categorized in a factor analysis procedure indicating five factors[3] (cf. appendix): (1) *Administrative Constraints* (stressors related to inadequate time, meetings and rules), (2) *Administrative Responsibilities* (related to typical managerial tasks such as evaluation, negotiation and supervision), (3) *Interpersonal Relations* (related to resolving differences between and among students, parents, teachers, supervisors and so on), (4) *Intrapersonal Conflicts* (caused by a discrepancy between one's performance and one's beliefs and expectations) and (5) *role expectations* (caused by a difference in expectations of self and the various publics served). The authors provide no further definition or explicit limitation of these categories though. The category of administrative constraints, for instance, is simply referred to as "constraints intrinsic to the administrative position" (Swent and Gmelch 1977, 9) which can be sources of stress and exemplifies the specific nature of the work of a school administrator (and more generally, a manager (cf. Mintzberg 1997)), that is, its open-ended character, the brevity, variety and fragmentation of work activities and the time demands imposed

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2   Participants were selected based on convenience sampling. Nevertheless, every effort was made to ensure that the sample population best reflected the general population in terms of canton (Geneva or Vaud), school type (primary, secondary or both), gender and experience, among other factors.

3   All 35 items in the Administrative Stress Index, grouped in the original five categories, and the three newly added items (cf. infra) are to be found in the appendix.

by the organization itself and outside agencies. Since this category mainly comprises items relating to school administrators' perception of work time (i. e., lack of time, lack of control over time and time wasted on non-essential or low-return tasks), we will throughout the remainder of this article use the term *time-related stressors* when referring to this category.

Since our study concerned school principals in French-speaking Switzerland, we used a version that had been translated into French and used by Poirel (2009) for his study on school principal stress in Quebec. Based on what we had previously learned about school principals' work during the CADRE research, we added three items to the original 35-item list: (1) "Feeling that the time spent on dealing with emails is too important", (2) "Trying to implement pedagogical and administrative reforms" and (3) "Trying to stay informed about pedagogical and administrative reforms". Our version of the ASI thus comprised 38 items and participants were asked to indicate to what extent they were bothered by each one of them on a scale from 1 (doesn't bother me), 2 (rarely bothers me), 3 (occasionally bothers me), 4 (often bother me) to 5 (bothers me very often).

Coping strategies were identified by using the Coping Preference Scale (hereafter: CPS), developed by Allison in the 1990s in North America to specifically examine coping preferences of school principals. It comprises 26 items covering a wide range of coping techniques covering both stress and stressor management. Since no French version of this questionnaire existed, we translated the CPS and had it checked by two bilingual university staff members. After some minor modifications were made, our translated version was then presented to two university staff members in educational leadership and to a member of a local school principals' association, to check if items were understandable and applicable to the context of our study. Based on their suggestions and on previous knowledge of school principals' work reality, the item "talk to district administrators or other school principals" was split into two items: "talk to my superiors" and "talk to other school principals". Our version of the CPS thus comprised 27 coping techniques. Participants were asked to indicate to what extent they used each one of them when facing a difficult situation at work, on a scale from 1 (almost) never), 3 (sometimes) to 5 (almost always).

4.2   Procedure

Our study was designed as a survey of the entire population of the principals of compulsory public primary and secondary schools in the French-speaking Swiss Cantons of Geneva and Vaud. In mid-February, all of them were sent an email with a request to complete the online survey questionnaire. At the beginning of March, a follow-up email was sent to school principals who had not completed the questionnaire yet. Another three weeks later, a final request to complete the questionnaire was sent to the remaining school principals. A total of 146 school principals responded. Seven questionnaires were discarded because of incomplete

or invalid data, leaving us with 139 usable questionnaires. The response rate was high (74%) and participants were deemed a representative sample of the overall population of public school principals in the two cantons.

4.3   Sample

The participants' average age was 51 years and the typical school principal has worked as a school principal for six years. Geneva primary school principals were somewhat exceptional, as most of them were recruited four years preceding the study. When discarding them, average duration of employment as a school principal rose to eight years. 87 participants (63%) were men, 52 were women and the latter were typically primary school principals (63% in Geneva and 50% in Vaud). Most participants (74%) had a degree in school administration.

