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## SELF-ENDANGERING WORK BEHAVIOUR OF POLISH SCHOOL PRINCIPALS DURING THE CORONAVIRUS PANDEMIC

During the COVID-19 pandemic, the work-related demands grew dramatically for school principals, and many experienced overwork, pressure, and stress. An adopted form of a coping reaction by workers who experience large workloads and strong demands for self-organisation has been conceptualised as self-endangering work behaviour (SEWB). This study focuses on three SEWB subscales: work extensification, work intensification, and the reduction in the quality of work among Polish school principals during COVID-19. The results come from an online survey conducted between June and December 2021. The study revealed that SEWBs were associated with respondents' wellbeing, mental and physical exhaustion, and psychosomatic complaints. The presented study contributes to the limited literature on Polish school principals' SEWB during the pandemic. Our findings could be a baseline for policymakers for the prevention of overwork and burnout in Polish school principals.

**Key words:** self-endangering work behaviour (SEWB); COVID-19; Polish school principals; health and wellbeing; burnout

### Introduction

During the pandemic, a lot of attention was devoted to the implementation of research on the functioning of students and teachers in the new paradigm of distance learning. Relatively often, research was also carried out on the nature of work performed by representatives of medical professions (Grzelak, Szwarz 2021; Fukowska, Koweszko 2022; Sokół-Szawłowska, Mierzejewski, Heitzman 2022; Gawrych 2022; Wypych-Ślusarska, Kraus 2022), social workers (Ornacka,

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Mirewska 2020; Necel 2021; Szyszka, Zaborowska 2022; Kanios, Herman 2022) and uniformed services (Andraszak 2020; Jarczewski 2022) in the new pandemic reality. At the same time, the literature emphasises the deficit of research on school principals, during both the COVID-19 pandemic and the pre-pandemic period (Pyżalski 2020; Leżucha 2021). Despite the fact that school principals – as managers of educational institutions – are subjected to high requirements in terms of professional and personal competences (Żukowski 2007; Wilsz 2014), creating the image of a ‘super-hero’, there are no studies on work-related burdens and their importance for physical and psychosocial health. At the same time, a few studies conducted in the pre-pandemic period indicated a sense of loneliness among school principals, caused particularly by the lack of support and understanding from institutions cooperating with the school on a daily basis and also from the teaching staff (Wasilewska, Rybińska 2013: 133). In addition, the ever-increasing scope of duties, changing law, work under pressure (Madalińska-Michalak 2016) and the very high responsibility (Madalińska-Michalak 2019) of school principals deepen the problem of the lack of people willing to take up managerial positions in the education system (Radwan 2023). This article attempts to fill this gap and show how school principals functioned during the pandemic, particularly in the context of the negative effects of workload on their psychophysical wellbeing.

The unprecedented situation of the COVID-19 pandemic was a traumatic event for modern societies that ‘knocked people out of their current rhythm of life and shattered their existential security’ (Długosz 2021b: 29). Fears of infection, quarantine, lockdown, media reports on the number of hospitalised people and the number of deaths translated into increased anxiety, a sense of threat and deepened fears about the future. This confirms that the modern world is increasingly uncertain (Beck 2002). The concept of ‘uncertainty’ frequently appears in scientific works about socio-cultural contexts of human life at the beginning of the 21st century. During the pandemic, the term ‘uncertainty’ was often used to define unexpected events and complex, challenging realities (Cekiera 2020: 214), generating, among others, additional stress and ill health (Leksy 2020: 41). It is worth emphasizing that the negative impact of the pandemic on the mental condition of Poles was clearly confirmed by empirical research (cf. e.g., Babicki, Mastalerz-Migas 2020; Długosz 2021a; Długosz 2021b). At the same time, the literature on the subject emphasises that ‘the pandemic – in addition to health-related panic – also caused a “status panic”. Anticipating the coming post-pandemic economic crisis, people began to fear that they would be unable to maintain their social positions and statuses they had already acquired with great difficulty’ (Długosz 2021a: 8). This could also be an additional psychological burden for school principals. The author points out that ‘the coronavirus pandemic has become the quintessence of a risk society. No one feels confident

