

Article

Factors Constraining Teachers' Wellbeing and Agency in a Finnish University: Lessons from the COVID-19 Pandemic

Tiina Mäkelä ^{1,*} , Pieta Sikström ², Päivikki Jääskelä ¹ , Salme Korkala ², Jimi Kotkajuuri ², Saara Kaski ³ and Peppi Taalas ²

¹ Finnish Institute for Educational Research, University of Jyväskylä, P.O. Box 35, FI-40014 Jyväskylä, Finland

² Centre for Multilingual Academic Communication, University of Jyväskylä, P.O. Box 35, FI-40014 Jyväskylä, Finland

³ Department of Chemistry, University of Jyväskylä, P.O. Box 35, FI-40014 Jyväskylä, Finland

* Correspondence: tiina.m.makelal@jyu.fi

Abstract: The COVID-19 pandemic forced teachers to undergo a sudden shift toward technology-enhanced teaching and learning, challenging their capacities for change in many ways. This study explores those factors constraining teachers' wellbeing and agency that influenced their capacities as teachers in a Finnish university during the first year of the pandemic. Two sets of data were collected, with an online survey in the spring ($n = 297$) and autumn ($n = 246$) of 2020. At both times, challenges with workload, time management, and interactions with colleagues were found to be the most constraining factors. Difficulties with work–life balance and home office facilities seemed more of an issue in the spring, whereas transforming teaching and adopting new technological tools were reported as more burdensome in the autumn. The findings show the need for teachers to be heard and holistically supported, particularly when extensive changes in teaching arrangements are expected on a rapid schedule.

Keywords: COVID-19; emergency remote teaching; university teachers; wellbeing; agency



Citation: Mäkelä, T.; Sikström, P.; Jääskelä, P.; Korkala, S.; Kotkajuuri, J.; Kaski, S.; Taalas, P. Factors Constraining Teachers' Wellbeing and Agency in a Finnish University: Lessons from the COVID-19 Pandemic. *Educ. Sci.* **2022**, *12*, 722. <https://doi.org/10.3390/educsci12100722>

Academic Editors: Elena Makarova and Kerstin Göbel

Received: 22 September 2022

Accepted: 17 October 2022

Published: 19 October 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The COVID-19 pandemic outbreak forced educational institutions to undergo sudden and unexpected changes in how teaching and learning were arranged. Teaching rapidly shifted from campus-based learning to emergency remote teaching without the opportunity for structured planning [1]. This sudden change was a stressful experience, resulting in negative effects on teacher and student wellbeing [2,3]. The rapid change from onsite to online education was reported as causing an exceptional workload for both teachers and students [4,5].

A systematic mapping review describing the characteristics of 282 primary empirical studies on emergency remote teaching in higher education in the first months of the COVID-19 lockdown concluded that most of the studies focus solely on student experiences of online learning [6]. There is, however, a growing body of research on teachers' experiences of emergency remote teaching, indicating that the sudden change to an online mode put teachers' wellbeing to the test. Teachers reported suffering from stress, anxiety, exhaustion, and burnout due to information overload, their workload, and time pressures [7,8]. Moving from onsite to online teaching required, for instance, reshaping the curricula, creating online assessment methods, and formulating replacement assignments for students to complete the courses [4].

Teachers may, however, exercise agency to adapt, promote, or resist change [9] and to manage wellbeing [10] in exceptional circumstances. At the time of the initial COVID-19 outbreak, teachers were found to be capable of exercising transformative agency and having a positive attitude, willingness, and ability to cope with a challenging situation [11]. A survey-based study of university teachers in the first month of the COVID-19 lockdown

reported that teachers' agency varied, from an iterative, non-transformative agency that noted constraints but did not actively manage them, to the projective and transformative agency that actively managed constraints and used new methods and software in their teaching [12]. Badiozaman [7] claims that strong agentic competence, including resilience, goal-setting, and adaptive behavior, was an important factor influencing teachers' readiness for emergency online teaching. In addition, teachers exercised their agency by reducing their workload and safeguarding the wellbeing of both their students and themselves [13].

Studies reporting teachers' experiences of wellbeing in the long term during a pandemic are still rare. An exception is the study by Lavonen and Salmela-Aro [14], which revealed that the number of teachers considering themselves to be fully engaged was found to have dropped in the period from the spring (41.8%) to the autumn (30%) of 2020, while the number of teachers feeling severe burnout rose from 9.8% to 20%. Dinu et al. [15] suggest that the teachers' workload continued to be high when preparing online teaching materials for the 2020/21 academic year, as it became apparent that returning to campus was not viable.

The present study focuses on the identifying factors constraining university teachers' wellbeing and agency at two different time points in the first year of the pandemic. The additional value of this study is twofold. First, we need to identify teacher-experienced constraints, in order to develop support practices for teachers to overcome them and enhance their agency and overall wellbeing. This is expected to improve both student wellbeing (see [16]) and high-quality teaching practice (see [17]). Second, we perceive that it is important to acquire more longitudinal knowledge of this topic to evaluate the possible changes in factors constraining wellbeing and agency. Thus, we base our analyses on the data collected at the first stage of the initial COVID-19 outbreak and then, after the pandemic had already become a more permanent part of people's daily lives and teachers were likely to be more accustomed to online teaching.

In this study, teachers' wellbeing and agency are seen as being intertwined: fostering teachers' wellbeing supports their role as agents of change [18]; in turn, teachers' strong agency supports their wellbeing [19]. As concluded by Vähäsantanen [20], teachers' opportunities and power to influence work practices are likely to foster wellbeing, while a lack of agency over one's work, time, and social resources may lead to exhaustion. Possibilities for influencing practices vary, depending on sociocultural and material circumstances [21]. In circumstances such as the COVID-19 pandemic, individuals' and communities' agency are strongly constrained by external factors that have to be accepted without being able to influence them. This alone may negatively affect wellbeing.

This article analyzes university teachers' experiences of the factors that influenced their wellbeing and agency during the first year of the pandemic. The following research questions were set:

- What factors do teachers experience as being constraining for their wellbeing and agency in the spring and autumn of 2020?
- What are the most common factors in teachers' experiences that can be found in the spring and autumn of 2020?
- The focus is on the lessons learned from the COVID-19 pandemic that could be applied in post-pandemic higher education instead of merely returning to pre-pandemic "normal" [22].

2. Conceptualizing Wellbeing and Agency

This study conceptualizes both teacher wellbeing and agency as contextually situated. Furthermore, teacher wellbeing and agency are viewed as interrelated and even partly overlapping.