82 Geneva school principals (80% of all Geneva school principals) completed our survey, as well as 57 (66%) Vaud school principals. 74 participants were primary school principals (73% of all primary school principals), 32 (73%) were secondary school principals and 33 participants (77%) held principalship in schools that combined both primary and secondary education.

School size was measured by the number of students and the number of teachers, both measures being strongly correlated. On average, schools accommodated 653 students and were the workplace of 67 teachers. School size was highly variable though, the smallest school accommodating fewer than 200 students while the largest taking on nearly 1500 students. Overall, school size was smaller in Geneva than in Vaud and this difference was particularly noticeable among primary schools, the smallest primary school in Vaud accommodating more students than the largest Geneva primary school.

School principals do not take on the job of managing their school all by themselves and are more often than not backed by vice-principals and a technical and administrative support staff. Again, primary school principals in Geneva were an exception so far in that most of them (66%) work without a vice-principal and do not have a full-time administrative collaborator. In all other schools, the number of support staff members was generally correlated with school size. Their school principals have at least one, and on average three, administrative collaborators and are assisted by two to seven vice-principals.

5   Findings

Overall, school principals consider their job to be (very) stressful. Only seven of them (5%) think of their job as being less than moderately stressful. Half of school principals feel that occupational stress has a negative impact on their health (46%) and on their personal life (53%). Moreover, one out of five says they consider

quitting the principalship at least once a month due to work stress and one out of three is not sure if they would take up the principalship again if they had to make the choice all over again. Not surprisingly, principals who consider quitting more regularly or who are more hesitant to make the same choice are also the ones who report more job stress.

The first objective of this study was to find out what the most important factors of stress in a school principal's work life are. Our results indicate that school principals in French-speaking Switzerland are mostly bothered by time-related stressors (mean score of 2.87). Intrapersonal conflicts (2.49) and role expectations (2.47) make up for two other important stress factors. Interpersonal relations (2.11) and administrative responsibilities (2.05) seem to trouble school principals to a lesser extent.

This rank order is largely respected when we take a closer look at specific stressor items. Table 1 shows the top ten stressors identified as most bothersome. Time-related stressors make up for five of the top ten stressors. There is considerable agreement among school principals that having too heavy a workload to finish during a normal workday is a major cause of stress. This feeling is reflected in the average duration of a school principals' typical workweek. Indeed, our participants indicate working on average 51 hours a week. Two thirds of our participants report working 50 hours or more, and one out of ten claims working at least 60 hours a week. Trying to complete reports and other paperwork on time is another major stressor for school principals, as well as being frequently interrupted by telephone calls. Two other high-rated stressors that fall within this category are "feeling that meetings take up too much time" and "writing memos, letters and other communications".

Three more original ASI items, each one belonging to a different category, from the list of most important stressors. School principals are frequently bothered by a lack of access to information needed to carry out their job properly (intrapersonal conflicts), by the thought of not being able to satisfy the conflicting demands of their superiors (role expectations) and finally, by the feeling that staff members do not understand their goals and expectations (interpersonal relations). However, none of the administrative responsibilities items is present among the top ten stressors. The most bothersome stressor that falls within this category, "Supervising and coordinating the tasks of many people", is ranked 16th.

Interestingly, two of the three items newly added to the original 35-item list rank among the ten most important stressors. These concern implementing pedagogical and administrative reforms and most importantly, dealing with emails. School principals in French-speaking Switzerland today are thus most frequently troubled by a work stressor, feeling they spend too much time processing their emails, which was not included in the original version of the Administration Stress Index, as it did not yet exist at the time of its development.