about their health, keeping a job or social position' (Długosz 2021a: 9). In general, research conducted among managers during the pandemic indicated this professional group had a reduced sense of employment stability (Szymczyk, Połonowska 2021: 57). From the perspective of the management staff, the level of uncertainty 'grows with the increase in volatility and dynamism of events that are difficult to predict and distant in time, and the simultaneous weakening of the organisation's control over external conditions' (Wolniak 2022: 22). A thesis can be put forward that the fear of losing their job (and thus social status) could have had a much greater influence in their professional life, in particular for people in managerial positions who were responsible for the implementation of the new work model. Moreover, empirical studies indicate a significant relationship between subjective feelings of job insecurity and an individual's health (Widerszal-Bazyl 2007).

School principals experienced the pandemic, on the one hand, as members of society and, on the other, as managers responsible for the continued functioning of important institutions, which, in this case, are schools. Considering the fact that school principals, as education managers, are responsible for: 'effective and economical, that is, efficient management of organisations providing high-quality public services understood in a broad sense' (Kožuch 2004: 225), it is justified to put forward the thesis that they were the professional group that particularly experienced the consequences of the COVID-19 pandemic. Educational institutions were among the first to close due to the coronavirus pandemic and then switch to the remote learning system (Muster 2022). However, 'distant learning has revealed deficiencies in infrastructure: both in access to broadband internet and the equipment necessary for the work of teachers and students. The digital exclusion of some students also turned out to be a serious problem' (Leżucha 2021: 11). In addition, school principals began to struggle with the problem of 'disappearing students' who did not fulfil their school duties (Bogacka et al. 2021: 29). It is also worth noting that the powers of school principals were centralised under the Regulation of the Minister of National Education of 20 March 2020 (Journal of Laws of 2020, item 493). In fact, they became a one-person authority in their schools. Undoubtedly, this facilitated quick decision-making but was also associated with one-person responsibility. The increasing problems caused by the unpredictability of coronavirus transmission, as well as the rapid changes in the legal regulations for the functioning of schools during the pandemic, caused difficulties in planning the form of classes, which were held at school, online or in a hybrid mode, depending on the epidemiological state (Staszkiwicz-Grabarczyk 2021; Mydłowska 2022: 35).

The need to implement a new paradigm of school functioning in times of uncertainty undoubtedly increased the level of stress in school principals. It was also a 'significant psychological challenge' (Gurba 2021: 170) which caused

a greater burden with new, additional work-related duties. Thus, there is no doubt that during the coronavirus pandemic, school principals had many more work-related duties and many experienced overwork, pressure and stress. They had to cope with the challenges of supporting the continuity of learning, ensuring conditions met health requirements, and organising the technological network community (Gouëdard, Pont, Viennet 2020: 13–14). How school principals reacted, adapted, and coped with the pandemic work situation was essential for their functioning and wellbeing. In line with transactional stress theory (Lazarus, Folkman 1984), the cognitive, emotional, or behavioural response to a stressor is decisive for the effect of this stressor on an individual. Thus, coping reactions mediate the impact of stressors on wellbeing. In the psychological literature, coping 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, Folkman 1984). Coping strategies can take the form of a problem focus or an emotion focus, as well as active/approach or passive/avoidance coping (Carver et al. 1989). It must be emphasised that high-stress levels and how people deal with this can generate short- and long-term mental and physical disturbances and lead to illnesses (Dettmers et al. 2016: 33). Regarding the workplace, employees can use problem-oriented and active coping strategies to fulfil occupational obligations and achieve challenging goals (Baeriswyl et al. 2021b). An adopted form of coping reaction by workers who experience large workloads and strong demands for self-organisation has been conceptualised as self-endangering work behaviour (SEWB) (Dettmers et al. 2016: 25).