First, our conceptualization of wellbeing is in line with that of Dodge et al. [23], considering it to be a state of equilibrium between the individual's psychological, social, and physical resources and existing challenges. That is, there is a need for adequate resources to meet a particular challenge. In a similar vein, according to the theory of

self-determination [24], satisfying basic physiological and psychological needs (autonomy, belongingness/relatedness, and competence) has an effect on motivation, social development, health, wellbeing, and work performance. The need for autonomy refers to ownership and self-actualization; belongingness refers to close relationships and support; competence refers to feeling capable of achieving the desired outcomes and effectively coping with challenges [24]. Naidoo et al. [25] concluded that during the pandemic, the sense of an external locus of control lowered faculty members' feelings of autonomy, a lack of social connection influenced relatedness, and competence was also put to the test. In line with Acton and Glasgow [26] (p. 100), we position teacher wellbeing within wider social and professional contexts and the "complex interplay between individual, relational and external factors that affect, constrain and mediate the wellbeing of teachers". Individual factors refer to the need for autonomy and a sense of competence, a healthy work–life balance, happiness, and satisfaction. Relational factors entail the quality of staff and student interactions and working environments, connectedness, and belonging. External factors include policy initiatives, work intensification, and organizational culture.

Second, our conceptualization of agency follows the ecological view proposed by Biesta and Tedder [27]: agency is seen as the personal capacity to act in a specific environment that sets conditions for one's actions. Individual agency and social context are seen as being analytically separate but mutually constitutive and highly interdependent [21]. As defined by Eteläpelto et al. [21] (p. 62), teachers' professional agency is practiced and manifested when individuals and communities "exert influence, make choices, and take stances in ways that affect their work and/or their professional identities" in specific sociocultural and material circumstances. These circumstances can constrain or enable both teachers' professional agency [21] and their wellbeing [26]. Agency and wellbeing at work can also be linked with the way that professional capacity is employed in an unexpected situation. In particular, collegiality and collaborative capability are found to be important factors in coping with pressure and uncertainty [28,29].

Several studies have demonstrated the overlap of wellbeing and agency. For instance, wellbeing is related to a sense of autonomy, environmental mastery, the realization of one's potential, and the ability to fulfill goals [23], which are also viewed as fundamental in exercising agency. Ryan and Sapp [30] connect wellbeing with agency by relating it to an individual's vitality, ability to thrive within one's everyday environment, capacity for optimal functioning, confidence in being able to fulfill goals, and the motivation and energy to persist despite encountering obstacles. Taylor [31] adds to this definition the concept that wellbeing and agency, or "agency for wellbeing", refers to self-fulfillment and the capability or capacity to act in the context of specific social relations.

Constraints in teachers' circumstances may include the curriculum, professional and power relationships with colleagues and management, and the dominant culture in educational institutions, while available material circumstances or resources include equipment, instructional methods, ICT devices, and so on [9]. Alternatively, as defined by Priestley et al. [32], teacher agency is constrained or supported by cultural aspects, such as beliefs, values, and aspirations, that direct intrapersonal and interpersonal communication, material resources and physical environments, and social and relational resources.

In the conceptualization of agency, an individual's belief in their capability of controlling events and their quality of life plays an important role [33]. As described by Hargreaves and Fullan [29], capabilities—meaning the skills and qualities that lead to accomplishment—build confidence and support teachers in becoming active agents of change. In the context of remote working, both the individual's belief regarding capability and the actual capacity to control life events are being challenged. For instance, work–life balance has been experienced as being difficult to manage [34]. In addition, in online teaching, the lack of face-to-face contact with students has led teachers to feel less control over how to manage their classes [35]. Agency depends on an individual's experiences and interpretations of contextual factors, such as the opportunities provided for participation, influencing, and making choices [36]. While teachers' agency is constrained, for instance,

by the available resources, these constraints are not completely out of teachers' control but depend on their interpretation of the contextual constraints within which they enact their teaching [9]. In spring 2020, teachers were, however, forced to switch their teaching to an online mode, which may have also lowered their sense of control over their teaching. This, together with the pandemic, which is likely to affect everyone's sense of agency and control over life events in general, is also likely to influence teachers' wellbeing.

Damşa et al. [12] viewed teachers' conduct as a dynamic relationship with their environment, entailing varying resources, tools, institutions, infrastructures, and communities. They argue that in emergency circumstances, such as a pandemic, notions of agency should consider both the individual or contextual background constraints, including limitations in digital or pedagogical skills, technical infrastructure, institutional support, or time. Our study deepens the earlier work by Damşa et al. [12] by extending the analysis of the constraints to both wellbeing and agency inherent in emergency online teaching, as well as by examining the teachers' experiences at the beginning of the COVID-19 outbreak in spring 2020 and after they had gained experience of implementing their whole courses under pandemic circumstances by autumn 2020.

3. Materials and Methods

3.1. Context of the Study

The study was conducted at a Finnish multidisciplinary university. The university has six faculties and five independent institutes and comprises approximately 2600 staff members and 14,000 students. The study was designed and conducted as part of preparing the university's education development program, which aimed to involve the university community in the development of pedagogically and digitally relevant teaching practices and environments in multiple forms and over several sites.

The university campuses were closed due to the COVID-19 pandemic on 16 March 2020. With three days' notice, the university switched to distance learning mode for the rest of the spring term. Autumn 2020 began by alternating between remote work and working on campus, limiting the group sizes and courses offered onsite, and offering hybrid teaching. Since the further acceleration of the pandemic at the beginning of December 2020, the share of time spent working and studying on campus decreased further. This situation offered an opportunity to gather information on the preparedness of the university community to work remotely and to identify needs as well as resources that are required to support teachers in transforming teaching and guidance (or supervision) to an online or hybrid mode.

3.2. Participants

The invitation to participate anonymously in the questionnaire was sent to all university staff members who were in charge of teaching or providing guidance (herein referred to as teachers) during the spring and autumn of 2020: 1062 persons in the spring of 2020 and 1042 persons in autumn 2020. In the spring, there were 297 respondents and in the autumn, there were 246. At both times, most of the respondents were university teachers (65%), followed by researchers (20%) and professors (15%) with teaching or supervising responsibilities. Most of the respondents (68%) in the spring reported having no or very little online teaching experience. The respondents represented all six faculties. Of the independent institutes, most of the respondents represented the Center for Multilingual Academic Communication (Table 1).

3.3. Materials

The data analyzed in the present study are part of a larger dataset on the experiences teachers have had regarding teaching and guidance during the pandemic in 2020. The analysis of this study utilizes one structured and one open-ended question dealing with the theme of Personal resources and sense of control, which examines the teachers' perceptions of available resources and their control over their work and life (see [9,23,33]), affecting

both their wellbeing and agency. Both questions focused on identifying the interrelated individual or psychological factors; social, relational or (socio)cultural factors; and physical, material, or external factors (see [21,23,26,32,37]) that could have constrained both the wellbeing and agency of university teachers.

Table 1. Numbers of respondents according to faculty/unit and their proportion of the data.