Table 1   Top 10 stressors identified by Geneva and Vaud school principals

Administrative Stress Index item	M	SD
Feeling that the time spent on dealing with emails is too important (new)	3.74	1.04
Feeling that I have too heavy a workload, one that I cannot possibly finish during the normal workday (T-RS)	3.44	1.23
Trying to complete reports and other paperwork on time (T-RS)	3.20	1.11
Being interrupted frequently by telephone calls (T-RS)	3.17	0.95
Knowing I can't get information needed to carry out my job properly (IC)	3.05	0.99
Thinking that I will not be able to satisfy the conflicting demands of those who have authority over me (RE)	2.97	1.08
Feeling that meetings take up too much time (T-RS)	2.91	1.06
Writing memos, letters and other communication (T-RS)	2.83	1.28
Feeling staff members do not understand my goals and expectations (IR)	2.77	0.95
Trying to implement pedagogical and administrative reforms (new)	2.75	1.32

Another objective of this study was to identify the most common ways in which Geneva and Vaud public school principals cope with work stress. On average, participants report that they manage to cope fairly well with stress at work. The ten coping techniques most frequently used are presented in Table 2. Above all, school principals try and practise good human relations with staff members, students and students' parents (mean score of 4.52). Next come several coping techniques we might qualify as cognitive stress management techniques (being realistic, optimistic, staying positive …) that aim at redefining a stressful situation, rather than actually changing it.

Talking to other school principals when facing difficulties at work is ranked 5th, with a mean score of 3.96. Interestingly, while school principals clearly look for (emotional or instrumental) support of other school principals, the item "talk to my superiors" is ranked third to last ($M = 2.02$) and nearly half of all participants indicates they only rarely reach out to their superiors when facing difficulties at work. This finding can be interpreted in at least two not mutually exclusive ways. On the one hand, school principals may hesitate to seek their superiors' aid out of fear of "exposing" themselves as not really being up to their job. On the other hand, when asked how they value the support they receive during challenging times, most participants were (highly) satisfied by the support given to them by staff members (82%) and other school principals (93%), whereas superiors' support was qualified as (highly) unsatisfactory by almost half of the participants. Primary school principals in particular feel unsatisfied by their superiors' support.

Similarly, participants only occasionally benefit from internal opportunities within the department to develop their professional skills (18th place, $M = 3.11$). Ranked last, the use of relaxation and stress management techniques ($M = 1.81$) seems a minor coping strategy. Nearly two thirds of the participants state they almost never use it.

Table 2   Top 10 coping strategies used by Geneva and Vaud school principals

Coping Preference Scale item	M	SD
Practice good human relation skills with staff, students and parents	4.52	0.75
Set realistic goals	4.14	0.88
Approach problems optimistically and objectively	4.12	0.83
Create positive and self-supportive mental sets	4.04	0.88
Talk to other school principals	3.96	1.01
Compartmentalize work and non-work life	3.96	1.14
Maintain a sense of humour	3.83	0.91
Maintain regular sleep habits	3.60	1.29
Engage in less active non-work or play activities (e.g., attend cultural or sporting events, watch tv, etc.)	3.49	1.07
Work harder (including evenings and weekends)	3.43	1.18

Surprisingly, school principals do not often use coping strategies that might help alleviating their workload or gaining control over their work time. Delegating responsibilities to staff members, for example, is only occasionally a way to meet the demands of the job (14th place, $M = 3.29$). Setting priorities and using time management techniques is only ranked 17th ($M = 3.12$), and participants seem even more hesitant to establish office procedures so that unplanned interruptions are kept to a minimum (23rd place, $M = 2.51$). Our results indicate that these coping strategies should probably not be as easily overlooked. For instance, when comparing school principals experiencing lower levels of stress (low total ASI score) to those experiencing higher levels of stress (high total ASI score) regarding their use of time management techniques, low-stress participants more frequently use these techniques ($M = 3.39$, $ET = 1.34$) than high-stress participants ($M = 2.59$, $ET = 1.09$; $t(57) = 2.50$, $p < 0.05$). Furthermore, the use of time management techniques is not only negatively correlated to time-related stressors ($r = -0.31$, $n = 137$, $p < 0.01$), but also to the average duration of a workweek ($r = -0.23$, $n = 137$, $p < 0.01$). This means, in real terms, that school principals who frequently use time management techniques gain on average two and a half hours per workweek.