SEWB is perceived as a maladaptive active coping strategy (Knecht et al. 2017: 194). This has been defined as, ‘Whereas self-endangering work behaviour is directed toward goal attainment and may even succeed in achieving that, this success is built on detrimental behaviours that may impair wellbeing and health’ (Dettmers et al. 2016: 26). Although many different types of behaviours aim to cope with high work demands and simultaneously potentially harm employees’ health, Krause et al. (2012: 192–193) identify eight specific ones. These are the following types of work-related behaviours: extension of work time and not taking time to recover; work intensification; sickness presenteeism; abuse of stimulants in an attempt to optimise internal states; abuse of sedative substances to facilitate relaxation; reducing the quality of work; failure to comply with security regulations; and faking (Dettmers et al. 2016: 28). It is worth adding that SEWB seems to be functional over a short time due to achieving established work goals, overcoming stressful situations, and strengthening self-efficacy, self-esteem, motivation, and work satisfaction through that (Widmer 2012: 425).

But in the longer perspective, SEWB is deemed to have health disadvantages and is highly connected with strain, exhaustion, and burnout (Baeriswyl et al. 2021a; Yokoyama et al. 2022: 297).

SEWB is a new concept showing a mechanism for coping with high work demands in connection with both subjective wellbeing and health (Knecht et al. 2017: 193). The current study focuses on three work-related behaviours: work extensification, work intensification and reduction in the quality of work among Polish school principals during the COVID-19 pandemic. Work extensification without time to recover means extending the working time to the detriment of private and family time, recovery, and leisure time. This also means being permanently reachable for work issues (Dettmers et al. 2016: 28). Work intensification refers to increasing the intensity and pace of employees' work, decreasing social interactions, and simultaneously taking fewer breaks (Knecht et al. 2017: 195). Quality reduction is perceived as fewer work outcomes and work results which are not as good, affecting employees' work-related self-esteem and job security (Dettmers et al. 2016: 29). Concerning established SEWB indicators, this study aims to gain knowledge about Polish school principals' SEWB during the pandemic as potentially detrimental to their mental and physical health. According to our knowledge, this is the first community-wide study to examine Polish school principals' SEWB levels (in the scope mentioned above) and their association with respondents' work satisfaction (WS), wellbeing (WHO), exhaustion (EXH), and psychosomatic complaints (PC) in the middle phase of the COVID-19 pandemic (June–December 2021).

## Method

### Study design, data collection, and sample size

The results come from an online survey among school principals in Poland as part of the international *COVID-Health Literacy Network* ([www.covid-hl.org](http://www.covid-hl.org)). The survey was conducted in eight out of 16 provinces in Poland<sup>1</sup> between June 2021 and December 2021 by using the online survey tool LimeSurvey. Local government agencies responsible for education were informed about the study. The survey questionnaire, developed by Dadaczynski et al. (2021) and used by all countries participating in the COVID-HL Network, was translated into Polish and sent by email to school principals with an invitation to participate in the survey. After one month, a reminder with another invitation to participate in the research was sent. Participants were informed about the purpose and

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<sup>1</sup> The survey was conducted in the following voivodeships: śląskie, podkarpackie, podlaskie, kujawsko-pomorskie, łódzkie, warmińsko-mazurskie, wielkopolskie, lubuskie.

importance of the study, and before starting, active consent needed to be given. Completing the questionnaire took about 20–30 minutes. Of the 1,899 Polish school principals who took the survey, 832 completed the whole questionnaire (female – 81% and male – 19%; the mean age of school principals was  $51.9 \pm 6.5$  years; 76.6% were primary school principals and 23.4% were secondary school principals). At the same time, the research sample for individual questions differs because the respondents answered only some of the survey's questions. Nevertheless, it was a sufficient sample size for analysis.