Faculty/Unit	Spring 2020		Autumn 2020	
	<i>n</i>	%	<i>n</i>	%
Humanities and Social Sciences	70	23.6	55	22.4
Education and Psychology	51	17.1	39	15.9
Mathematics and Science	45	15.2	43	17.5
Center for Multilingual Academic Communication	41	13.8	39	15.9
Sport and Health Sciences	32	10.8	20	8.1
Information Technology	23	7.7	18	7.3
Business School	20	6.7	18	7.3
Other (e.g., university services, open university, open science center)	15	5.1	14	5.6
Total	297	100	246	100

The structured question was, “How well have you managed to control the following during the COVID-19 period of spring/autumn 2020?” (1 = very poorly, 5 = very well). This question focused on teachers’ beliefs of their capabilities to control [33] factors that can be viewed to influence not only their agency but also their wellbeing and “agency for wellbeing” [31]. The query items for this question were formulated based on the earlier literature on both remote working in general (e.g., [34]) and online teaching in particular [35], as well as on teachers’ professional capital [29], which topic the research team saw as particularly applicable to the sudden change from onsite to online teaching. The items were (a) organizing one’s work; (b) organizing one’s time; (c) life management and coping; (d) adopting new technological tools; (e) offering support to one’s colleagues; and (f) aligning work and free time. These six items were used as independent variables in the analyses. The open-ended question, “What aspects were the most burdensome for you during the COVID-19 remote teaching period?” allowed the respondents to describe their own thoughts concerning the issues they perceived as challenging, particularly for their wellbeing (“burdensome factors”). Burdensome factors are likely to influence an individual’s ability to thrive within their everyday environment, also with negative consequences for their sense of agency [30].

3.4. Data Analysis

Responses to the structured question (sense of control) in the spring and autumn were analyzed separately. Mean values were used to examine the average level of control in the measured items. To obtain more detailed knowledge of the distribution of responses for each item on the rating scale, the frequencies for each rating were calculated. We were especially interested in frequencies rated as either 1 or 2, which indicated the respondents’ sense of weak control over their work.

Responses to the open question were analyzed using data-driven thematic analysis [38]. The length of the responses varied from a few words or a single sentence to more than ten sentences covering several themes. The second author first coded the data by marking the emerging themes and naming them. Then, the identified themes, their coding criteria, and naming were discussed and refined. Next, each response was coded by two authors who classified them independently, according to the agreed themes. These classifications were compared to find interrater reliability, which was found to be strong, with the immediate agreement of coding of between 78% and 86%. When the coding differed, the authors discussed and agreed upon the final coding.

Finally, the results of the structured and open-ended questions were considered side by side, to see whether they coincided with each other. From the responses to the structured question, the aggregated frequencies and proportions indicating difficulty in managing control (rated as 1 = very poorly or 2 = poorly) were compared with the frequencies and proportions that were calculated in the context of the thematic analysis of the open responses.

4. Results

4.1. Sense of Control over Remote Working

In both the spring and autumn of 2020, the teachers considered that they had, on average, better control (1 = low control; 5 = high control) over organizing their work ($T^1 M = 3.74$, $SD = 1.05$; $T^2 M = 3.63$, $SD = 0.97$) and adopting new technological tools ($T^1 M = 3.88$, $SD = 0.98$; $T^2 M = 3.47$, $SD = 1.13$) than they did over time management ($T^1 M = 3.20$, $SD = 1.20$; $T^2 M = 3.19$, $SD = 1.07$), life management, and coping ($T^1 M = 3.07$, $SD = 1.13$; $T^2 M = 2.90$, $SD = 1.14$), offering support for their colleagues ($T^1 M = 3.15$, $SD = 1.00$; $T^2 M = 3.04$, $SD = 1.03$), and aligning work and free time ($T^1 M = 2.99$, $SD = 1.21$; $T^2 M = 3.00$, $SD = 1.16$).

When considering the proportions of responses for each item on the rating scale, approximately one-third of the respondents experienced a low or a very low sense of control over organizing their time, managing and coping with problems in their lives, and aligning their work and free time (Figure 1). Half of the items were rated as difficult to handle (ratings 1 and 2) by more respondents in the spring survey than in the autumn one. These were: *organizing my work* (13% in spring; 10% in autumn), *organizing my time* (32% in spring; 26% in autumn), and *aligning work and free time* (39% in spring; 32% in autumn). On the other hand, half of the items were rated by more respondents as being more difficult to handle in the autumn than in the spring. They were *life management and coping* (34% in spring; 37% in autumn), *adopting new technological tools* (9% in spring; 20% in autumn), and *offering support to my colleagues* (25% in spring; 28% in autumn).

4.2. Burdensome Factors in Remote Working

Next, based on the analysis of responses to the open question, Table 2 summarizes the themes describing those factors that teachers viewed as burdensome in terms of their work during the pandemic. It also presents the frequencies of the responses according to the theme, and their proportions to the total number of responses, separately in the spring and autumn of 2020.

Seventeen themes were identified in the analysis. The teachers most frequently reported issues related to *workload and time management* as being burdensome (38% of the respondents in the spring; 33% in the autumn). Various respondents commented that there was an increased workload and burden due to more challenging and time-consuming tasks. They had to re-design courses in a short time and deal with their feelings of inadequacy. Some respondents mentioned that they had to work excessively long days, including weekends, and still felt that they would have not accomplished everything that was needed. As one teacher stated: 'Feeling that you always have to be available in front of the computer causes overload.' Feelings of overload due to extensive working days also seemed to continue in the autumn, when online teaching continued after the summer break.

Regarding a problem partly linked to workload and time management, a growing proportion of the respondents mentioned *study administration* (3% in spring; 7% in autumn) and *research* (1% in spring; 5% in autumn) as burdensome factors in their work. In relation to finding time for research, one teacher commented in the autumn: "It is very hard to manage extra teaching responsibilities and keep up research, with limited access to the laboratories and students demanding a lot of time".