These results beg the question as to why school principals do not use these techniques more often. This question, however, cannot be answered with our survey data. Interview data may offer a plausible explanation. All school principals interviewed seem somewhat aware of their problematic use of and control over time. But while some school principals state that they cannot conceive "making themselves unavailable" because it goes against the way they see their job, others point out a less voluntary obstacle. Indeed, numerous participants indicate their job requires constant vigilance and fast reactivity. One principal, for instance, states: "[My work time] is always disturbed, because if I choose not to handle a crisis, it will only postpone the troubles and then aggravate them by a factor 2, 3, 4, 5, 10 or 100" [SP1]. It all seems to come down to being ready to intervene wherever and

whenever called upon, in order to put out fires and handle students', parents', and teachers' problems before they spin out of control.

    While our survey data previously established interpersonal conflicts as a relatively minor (i. e., less frequent) concern, interviews with school principals make clear that, once these occur, they can be terrible to endure, emotionally draining, hardly manageable and carry on for many years. School principals therefore try to avoid them by all means, even if this implies long and unpredictable work hours: "There are some moments in the week when we are not disturbed: in the evening and in the weekend, or very early in the morning. So, it is impossible to do [long-term work], if not while students and teachers are not present at school. So, it is an exhausting job" [SP2]. They do so while being well aware that in the long run, this way of functioning may come at too great a cost: "Now you come across something extremely hurtful. It is a disaster. When you become a school principal, you ditch your hobbies first. […] Then you ditch your social life. […] And your family life, there is damage too" [SP1]. Finally, another principal stresses the way his job seems to affect his health and that of his colleagues: "There is the time investment, the work overload. That is something that affects our health, no doubt. I feel as if our health is compromised, as if we somehow age more rapidly" [SP3].

6   Discussion and Conclusion

This study examined work stress of compulsory public primary and secondary school principals in the French-speaking Swiss Cantons of Geneva and Vaud. Our objective was two-fold: firstly, to identify school principals' most important work stressors and secondly, to identify the coping strategies most commonly utilised by school principals. School principals' work stressors were identified using the Administrative Stress Index, a questionnaire used in numerous studies to identify occupational stressors among school administrators in different countries. Interestingly, throughout the years and around the world, school principals seem above all bothered by administrative constraints (named time-related stressors in our study) (Table 3), by what Gmelch (1978) calls "the stress of time". School principals in French-speaking Switzerland are no exception. They too reported too heavy a workload, being bothered by time-consuming meetings and tight deadlines and too often feeling interrupted, hindered from completing their work and thus forced to schedule some of their work activities outside of regular school and work hours (early morning, late afternoon, evening or weekend).

    School principals in our study do differ, at least at first glance, from those in other studies in that they seem less frequently bothered by interpersonal relations. While these constitute the second most important category of stressors in most studies abroad, interpersonal relations are only ranked 4th in ours. Interviews with

Table 3   Comparison of stressors categories in a selected number of studies using the Administration Stress Index (mean score and rank)

	Administrative constraints (time – related stressors)	Intrapersonal conflicts	Role expectations	Interpersonal relations	Administrative responsibilities	mean score
French-speaking Switzerland Current study	2.87 1[e]	2.49 1[e]	2.47 3[e]	2.11 4[e]	2.05 5[e]	2.40
Quebec, CA Poirel 2009	3.18 1[e]	2.57 3[e]	2.47 5[e]	2.61 2[e]	2.50 4[e]	2.47
Kuala Lumpur, MY Abdul Muthalib 2003	2.87 2[e]	2.42 5[e]	2.45 4[e]	2.65 3[e]	2.93 1[e]	2.66
South Carolina, US Flynn 2000	3.00 1[e]	2.49 2[e]	2.20 4[e]	2.45 3[e]	2.04 5[e]	2.44
Pennsylvania, US Czerniakowski 1995	2.82 1[e]	2.16 4[e]	2.18 3[e]	2.32 2[e]	1.89 5[e]	2.27
British Columbia, CA Allison 1995	2.92 1[e]	2.57 3[e]	2.33 5[e]	2.62 2[e]	2.48 4[e]	2.58
Oregon, US Gmelch and Swent 1982	2.85 1[e]	2.31 4[e]	2.12 5[e]	2.49 3[e]	2.58 2[e]	2.47
mean	2.93 1[e]	2.43 3[e]	2.32 5[e]	2.46 2[e]	2.35 4[e]	