## Measurements

### *Outcome variables*

In the presented study, the following variables were adopted as the outcome variables: Polish school principals' WHO, EXH, and PC. General wellbeing was evaluated using the WHO-5 scale. This measurement tool has been found to have adequate validity in screening for depression and measuring outcomes in clinical trials. Item response theory analyses in studies of younger and elderly persons indicate the measure has good construct validity as a unidimensional scale measuring wellbeing in these populations (Topp et al. 2015: 167–176). The scale contains five statements (e.g., Over the last two weeks, I have felt calm and relaxed) which were assessed by respondents on a 6-point scale from 0 = At no time to 5 = All of the time. Concerning mental and physical exhaustion, the short form of the exhaustion subscale, which constitutes the BAT inventory, was used in this study (Schaufeli et al. 2020). It contains three statements (At work, I feel mentally exhausted; After a day at work, I find it hard to recover my energy; At work, I feel physically exhausted) that were assessed on a 5-point Likert scale from 1 = never to 5 = always. Meanwhile, the scale for the PC (another the BAT inventory subscale) contains five items referring to somatic disorders, for example, headaches, muscle pain, palpitations or chest pain, suffering from stomach or intestinal complaints, and getting sick often. The items were rated on a 5-point Likert scale from 1 = never to 5 = always. The Cronbach's alpha coefficient for WHO was 0.914, for EXH was 0.892, and for PC was 0.777.

### *Independent variables*

Three subscales of the SEWB scale (Krause et al. 2015: 50–53) were used in this study as part of the survey questionnaire developed by Dadaczynski et al. (2021), who adapted the introductory questions to the context of the COVID-19 pandemic (e.g., In the last three months, how often has it happened due to the COVID-19 pandemic that you had to...). Within the study, the following subscales were used: Extensification of work (EW), which contains six questions

(e.g., In the last three months, how often has it happened due to the COVID-19 pandemic that you had to give up leisure activities in favour of work?); Intensification of work (IW), containing three questions (e.g., In the past three months, how often has it happened that you have been working at a pace due to the COVID-19 pandemic that you find burdensome?); Quality reduction (QR), with three questions (e.g., In the past three months, how often have you been required by the COVID-19 pandemic to lower your work output standards somewhat?). Each statement in these subscales was assessed on a 5-point Likert scale from 1 = never/very rarely to 5 = very often. The Cronbach's alpha coefficient for EW was 0.921, for IW was 0.935, and for QR was 0.859.

Additionally, sociodemographic characteristics, including gender, age, and type of school (primary school/secondary school) were considered the control variables. The age of the respondents has not been operationalised, and the original values were used for analysis.

### ***Statistical analysis***

The associations between independent and outcome variables were analysed using the Kendall's Tau correlation. The level of statistical significance was set as a two-sided  $p < 0.05$ . The Cronbach's alpha coefficient was calculated to check internal reliability, with values  $\geq 0.7$  considered to be satisfactory (Cronbach, Shavelson 2004). Regression models consisting of two equations (models) were used to test the relationship between variables. The first equation consists of control variables (gender, age, and type of school), and in the second equation, the independent variables (EW, IW and QR) were included in addition to the control variables. The F statistic was used to test whether the increase in the coefficient of determination was statistically significant. The regression models used parameters estimated from standardised parameters, which allow for models without free expression ( $b_0$ ) and for direct comparison of parameter values and the strength of the relationship between different equations. The level of statistical significance was set as a two-sided  $p < 0.05$ . All analyses were processed using IBM SPSS Version 28.0 for Windows.

### ***Ethical approval and research funding***

The study was reviewed and approved by the Research Ethics Committee of the University of Silesia in Katowice, Poland (KEUS.118/04.2021). Participants were informed about the aim of the study, its voluntariness, and its anonymity. The research activities were co-financed by funds granted under the Research Excellence Initiative of the University of Silesia in Katowice.

## Results

### Variables frequency results

At the beginning of the analysis of the results, it is worth emphasising that 59.5% of Polish school principals assessed their weekly working hours were higher during the pandemic than before. In line with these findings, respondents confirmed the extensification and intensification of work during the COVID-19 pandemic. The work extensification was mainly manifested by: being available to the school community members in their free time (71.4%); working longer than contractually agreed (68.4%); or giving up free time in favour of work (67.8%) For work intensification, the work pace during the pandemic was indicated by Polish school principals as burdensome (51.9%), challenging to maintain in the long term (53.6%), and not beneficial for their welfare (52.2%). Concerning assessing the quality of work during COVID-19, almost 60% of respondents did not confirm lowering of their work quality standards and its outcomes (see Table 1).