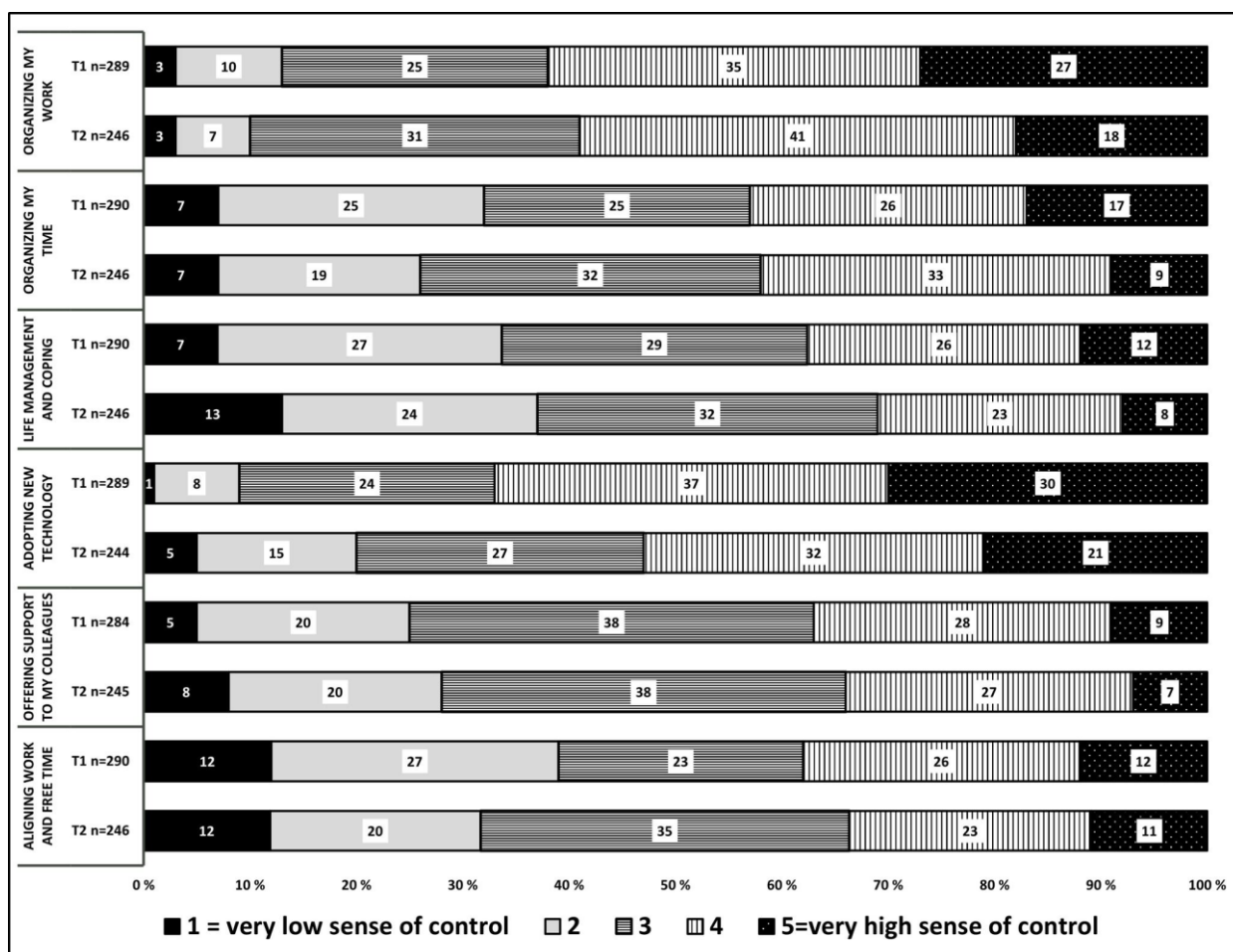


Figure 1. Burdensome factors in remote working. Note 1: The number of respondents for each item varied in spring (T1) between 284 and 290 respondents, and in autumn (T2), between 244 and 246 respondents, as it was not mandatory for participants to respond to all items. Note 2: Numbers in bar charts refer to the proportions of responses on the rating scale.

Table 2. Themes of the burdensome factors, frequencies of responses according to theme, and their proportion of the total number of responses in the spring and autumn of 2020.

Theme	Spring 2020 (n = 297)		Autumn 2020 (n = 246)	
	f	% of n	f	% of n
Workload and time management	114	38	81	33
Work–life balance	81	27	25	10
Interaction with colleagues	68	23	53	22
Transforming teaching	58	20	66	27
Psychological and physical wellbeing	45	15	32	13
Learning new technologies	32	11	21	9
Student guidance, scaffolding, and support	26	9	24	10
Facilities at the home office	25	8	11	4
Online meetings	22	7	15	6
Problems with technology	22	7	15	6
Offering and asking for support	22	7	21	9
Interaction with students	17	6	32	13
Leadership	16	5	23	9
Worry about students	12	4	12	5
Uncertainty	9	3	14	6
Study administration	9	3	16	7
Research	4	1	12	5
Miscellaneous (e.g., “nothing to mention”, “new staff members”, “a new work role”)	68	23	59	24

Work–life balance was the second most frequent challenge in the spring (27%). The participants reported difficulties in finding a balance between work and their personal life, including free time, home duties, family, children, spouses, and aging parents. As one teacher commented:

“At some point, I felt I was always at home doing nothing else than working and sleeping; before, with having an office on campus, I could more easily separate work and private life. Now I respond to student emails even in the middle of the night, which was not my style before.”

Particularly in spring 2020, when schools were under nearly complete lockdown, teachers with children found it difficult to combine work and taking care of their children. In the autumn, when children were back to daycare and school, fewer respondents (10%) referred to work–life balance as a challenge. Children were, however, still at home more often than usual, due to different symptoms, outbreaks, or quarantine restrictions. As one respondent commented: “Children returned to daycare at the beginning of autumn and during the first month there were many sick leaves, but now everyday life is running smoothly again”.

Lack of *interaction with colleagues* was also among the most frequently mentioned challenges (23% of the respondents in spring; 22% in autumn) when working from home. The respondents missed their spontaneous and unplanned face-to-face encounters and felt that many things that were easy and quick to arrange when face-to-face were more difficult in online communication. Online encounters limited their creativity and innovation. As one teacher stated: “Spontaneous coffee-break conversations are missing, developing and ideating new things is rare”.

Seven percent of the respondents in the spring and six percent in the autumn mentioned *online meetings* as being burdensome. The participants felt that there were too many online meetings in a row, and it was more difficult to concentrate online than when face to face. Too-short breaks between meetings made it difficult to make progress with other work. As one teacher commented in the spring: “You have to be so intensively present there, that they burden you more than face-to-face meetings”. Another respondent wrote in the autumn that there were “a huge number of online meetings, which impedes doing other tasks during the workday”.

Psychological and physical wellbeing was also a concern that was directly mentioned by many participants (15% of the respondents in spring 2020; 13% in autumn 2020). Participants were worried about both their physical and mental health and recovery. As one teacher commented:

“The most challenging aspects were related to wellbeing. I did exercise regularly and tried to have reasonable hours dedicated to work each day (but initially there were long days). However, [the number of] changes and the amount of work I had to do at the time caused great stress. I could not really shake off the stress.”

Closely connected to psychological wellbeing, 3% of responses in the spring and 6% in the autumn mentioned *uncertainty* as being stressful. Uncertainty was related both to the continuity of work (e.g., renewing contracts or achieving research funding) and to the general insecurity provoked by the pandemic. One participant noted in the spring: “The stress [was] provoked generally by the state of emergency, insecurity about the future and, for that reason, the impossibility [of planning] anything”.