school principals do depict a somewhat nuanced story, though. While interpersonal conflicts (with parents, with or between staff members, et cetera) may be quite uncommon, their occurrence may have a devastating and long-lasting impact on the school and on the principal's work life. Articulating a sense of ubiquity and premonition (Gather Thurler et al. 2017a), school principals will thus try to detect and immediately stifle any spark that may otherwise lead to a full-blown fire. As a result, school principals fail to take full control over their own time. Work that requires longer periods without interruption are scarce and typically scheduled outside regular working hours. School principals thus seem caught between a rock and a hard place: in trying to cope with and prevent one type of potentially major stressors to happen, they are somehow forced to add to their work overload. Whether this is the better strategy is yet to be seen, as its costs, in terms of individual and organisational health, may turn out to be too high and irreversible in the long-run. School principals do not pick this strategy voluntarily, though, as they are well aware of its potential risks. Educational authorities should thus ensure that school principals' working conditions are such that they feel they can take control over their working hours by providing, among other things, adequate resources and support, and by making sure that their role boundaries are clearly defined and respected.

    This study aimed at advancing our knowledge on work stress of school principals in two Swiss cantons. Broadening the scope to other cantons would not only be

interesting in order to see if our results reflect the reality in these cantons, it would also allow for a more confident analysis of potential variation due to contextual factors. Furthermore, school principals are not alone in leading and managing schools; vice-principals usually assist them and thus provide important instrumental, informational and emotional support. Very little is known, though, about the functioning of school management teams, the role of vice-principals, and the nature and scope of their work. Although the demands made upon vice-principals may be different, their job may well be as stressful (e. g., Poirel et al. 2017). Future studies should focus more on vice-principals' work experience and in doing so, better tailor training programs for both principals and vice-principals.

7   References

Abdul Muthalib, Nur Anuar. 2003. Occupational Stress and Coping Strategies as Perceived by Secondary School Principals in Kuala Lumpur, Malaysia. Doctoral dissertation, Education. University of Illinois at Urbana-Champaign, Urbana, IL.

Allison, Donald G. 1995. An Investigation of Administrative Stress and Coping in British Columbia Elementary and Secondary School Principals. Doctoral dissertation, Educational Studies. University of British Columbia, Vancouver.

Bandura, Albert. 1977. Self-Efficacy. Toward a Unifying Theory of Behavioral change. *Psychological review* 84(2): 191–215.

Barroso, João. 2000. Autonomie et modes de régulation locale dans le système éducatif. *Revue Française de Pédagogie* 130: 57–71.

Barroso, João. 2005. Les nouveaux modes de régulation des politiques éducatives en Europe: de la régulation du système à un système de régulation. Pp. 151–171 in *La régulation des politiques d'éducation,* edited by Yves Durtercq. Rennes: PUR.

Boyland, Lori. 2011. Job Stress and Coping Strategies of Elementary Principals: A Statewide Study. *Current Issues in Education* 14(3): 1–11.

Buckingham, Don A. 2004. *Associations Among Stress, Work Overload, Role Conflict, and Self-Efficacy in Maine Principals.* Doctoral dissertation, Educational Leadership. University of Maine, Orono, ME.

Buckingham, Don A., Gordon Donaldson, and Georges Marnik. 2005. *The Maine Principal Study. Change and Stability in School Leadership: 1997-2005.* University of Maine, Orono, ME.

Caplan, Robert D. 1987. Person-Environment Fit Theory and Organizations: Commensurate Dimensions, Time Perspectives, and Mechanisms. *Journal of vocational behavior* 31(3): 248–267.