**Table 1.** Frequency of SEWB of Polish school principals during the COVID-19 pandemic [in the last three months]

SEWB subscales	Never/rarely	Sometimes	Often/very often	n
<b>Extensification of work</b>	15.5%	21.8%	62.6%	923
<b>Intensification of work</b>	16.1%	31.4%	52.5%	923
<b>Quality reduction</b>	45.7%	34.1%	20.1%	922

Source: Authors' research.

In the context of outcome variables, the results revealed that over 30% felt mentally and physically exhausted. Nearly half of the surveyed school principals (44.7%) found it was hard to recover their energy after a day at work. They also suffered the most frequently from muscle pain (49.5%) and headaches (27.8%). Regarding the work-related wellbeing of Polish school principals during the COVID-19 pandemic, respondents least often declared feeling calm and relaxed over the last two weeks (61.3%) and woke up feeling fresh and rested (61.3%). Over half of those surveyed admitted feeling cheerful and in good spirits (53.7%) and active and vigorous within the last two weeks (52.8%).

### Associations between variables

The statistical analysis proved the associations between the three SEWB subscales (EW, IW, and QR) and school principals' WHO, EXH, and PC during the coronavirus pandemic. Statistical analysis revealed a weak but statistically



significant correlation between the independent variables and all outcome variables (see Table 2). The rise in EW was associated with lower WHO ( $\tau = -0.25$ ), greater EXH ( $\tau = 0.29$ ), and PCs ( $\tau = 0.23$ ). Concerning the IW of Polish school principals during COVID-19, the result revealed that the more respondents intensified their work, with lower wellbeing declared ( $\tau = -0.36$ ). Moreover, IW during the pandemic has been positively associated with EXH ( $\tau = 0.45$ ), meaning that the more intensive the work pace was, the more exhaustion the respondents felt. Similarly, the IW was related to PCs, although the association was not so high ( $\tau = 0.33$ ). Thus, the deterioration of the quality of work was related to the principals' WHO, causing it to decrease ( $\tau = -0.33$ ). This analysed variable was connected with EXH ( $\tau = 0.34$ ) and PC ( $\tau = 0.26$ ).

**Table 2.** Kendall's Tau statistics for SEWB subscales (work extensification, work intensification, and quality reduction) and wellbeing, exhaustion, and psychosomatic complaints of Polish school principals during the COVID-19 pandemic

Variables		Extensification of work (EW)	Intensification of work (IW)	Quality reduction (QR)
<b>Wellbeing (WHO)</b>	n	829	829	829
	$\tau$	-0.25	-0.36	-0.33
	p	0.000	0.000	0.000
<b>Exhaustion (EXH)</b>	n	834	834	834
	$\tau$	0.29	0.45	0.34
	p	0.000	0.000	0.000
<b>Psychosomatic complaints (PC)</b>	n	834	834	834
	$\tau$	0.23	0.33	0.26
	p	0.000	0.000	0.000

N – number of observations;  $\tau$  – Kendall's Tau coefficient; p (p-value) – the significance of test set as  $p < 0.05$  two-sided. Source: Authors' research.

## Regression results

In none of the models was EW associated with WHO, EXH and PC. In turn, IW and QR were associated with each of the outcome variables, with the effect of IW being much larger, particularly for EXH and PC. IW and QR negatively correlated with WHO and positively correlated with EXH and PC. This means that with the increase in IW and QR, WHO decreased, and the level of EXH and PC grew. The control variables 'gender' and 'age' of school principals were particularly important for the sense of PC. Statistical analysis showed that male

and older school principals less frequently felt PC. With regard to EXH, age was the only significant control variable for the regression results obtained. The sense of EXH decreased with the age of respondents. For WHO, there was only a tendency to differences: women were less likely to feel WHO. School type did not matter for the WHO, EXH and PC of the principals surveyed (see Table 3).