Every fifth respondent in the spring survey (20%) reported challenges related to *transforming teaching*. Adapting course objectives, tasks, and activities to fit online teaching in such a short period of time was viewed as challenging. The teachers were concerned about how to maintain high standards and achieve the course objectives. Forced and sudden changes in their teaching environments affected the teachers’ sense of agency, such as how they perceived the possibility of their influencing their work and tailoring their pedagogy to adapt to new circumstances. Consequently, the need for rapid changes affected teachers’ overall wellbeing. As one teacher described in the spring survey:

“Teaching is always intensive. Online teaching is much more so, if you aim to do the same as face-to-face, that is, discuss [and] recognize students’ feelings and needs. My work has become more burdensome as I have not wanted to compromise when it comes to objectives. I have also had to redesign previously designed courses, new applications, new materials, and so on. The workload has increased also in that sense.”

The additional workload related to changes in teaching seemed not to be over but may even have increased after the summer break. Namely, every fourth respondent commented on this challenge in the autumn (27%). They felt they did not have enough time to design and develop their courses. Creating new materials such as recorded video lectures was considered to be time-consuming.

Apart from teaching itself, the factor of *student guidance, scaffolding, and support* was mentioned as overloading by 9% of respondents in the spring and 10% in the autumn. The respondents saw that there was a need for individual online sessions and extensive email interchange, providing additional instructions and materials for students. As stated by one respondent in the spring survey, the attention was particularly on “supporting the learning processes of students who had had difficulties [acting] during the pandemic”. Another respondent commented in the autumn survey: “Different individual challenges among students have clearly increased this autumn”. Various participants also commented that supporting students online was challenging and time-consuming.

In addition to guiding students in their studies, some respondents (6% in spring) expressed there were challenges in the factor of *interaction with students*. This category included concerns related to activating students and supporting group work when teaching online. There were also responses referring to the challenge of being isolated from students. As commented by one teacher in the spring survey: “Having direct contact with the people in teaching situations feels more natural and communicatively remote work is strange.” The percentage of respondents (13%) mentioning challenges in interacting with the students increased in the autumn survey in comparison to the spring. As one participant commented:

“It is very difficult to know the best way to stay in contact with students and students [who] complain about not getting sufficient information. In the spring, the students were a bit more active, trying to stay on top of things, but now I think they are a bit more passive, ‘waiting for information/instructions’.”

Furthermore, 4% of respondents in the spring and 5% in the autumn surveys expressed the sense that they were *worrying about students*. This category included concerns related to students’ learning, wellbeing, loneliness, drop-out, off-grid students, and the technical aspects of attendance. As stated by one respondent:

“[I] worry about how students are coping and if they have opportunities to do their work as well as they want to. How well they can access the resources and how to consider this in the evaluation . . . ”

Learning new technologies was considered burdensome, particularly in the spring (11%) due to the sudden change from face-to-face to online teaching. One respondent described the change as follows: “You are supposed to study the use of remote technology and it feels like something excessive in an otherwise busy working situation”. One teacher mentioned that the lack of being accustomed to dealing with technology caused “stressful situations, which made me even more clumsy with it”. Similar concerns seemed, however, to persist in the autumn (9%), despite having more experience with online teaching.

Along with the need to learn about the use of technologies, *problems with technology* (e.g., with different applications or poor internet connection) were mentioned by 7% of respondents in the spring and by 6% in the autumn. There were also some comments related to constraints related to *facilities at the home office* (8% of the respondents in the spring; 4% in the autumn). These comments were linked to physical health (e.g., ergonomics) and infrastructure (e.g., available office furniture, technology, or the internet). As commented by one participant: “You basically work all the time in front of the computer—this is surprisingly burdensome”.

Offering and asking for support was called burdensome by 7% of respondents in the spring and by 9% in the autumn. In some cases, respondents felt that they had to learn to use new technologies and adapt their teaching methods without much support. This was perceived as time-consuming and burdensome. The respondents said that it was difficult to access particularly prompt support when facing difficulties. On the other hand, helping others caused an additional burden. One participant in the spring survey described it as follows: “I also had to offer IT support to my colleague and to create our joint course platforms on Moodle and Zoom by myself”.

Some participants felt that they had not received enough support from their superiors: 5% of respondents in the spring and 9% in the autumn wrote about challenges related to *leadership*. One teacher commented in the spring survey: “[In terms of] personal support for organizing teaching, there was no support from a superior, but one had to figure out things by oneself.” Others felt that management had not succeeded in communication. Some claims were seen as erroneous, unclear, or contradictory. There were either not enough instructions or they were too detailed and trivial, even patronizing. As reported by one respondent in the autumn: “The university’s constantly changing corona rules and requirements have forced us to redesign [the] curriculum already many times.” Some participants expressed their disappointment that no extra compensation was even discussed, despite the additional efforts that teachers were making.

4.3. Comparison of Results from the Structured Question and Open-Ended Question

Finally, the results seemed to be very much in line when comparing the frequencies of themes and their proportions in the structured question, especially those scoring 1 (very poorly) and 2 (poorly) that indicated difficulties in managing to control remote working, with the frequencies and proportions of responses to those themes reported as burdensome (see Figure 1 and Table 2). In addition to supporting and giving more insight into the results related to items rated as being difficult to manage, responses to open-ended questions revealed additional themes that were considered to be burdensome. Figure 2 demonstrates how items in the structured question can be linked to themes identified in the responses to the open question.

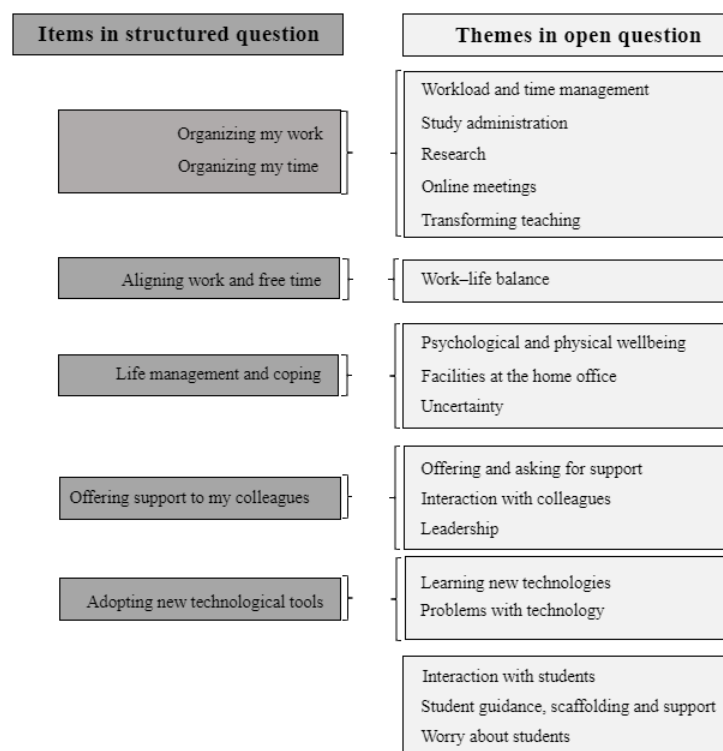


Figure 2. Linking of items in the structured question to themes in the open question.