Carr, Nora. 2003. The Toughest Job in America. *American School Board Journal* (Special report: Educational Vital Signs 2003): 14–18.

Chandler, Evelyn A. B. 2001. *An Analysis of the Relationship between Stress and Middle Grade Principals in Florida Public Schools.* Doctoral dissertation, Educational Research, Technology and Leadership. University of Central Florida, Orlando, FL.

Chaplain, Roland P. 2001. Stress and Job Satisfaction among Primary Headteachers. *Educational Management Administration & Leadership* 29(2): 197–215.

Chapman, Judith D. 2005. *Recruitment, Retention, and Development of School Principals.* Paris: UNESCO.

Cubitt, Sarah, and Christopher Burt. 2002. Leadership Style, Loneliness and Occupational Stress in New Zealand Primary School Principals. *New Zealand Journal of Educational Studies* 37(2): 159–169.

Czerniakowski, John J. 1995. *Stress, Burnout, and Coping Strategies among Elementary School Principals in Pennsylvania*. Doctoral dissertation, Educational Administration. Pennsylvania State University, Stae College, PA.

Darmody, Merike, and Emer Smyth. 2016. Primary School Principals' Job Satisfaction and Occupational Stress. *International Journal of Educational Management* 30(1): 115–128.

DeLuca, Joseph, Joseph Rogus, C. Daniel Raisch, and A. William Place. 1997. The Principal at Risk: Career Threatening Problems and Their Avoidance. *NASSP Bulletin* 81: 105–110.

Duru-Bellat, Marie, and Denis Meuret. 2001. Nouvelles formes de régulation dans les systèmes éducatifs étrangers : autonomie et choix des établissements scolaires. *Revue Française de Pédagogie* 135 : 173–221.

Dutercq, Yves. 2012. La nouvelle légitimité des chefs d'Établissement en France. *Formation et profession* 20(3) : 83–86.

Felouzis, Georges, Christian Maroy, and Agnès van Zanten. 2013. *Les marchés scolaires. Sociologie d'une politique publique d'éducation*. Paris: PUF.

Flynn, Philip D. 2000. *Identification of the Level and Perceived Causes of Stress and Burnout among High School Principals in South Carolina*. Doctoral dissertation, Educational Leadership and Policies. University of South Carolina, Columbia, SC.

Gadja, Rebbeca, and Matthew Militello. 2008. Recruiting and Retaining School Principals: What We Can Learn from Practicing Administrators. *Journal of Scholarship and Practice* 5(2): 14–20.

Gather Thurler, Monica, Isabelle Kolly Ottiger, Carl Denecker, and Aline Meyer. 2017a. Un pouvoir de service. Pp. 233–246 in *Les directeurs au travail. Une enquête au cœur des établissements scolaires et socio-sanitaires,* edited by Monica Gather Thurler, Isabelle Kolly Ottiger, Philippe Losego and Olivier Maulini. Bern: Peter Lang.

Gather Thurler, Monica, Isabelle Kolly Ottiger, Philippe Losego, and Olivier Maulini (eds.). 2017b. *Les directeurs au travail. Une enquête au cœur des établissements scolaires et socio-sanitaires.* Bern: Peter Lang.

Gmelch, Walter H. 1978. The Principal's Next Challenge: The Twentieth Century Art of Managing Stress. *NASSP Bulletin* 62(415): 5–12.

Gmelch, Walter H., and Boyd Swent. 1981. Stress and the Principalship: Strategies for Self-Improvement and Growth. *NASSP Bulletin* 65(449): 16–19.

Gmelch, Walter H., and Boyd Swent. 1982. *Management Team Stressors and their Impact on Administrators' Health.* Paper presented at the Annual meeting of the American Educational Research Association, New York, NY.

Gronn, Peter, and Felicity Rawlings-Sanaei. 2003. Principal Recruitment in a Climate of Leadership Disengagement. *Australian Journal of Education* 47(2): 172–184.

Grubb, W. Norton, and Joseph J. Flessa. 2006. "A Job Too Big for One": Multiple Principals and Other Nontraditional Approaches to School Leadership. *Educational Administration Quarterly* 42(4): 518–550.