**Table 3.** Findings of the regression analysis for well-being, mental and physical exhaustion and psychosomatic complaints

	Well-being (WHO)		Mental and physical exhaustion (EXH)		Psychosomatic complaints (PC)	
	Model 2		Model 2		Model 2	
<b>Control variables</b>	b	P	b	P	b	P
Gender (woman/man)	0.057	0.068	-0.009	0.767	-0.185	0.000
Age (in years)	0.018	0.561	-0.071	0.013	-0.083	0.007
Type of school (primary/secondary)	-0.041	0.180	-0.020	0.485	-0.004	0.902
<b>Independent variables</b>						
Extensification of work (EW)	-0.005	0.905	-0.008	0.841	-0.012	0.774
Intensification of work (IW)	-0.352	0.000	0.481	0.000	0.369	0.000
Quality reduction (QR)	-0.256	0.000	0.192	0.000	0.151	0.000
<b>Model evaluation</b>						
R <sup>2</sup>	0.300		0.375		0.277	
R <sup>2</sup> adjusted	0.294		0.370		0.272	
F	54.658		77.210		49.275	
P (F)	0.000		0.000		0.000	
n	772		778		778	

R<sup>2</sup>—coefficient of determination; F—test for the equality of the coefficient of determination; n—number of observations; Source: Authors' research.

## Discussion

In the middle phase of the coronavirus pandemic in Poland, most of the surveyed school principals declared more working hours, work extensification and intensification during the COVID-19 crisis. This result is significant

because even before the pandemic, teachers and school principals worked extra hours, usually at home. For example, according to Bottery (2016, p. 98), principals find themselves working extra hours, ‘not just on weekday evenings but also at weekends and during school holidays, [...] where the job becomes unsustainable if they do not’ (Mestry 2017b: 1). Meanwhile, some research suggests that working on weekends (especially Sundays), and in the evenings was associated with more health impairments among employees (Wirtz et al. 2011), poor work-life balance and work-related health complaints (Greubel et al. 2016). Moreover, the increased workload can lead to several adverse mental and physical health issues, such as fatigue, tension, emotional exhaustion (Baeriswyl et al. 2021a; Fein et al. 2017: 361–362, 368), high blood pressure, weight gain (Trapp et al. 2014), sleep disorders (Mahfouz 2020), breathing problems, and headaches (Van der Merwe, Parsotam 2012).

More than half of the surveyed Polish school principals indicated that the work pace (IW) during the pandemic was difficult to maintain in the long term, burdensome, and harmful to their welfare. In the face of these results, it is worth emphasising that earlier studies report that IW has negative stress-related implications (Green 2004: 709–741; Green, McIntosh 2001: 291–308). In particular, the high pace of work adversely affects employees’ wellbeing, health, and motivation (see: e.g., Leksy et al. 2023; Bowling et al. 2015: 95–113; Daniels et al. 2014: 63–89; Mazzola, Disselhorst 2019: 949–961). Simultaneously, considering that nearly half of surveyed Polish school principals did not lower their work outcome standards, we assume that the respondents’ attitude to their occupational duties was conscientious and ambitious. Moreover, the significant occupational involvement of Polish school principals can stem from the high social expectations of school professionals. In addition, the threat of a lack of control and influence, resulting in a potential sense of incompetence, could contribute to putting one’s health and wellbeing above professional duties (Şek 2011: 149–167).

Our findings further revealed that the IW of Polish school principals during the pandemic was more negatively associated with WHO than EW. Moreover, the association between IW and EXH was remarkable and more significant than between EW and EXH. Also, concerning PC, IW was the most associated with this outcome compared to the EW and QR declared by respondents. Surprisingly, the EW of school principals during the pandemic was the least associated with EXH. We assume that even though the EW of Polish school principals during the pandemic was raised, they had a sense of good and conscientious performance of their professional duties. Overall, the IW presented by respondents was the most correlated with the assumed outcome variables, and adding control variables did not influence this effect. This conclusion aligns with other research results showing the relationship between IW and many negative consequences (Mauno

et al. 2022). Among these, researchers reported an association between IW and some indicators of mental or physical health problems (Borle et al. 2021; Chillakuri, Vanka 2022; Chowhan et al. 2019; Engelbrecht et al. 2020; Xia et al. 2020), a negative association with job satisfaction (Sayin et al. 2021; Xia et al. 2020), work-family imbalance (Muster, Leksy 2022; Kubicek et al. 2016;), and job burnout (Engelbrecht et al. 2020; Huo et al. 2022; Paškvan et al. 2016).