First, a slightly descending proportion of respondents rating *organizing work* and *organizing time* as being difficult to handle in the autumn in comparison to the spring was in line with the responses coded under *workload and time management*. Responses to the open-ended question indicated that difficulties with organizing work were related to dividing time between *study administration, research, online meetings*, and more directly teaching-related responsibilities, namely, *transforming teaching*.

Second, *aligning work and free time* was rated as being difficult to handle by somewhat more respondents in the spring survey than in the autumn. In the open-ended question, the proportion of responses referring to difficulties with *work–life balance* was even more remarkably lower in the autumn than in the spring.

Third, the theme of *life management and coping* was rated as difficult to handle by a growing proportion of respondents in the autumn in comparison to the spring. This challenge was confirmed by challenges coded under *psychological and physical wellbeing*. In open-ended questions, responses coded under *facilities at the home office* and *uncertainty* can also be seen to have challenged life management and wellbeing.

Fourth, *offering support to colleagues* was considered to be difficult to handle by a slightly growing number of participants in the autumn in comparison to the spring. In the open-ended question, we identified challenges related to *offering and asking for support* in both the spring and the autumn surveys. In addition to this, challenges related to *interaction with colleagues* and *leadership* were seen as constraining.

Fifth, *adopting new technological tools* was considered difficult to handle by a growing number of respondents in the autumn in comparison to the spring. This was not the case with responses coded under *learning new technologies* and *problems with technology*.

Finally, apart from themes in the open-ended question that can be seen as closely related to items in the structured questions, three themes related to teacher–student relationships and communication were identified as burdensome in responses to the open-ended question. They were *interaction with students, student guidance, scaffolding and support*, and *worry about students*.

5. Discussion

The results of this study indicate that during the first year of the pandemic, university teachers' wellbeing and agency were constrained by various interrelated individual or psychological factors, social, relational or (socio)cultural factors, and physical, material, or external factors (see [21,23,26,32,37]). When comparing our results with articles reporting the constraints experienced in different parts of the world, we could see that many of them were internationally shared but some of them could also be related to the specific context of our study.

Workload and time management was found to be the most commonly reported constraint. This was confirmed by the proportion of respondents rating *organizing their work and time* as being difficult to handle. Similar results have also been reported elsewhere [4,5,39]. Damşa et al. [12] found that, in particular, the transition from onsite to online teaching was considered burdensome. In our study, challenges related to *transforming teaching* were mentioned somewhat more frequently in the autumn than in the spring. This is surprising, as one might think that by the autumn of 2020, teachers would already be used to and more familiar with online teaching. This result may be explained by the growing demands for organizing high-quality online teaching instead of offering quick solutions for emergency remote teaching. Hietanen and Svedholm-Häkkinen [5] found that during the transition to distance education, extra time was taken, particularly from research projects (see also [25]), other tasks, and spare time. Our results suggest that the pressure of balancing teaching with other duties, such as in *study administration* and *research*, was higher in the autumn when the exceptional circumstances seemed set to continue. An obligation for transforming teaching and dealing with the constraints related to research may have been particularly burdensome for teachers in countries such as Finland, in which teachers traditionally have strong academic autonomy, as well as freedom of teaching and

research (see [40]). In line with other studies [15,39], overabundant *online meetings* were also seen as burdensome. Based on the results of our study, it seems that overload was affecting individuals' ability to thrive within their everyday environment [30] over the long term, with negative consequences for both wellbeing and agency.

Work-life balance is considered an important individual factor affecting wellbeing [26,34]. In this study, it was the second most reported constraining factor in spring 2020. There were fewer comments related to this theme in the autumn. Moreover, *aligning work and free time* was rated as somewhat easier to manage by a greater proportion of respondents in the autumn of 2020 than in the spring. In our study, the more commonly experienced constraints in the spring may be explained by the complete lockdown, which included closed schools and daycare.

Life management and coping were rated as being difficult to manage by around one-third of the respondents in both the autumn and spring of 2020. This challenge was also confirmed by responses describing issues with *psychological and physical wellbeing*, as well as *uncertainty*. Indeed, supporting both teachers and students in coping with the consequences of the pandemic, such as stress, fatigue, anxiety, and depression, should be prioritized [19] in order to safeguard both the quality of life and education in the long run. Interrelations identified between staff and student wellbeing indicate that the focus should be on supporting the wellbeing of the whole university community [16]. In this study, constraints in material circumstances [9,32] related to *facilities at the home office*, such as the accessibility of resources and equipment, the lack of optimal workspace and ergonomics (see also [15]), were viewed as burdensome by fewer participants in the autumn than in the spring of 2020. This may be because teachers had more time to arrange and equip their home offices.

Reduced *interaction with colleagues* was among the most mentioned relational factors (see [26]) perceived as burdensome during the first year of the pandemic (see also [25]). In line with other studies [41], participants seemed to wish that post-pandemic universities would pay attention to the development of a sense of community in physical spaces. There were also a few participants rating *offering support to colleagues* as difficult to manage, writing about the challenges related to *offering and asking for support*. These results suggest that due to differences in teachers' online teaching competencies, there was more workload involved in either searching for or offering support. When in balance, helping or receiving digital help from others can, however, be perceived as positive interaction and a mutual learning opportunity among colleagues [15] that also affects their belongingness (see [24]). Support by the administrative staff has been viewed as essential, particularly during the transition from onsite to online activities [42]. In this study, comments referring to the importance of good *leadership* suggest there is a need for long-term support from the management when developing new practices. It is evident that teachers need adequate training and support for using educational technology effectively [43]. In the context of the COVID-19 pandemic, teachers have been found to display agentic competence, resilience, and enthusiasm by requesting professional development opportunities and training related to the discipline- and pedagogy-specific uses of ICT [7].

In our study, the availability of technology did not emerge as a constraint of teachers' agency (cf. [9]). This may be explained by the good availability of technological equipment in the Finnish context. Instead, *adopting new technological tools* or *learning new technologies*, as well as *problems with technology*, were found to be burdensome (see also [12]). Coping with suddenly changed circumstances when having insufficient competence to use the learning technology needed to teach remotely is also likely to cause technostress, which is defined as an inability to cope with the use of new technologies in a healthy manner, or as stress experienced while using information technology [44]. This may also have affected their self-efficacy as competent teachers, which could have reduced their sense of agency.