Guilbert, Laure, and Alain Lancry. 2007. L'analyse des activités des cadres : l'intérêt de la triangulation des méthodes. *Le travail humain* 70(4) : 313–342.

Hallinger, Philip, and Ronald H. Heck. 1998. Exploring the Principal's Contribution to School Effectiveness: 1980–1995. *School Effectiveness and School Improvement* 9(2) : 157–191.

Hewitt, Paul M., George S. Denny, and John C. Pijanowski. 2011. Why Teacher Leaders Don't Want to Be Principals. *Journal of Scholarship and Practice* 8(1): 13–23.

Huber, Stephan G. 2011. School Governance in Switzerland: Tensions between New Roles and Old Traditions. *Educational Management Administration & Leadership* 39(4): 469–485.

Huber, Stephan G., Christine Wolfgramm, and Selin Kilic. 2013. *Schulleitungsstudie 2011/2012 in Deutschland, Österreich, Liechtenstein und der Schweiz: Vorlieben und Belastungen im Schulleitungshandeln.* Zug: PHZ Zug.

Karasek, Robert . 1979. Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Design. *Administrative Science Quarterly* 24(2): 285–308.

Lazarus, Richard S., and Susan Folkman. 1984. *Stress, Appraisal, and Coping.* New York: Springer Publishing Company.

Maroy, Christian. 2005. Une comparaison des formes de régulation intermédiaire dans cinq pays européens. Pp. 51–84 in *Les régulations des politiques d'éducation,* edited by Yves Dutercq. Rennes: PUR.

Maslach, Christina, and Susan E. Jackson. 1986. *Maslach Burnout Inventory Manual.* Palo Alto, CA: Consulting Psychologists Press.

Mintzberg, Henry. 1997. *The Nature of Managerial Work.* New York: Harper and Row.

Mons, Nathalie. 2007. *Les nouvelles politiques éducatives.* Paris: PUF.

Murphy Joseph, Paul Schwarz, Doris Alvarez, Richard Barbacane, David Domenici, and Jane Norwood. 2000. *Leadership for Student Learning: Reinventing the Principalship.* Washington, DC: Institute of Educational Leadership.

Nido, Miriam, Ernst Trachsler, Kurt Ackermann, Susanne Brüggen, and Eberhard Ulich. 2008. *Arbeitsbedingungen, Belastungen und Ressourcen von Lehrpersonen und Schulleitungen im Kanton Aargau 2008.* Zürich: Institut für Arbeitsforschung und Organisationberatung.

Poirel, Emmanuel. 2009. *Le stress professionnel des directions d'école au Québec: sources du stress, vécu émotionnel et ajustements.* Doctoral dissertation, Psychopédagogie. University of Montreal, Montreal.

Poirel, Emmanuel, Carl Denecker, and Frédéric Yvon. 2013. Mieux comprendre le stress au travail : limites des méthodes quantitatives et proposition d'une méthode alternative par rétroaction vidéo. *Recherches qualitatives* 32(1): 81–106.

Poirel, Emmanuel, Frédéric Yvon, Pierre Lapointe, and Carl Denecker. 2017. La fonction de direction scolaire adjointe : une comparaison des sources de stress entre adjoints et directions. *Revue des Sciences de l'Éducation* 43(2): 231–260.

Pont, Beatriz, Deborah Nusche, and Hunter Moorman. 2008. *Améliorer la direction des établissements scolaires – Volume 1 : Politiques et pratiques.* Paris: OCDE.

Rich, Joël. 2010. *Les nouveaux directeurs d'école. Repenser l'encadrement des établissements scolaires.* Bruxelles: DeBoeck.

Riley, Philip. 2018. *The Australian Principal Occupational Health, Safety and Wellbeing Survey. 2017 Data.* Fitzroy, Victoria, Australia: Australian Catholic University.

Selye, Hans. 1936. A Syndrome Produced by Diverse Nocuous Agents. *Nature* 138: 32.