There is no doubt that school principals are perceived by society as strong, mentally resilient and free from health problems. Meanwhile, they also need methodical and psychological support in their daily work, particularly when they have to deal with crisis situations that relate not only to the pandemic threat, but also to the influx of children of war refugees from Ukraine. During the pandemic, school principals struggled with an emergency situation – initially related to the closure of schools and the transition to remote learning, and later with the need to organise hybrid learning. In many cases, this situation had a negative impact on the wellbeing of the management staff of educational institutions. At the same time, it is worth emphasising that the post-inspection conclusions of the Supreme Audit Office showed that the psychophysical condition of students and teachers deteriorated during the pandemic. It was also recommended creating and implementing comprehensive support for schools, students and teachers in particular, in crisis situations (*Funkcjonowanie szkół...*, 2001: 19). However, there is no information on what activities have been taken to support the work and wellbeing of school principals. On the other hand, the recommendation to provide ‘both legal and methodological comprehensive support for schools in crisis situations’ (ibid., p. 19) has been formulated at a high level of generality and freedom of interpretation.

Aligning with the research results and literature analysis, there is an urgent need for social support and the development of healthy leadership styles for school principals. Dettmers et al. (2016: 34) propose implementing a health-oriented prevention strategy to reduce SEWB. This kind of strategy would systematically assess the occurrence of SEWB and encourage employees to reflect on and change harmful behaviours. According to the cited authors, identifying risks to health before problems are revealed could be achieved by including an assessment of SEWB in early warning systems within general work-related risk assessment and employee surveys. Additionally, active coping strategies are positively associated with wellbeing (Nielsen, Knardahl 2014: 142–150) and play an essential role in burnout prevention (Wallace et al. 2010: 111–122). Moreover, positively related to job satisfaction and work engagement are problem-solving strategies, cognitive restructuring, social support (Beausaert et al. 2021: 2–3), and advice-seeking (Welbourne et al. 2007: 312–325). School principals should be aware of the phenomenon described in the article and its health-related consequences, not only concerning themselves but teachers as well. This will

allow them to implement suitable prevention arrangements. Specific training or workshops about SEWB would also be desirable for improving knowledge, using positive coping strategies, and therefore supporting school professionals' wellbeing. Finally, 'taking SEWB into account in workplace health promotion may help to develop more timely interventions that will decrease the risk of emotional exhaustion and, as a consequence, decrease the risk of further serious health problems' (Baeriswyl et al. 2021b: 2–3).

The presented research results have some significant limitations. Firstly, it was a cross-sectional study conducted in the middle of the pandemic (June–December 2021). Secondly, during the survey time, decisions about school closures were decentralised. These all mean that school principals' management styles and work-related behaviours have probably changed over time. Thirdly, the study results are based on respondents' declarations in the questionnaire, so their workload and work-related behaviours assessment was very subjective. Furthermore, the sampling strategy did not control varying probabilities of survey participation by schools in our survey, and the results may have been influenced by non-response bias. Nevertheless, the presented research can be the starting point for identifying health-damaging behaviours in the workplace presented by school principals and, on that basis, preparing prevention strategies. School leaders play a crucial role in effectively managing educational institutions and contributing to students' learning outcomes (Mestry 2017b: 13). This is why their health and wellbeing should be emphasised and taken into consideration by school policymakers who 'do not necessarily see working extra hours or extended work-related availability during leisure time as a crucial concern' (Baeriswyl et al. 2021b: 3).

## Conclusions

Our study confirmed that SEWB presented by Polish school principals during the COVID-19 pandemic is associated with respondents' WHO, EXH, and PC. This study contributes to the limited literature on Polish school principals' SEWB during the pandemic and its work and health-related outcomes. Therefore, our findings could be a baseline for policymakers for the prevention of overwork and burnout in Polish school principals. Multidimensional interventions based on the organisation, organisation-individual, and individual levels (Greenberg et al. 2016: 6–9) could help reduce school principals' SEWB and improve their work-functioning as well as mental and physical health.

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