The quality of teacher-student interaction is seen as an important relational factor for teachers' wellbeing [26]. In the current study, additional information was gained from the open-ended questions, where teachers could report their concerns related to

student guidance, scaffolding and support, and interaction with students. The lack of personal contact with students was found to be the teachers' greatest pedagogical challenge also in a study considering the transition to distance education in 2020 [5]. Dinu et al. [15] found that at the beginning of the emergency remote teaching period, there was decreased student attendance, participation, and limited feedback from students; however, over time, interaction increased. The longitudinal data in the current study shows, however, that the students' need for support and interaction increased from the initial emergency mode in the spring, due to the prolonged remote learning period. Teachers were also *worrying about students* and conscious that the pandemic had affected some students to a greater extent, who were in need of additional support. During the emergency remote teaching period, students' perceived competence and autonomy, but also their belongingness, were identified as relevant to their wellbeing [2]. This calls for action in supporting these students' basic psychological needs [24] while not forgetting teachers' own needs in this regard [25].

Earlier studies suggest that having agency, that is, the opportunity to influence, as well as the ability to be flexible and to adapt to changes, are among the key factors in preserving wellbeing in the midst of disruption [20]. Put another way, we argue that educational institutions should provide flexibility in teaching arrangements, in order to support both teachers' and students' wellbeing and agency. Many studies (e.g., [1,43]) suggest that a blended approach combining onsite and online education to accommodate the changing needs of students and teachers would be the most desirable option for future higher education.

One limitation of the current study is that our data analysis focused on the teaching staff's general experiences, rather than on the differences between respondents representing different demographic or employment factors, such as age, gender, or academic position (cf. [15,25]). These are factors that could be considered in future studies. We also acknowledge that the respondent rate was relatively low. It is possible that those teachers who experienced more difficulties during the pandemic found responding to the survey to be an additional burden and refrained from answering. Methods such as teacher interviews could provide additional insight into the constraining factors that are also present among teachers struggling with many challenges, as well as how to overcome these constraints. Furthermore, while the focus of this article was on burdensome factors in teaching during the pandemic, we acknowledge that emergency remote teaching experiences have also created opportunities to develop the future of higher education, for instance, toward more versatile and flexible modes of working (see also [22]). This is what we aim to focus on in our future studies.

In terms of practical implications, we present the following recommendations to foster teachers' wellbeing and agency in higher education. First, it is important to support teachers in finding a balance between teaching, research, and administrative duties. Second, more flexible models of work need to be implemented to better support the work–life balance. Moreover, teachers' psychological (e.g., coping with uncertainty) and physical wellbeing (e.g., adequate working facilities) should be cared for. Third, the management should ensure that working time is allocated to different forms of receiving and offering training and (peer) support, for instance, on innovative pedagogies and using technology effectively. Informal face-to-face meetings between colleagues should be promoted, while excessive online meetings should be avoided. Fourth, it is important to further develop and evaluate methods for offering students guidance, scaffolding, and support, and to maintain interaction with the students in both face-to-face and online environments.

Although the development needs that we have identified became more apparent in the exceptional circumstances caused by the pandemic, it is vital to consider them in all circumstances. It will also be essential to build on this momentum, take advantage of the lessons learned, and focus on restoring teachers' wellbeing and agency in post-pandemic working life. However, rethinking the existing structures, particularly the transition to teaching in multiple sites and forms, requires sufficient resources and time, as well as a significant amount of support for both teachers and students.

6. Conclusions

This study contributes to the understanding of which factors constrained teachers' wellbeing and agency during the sudden external demand for changes in teaching practices as a result of the pandemic. Based on this study, it is clear that the initial lockdown in the spring of 2020 put teachers in survival mode; as the pandemic continued, the negative impact on teachers' wellbeing and agency became more apparent. These findings confirm the interrelation between teachers' wellbeing and agency. They demonstrate how sudden changes in teaching, including the urge to learn new technological skills and transfer teaching into an online environment, made teachers feel that they lack the necessary competencies, a lack that then negatively affected their wellbeing and agency. Despite this impact, teachers were able to exercise their professional agency, although it did need to be re-evaluated under the constraining circumstances. This accumulated understanding should be carefully considered when deciding upon courses of action concerning the development of higher education. In addition to the practical recommendations for supporting teachers that are presented above, the findings highlight the importance of hearing and considering teachers' internationally shared as well as locally specific needs for support, not only when extensive changes in teaching are expected on a rapid schedule but also at all times.

Author Contributions: Conceptualization, T.M., P.S., P.J., S.K. (Salme Korkala), S.K. (Saara Kaski), and P.T.; formal analysis, P.S., P.J., S.K. (Salme Korkala), J.K., S.K. (Saara Kaski) and P.T.; investigation, T.M., P.S., P.J., S.K. (Salme Korkala) and S.K. (Saara Kaski); methodology, T.M., P.S., P.J., S.K. (Salme Korkala), S.K. (Saara Kaski) and P.T.; project administration, P.J. and P.T.; visualization, J.K. and S.K. (Saara Kaski); writing—original draft, T.M., P.S. and P.J.; writing—review and editing, S.K. (Salme Korkala), S.K. (Saara Kaski) and P.T. All authors have read and agreed to the published version of the manuscript.

Funding: This work was supported by the university's internal funding.

Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki and Finnish Advisory Board on Research Integrity and instructed by the University of Jyväskylä Ethical Committee. Informed consent was obtained from all subjects involved in the study. Personal data were not linked to responses. For this reason, there was no need for an additional Institutional Review Board Statement.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The datasets used and analyzed in the current study are available in the Finnish language from the corresponding author upon reasonable request.

Acknowledgments: We are especially grateful to teachers who participated in the study.