Selye, Hans. 1946. The General Adaptation Syndrome and the Diseases of Adaptation. *Journal of Allergy* 17(4): 231–247.

Selye, Hans. 1973. The Evolution of the Stress Concept. *American Scientist* 61(6): 692–699.

Siegrist, Johannes. 1996. Adverse Health Effects of High-Effort/Low-Reward Conditions. *Journal of Occupational Health Psychology* 1(1): 27–41.

Swent, Boyd, and Walter H. Gmelch. 1977. Stress at the Desk and How to Creatively Cope. *OSSC Bulletin* 21(4): 1–45.

Theorell, Töres, and Robert A. Karasek. 1996. Current Issues Relating to Psychosocial Job Strain and Cardiovascular Disease Research. *Journal of Occupational Health Psychology* 1(1): 9–26.

Weber, Andreas, Dieter Weltle, and Peter Lederer. 2005. Ill Health and Early Retirement Among School Principals in Bavaria. *International Archives of Occupational and Environmental Health* 78(4): 325–331.

Welmers John A. 2005. *Predicting Principal's Stress.* Doctoral dissertation, Educational Leadership. East Carolina University, Greenville, NC.

Whitaker, Kathryn S. 1992. The Elusive Phenomenon of Principal Burnout. *NASSP Bulletin* 76(547), 112–116.

Whitaker, Kathryn S. 2003. Principal Role Changes and Influence on Principal Recruitment and Selection: An International Perspective. *Journal of Educational Administration* 41(1): 37–54.

Wiederkehr, Ruth. 1998. *Belastung von Schulleiterinnen und Schulleitern.* Bern: University of Bern.

8   Appendix

Items in the Administrative Stress Index grouped in the original five categories (Gmelch and Swent 1977):

Administrative Constraints: 1. Being interrupted frequently by telephone calls; 9. Having my work frequently interrupted by staff members who want to talk; 12. Writing memos, letters and other communications; 26. Feeling that I have too heavy a workload, one that I cannot possibly finish during the normal workday; 27. Complying with federal, state, district and organizational rules and policies; 31. Feeling that meetings take up too much time; 32. Trying to complete reports and other paperwork on time.

Administrative Responsibilities: 2. Supervising and coordinating the tasks of many people; 14. Speaking in front of groups; 21. Preparing and allocating budget resources; 24. Being involved in the collective bargaining process; 25. Evaluating staff members' performance; 29. Administering the negotiated contract (grievances, interpretations …); 35. Trying to gain public approval and/or financial support for school programs.

Interpersonal Relations: 3. Feeling staff members don't understand my goals and expectations; 7. Trying to resolve differences between/among students; 13. Trying to resolve differences with my superiors; 20. Trying to resolve parent/school conflicts; 23. Handling student discipline problems; 33. Trying to resolve differences between/among staff members; 34. Trying to influence my immediate supervisor's actions and decisions that affect me.

Intrapersonal Conflicts: 4. Feeling that I am not fully qualified to handle my job; 5. Knowing I can't get the information needed to carry out my job properly; 10. Imposing excessively high expectations on myself; 15. Attempting to meet social expectations (community, friends, colleagues …); 17. Having to make decisions that affect the lives of individual people that I know (colleagues, staff, students …); 22. Feeling that I have too little authority to carry out responsibilities assigned to me; 28. Feeling that the progress on my job is not what it should or could be.

Role Expectations: 6. Thinking that I will not be able to satisfy the conflicting demands of those who have authority over me; 8. Feeling not enough is expected of me by my superiors. 11. Feeling pressure for better job performance above what I think is reasonable; 16. Not knowing what my superior thinks of me, or how s/he evaluates my performance; 18. Feeling that I have to participate in school activities outside the normal working hours at the expense of my personal time; 19. Feeling that I have too much responsibility delegated to me by my superior; 30. Being unclear on just what the scope and responsibilities of my job are.

New Items: 36. Feeling that the time spent on dealing with emails is too important; 37. Trying to implement pedagogical and administrative reforms; 38. Trying to stay informed about pedagogical and administrative reforms.