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Müller, A.M.; Goh, C.; Lim, L.Z.; Gao, X. COVID-19 emergency elearning and beyond: Experiences and perspectives of university educators. *Educ. Sci.* **2021**, *11*, 19. [[CrossRef](#)]
2. Holzer, J.; Lüftenegger, M.; Korlat, S.; Pelikan, E.; Salmela-Aro, K.; Spiel, C.; Schober, B. Higher education in times of COVID-19: University students' basic need satisfaction, self-regulated learning, and well-being. *AERA Open* **2021**, *7*, 23328584211003164. [[CrossRef](#)]
3. Lepp, L.; Aaviku, T.; Leijen, Ä.; Pedaste, M.; Saks, K. Teaching during COVID-19: The decisions made in teaching. *Educ. Sci.* **2021**, *11*, 47. [[CrossRef](#)]
4. De Boer, H. COVID-19 in Dutch higher education. *Stud. High. Educ.* **2021**, *46*, 96–106. [[CrossRef](#)]
5. Hietanen, M.; Svedholm-Häkkinen, A.M. Transition to distance education in 2020—Challenges among University Faculty in Sweden. *Scand. J. Educ. Res.* **2022**. [[CrossRef](#)]
6. Bond, M.; Bedenlier, S.; Marín, V.I.; Händel, M. Emergency remote teaching in higher education: Mapping the first global online semester. *Int. J. Educ. Technol. High. Educ.* **2021**, *18*, 50. [[CrossRef](#)] [[PubMed](#)]
7. Badiozaman, I.F.A. Exploring online readiness in the context of the COVID 19 pandemic. *Teach. High. Educ.* **2021**, 1–19. [[CrossRef](#)]
8. Vandeyar, S. Educational transmogrification: From panicgogy to pedagogy of compassion. *Teach. High. Educ.* **2021**. [[CrossRef](#)]
9. Imants, J.; Van der Wal, M.M. A model of teacher agency in professional development and school reform. *J. Curric. Stud.* **2020**, *52*, 1–14. [[CrossRef](#)]

10. Pantić, N.; Galey, S.; Florian, L.; Joksimović, S.; Viry, G.; Gašević, D.; Knutes Nyqvist, H.; Kyritsi, K. Making sense of teacher agency for change with social and epistemic network analysis. *J. Educ. Chang.* **2022**, *23*, 145–177. [[CrossRef](#)]
11. Gudmundsdottir, G.B.; Hathaway, D.M. “We always make it work”: Teachers’ agency in the time of crisis. *J. Technol. Teach. Educ.* **2020**, *28*, 239–250.
12. Damsa, C.; Langford, M.; Uehara, D.; Scherer, R. Teachers’ agency and online education in times of crisis. *Comput. Hum. Behav.* **2021**, *121*, 106793. [[CrossRef](#)]
13. Trust, T.; Whalen, J. Should teachers be trained in emergency remote teaching? Lessons learned from the COVID-19 pandemic. *J. Technol. Teach. Educ.* **2020**, *28*, 189–199.
14. Lavonen, J.; Salmela-Aro, K. Experiences of moving quickly to distance teaching and learning at all levels of education in Finland. In *Primary and Secondary Education during COVID-19*; Reimers, F.F., Ed.; Springer: Cham, Switzerland, 2022; pp. 105–123.
15. Dinu, L.M.; Dommett, E.J.; Baykoca, A.; Mehta, K.J.; Everett, S.; Foster, J.L.H.; Byrom, N.C. A case study investigating mental Wellbeing of University Academics during the COVID-19 pandemic. *Educ. Sci.* **2021**, *11*, 702. [[CrossRef](#)]
16. Brewster, L.; Jones, E.; Priestley, M.; Wilbraham, S.J.; Spanner, L.; Hughes, G. ‘Look after the staff and they would look after the students’ cultures of wellbeing and mental health in the university setting. *J. Furth. High. Educ.* **2022**, *46*, 548–560. [[CrossRef](#)]
17. Turner, K.; Theilking, M. Teacher wellbeing: Its effects on teaching practice and student learning. *Issues Educ. Res.* **2019**, *29*, 938–960. [[CrossRef](#)]
18. Spilt, J.L.; Koomen, H.M.Y.; Thijs, J.T. Teacher wellbeing: The importance of teacher–student relationships. *Educ. Psychol. Rev.* **2011**, *23*, 457–477. [[CrossRef](#)]
19. Dabrowski, A. Teacher wellbeing during a pandemic: Surviving or thriving? *Soc. Educ. Res.* **2020**, *2*, 35–40. [[CrossRef](#)]
20. Vähäsantanen, K. Professional agency in the stream of change: Understanding educational change and teachers’ professional identities. *Teach. Teach. Educ.* **2015**, *47*, 1–12. [[CrossRef](#)]
21. Eteläpelto, A.; Vähäsantanen, K.; Hökkä, P.; Paloniemi, S. What is agency? Conceptualizing professional agency at work. *Educ. Res. Rev.* **2013**, *10*, 45–65. [[CrossRef](#)]
22. Kerres, M.; Buchner, J. Education after the pandemic: What we have(not) learned about learning. *Educ. Sci.* **2022**, *12*, 315. [[CrossRef](#)]
23. Dodge, R.; Daly, A.P.; Huyton, J.; Sanders, L.D. The challenge of defining wellbeing. *Int. J. Wellbeing* **2012**, *2*, 222–235. [[CrossRef](#)]
24. Ryan, R.M.; Deci, E.L. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *Am. Psychol.* **2000**, *55*, 68–78. [[CrossRef](#)] [[PubMed](#)]
25. Naidoo, K.; Kaplan, S.; Roberts, C.J.; Plummer, L. Three stressed systems: Health sciences faculty members navigating academia, healthcare, and family life during the pandemic. *Educ. Sci.* **2022**, *12*, 483. [[CrossRef](#)]
26. Acton, R.; Glasgow, P. Teacher wellbeing in neoliberal contexts: A review of the literature. *Aust. J. Teach. Educ.* **2015**, *40*, 99–114. [[CrossRef](#)]
27. Biesta, G.; Tedder, M. Agency and learning in the lifecourse: Towards an ecological perspective. *Stud. Educ. Adults* **2007**, *39*, 132–149. [[CrossRef](#)]
28. Hargreaves, A.; O’Connor, M. *Collaborative Professionalism. When Teaching Together Means Learning for All*; Corwin Impact Leadership Series; SAGE Publications: Thousand Oaks, CA, USA, 2018; ISBN 1506328156.
29. Hargreaves, A.; Fullan, M. *Professional Capital: Transforming Teaching in Every School*; Teachers College Press: New York, NY, USA, 2012; ISBN 978-0-8077-5332-3.
30. Ryan, R.M.; Sapp, A.R. Basic psychological needs: A self-determination theory perspective on the promotion of wellness across development and cultures. In *Wellbeing in Developing Countries: From Theory to Research*; Gough, I., Ed.; Cambridge University Press: Cambridge, UK, 2007; pp. 71–92. ISBN 978-0521180801.
31. Taylor, D. Wellbeing and welfare: A psychosocial analysis of being well and doing well enough. *J. Soc. Policy* **2011**, *40*, 777–794. [[CrossRef](#)]
32. Priestley, M.; Biesta, G.; Robinson, S. *Teacher Agency: An Ecological Approach*; Bloomsbury Publishing: London, UK, 2015; ISBN 10.1474297366.
33. Bandura, A. The human agency in social cognitive theory. *Am. Psychol.* **1989**, *44*, 1175–1184. [[CrossRef](#)]
34. Felstead, A.; Henseke, G. Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. *New Technol. Work Employ.* **2017**, *32*, 195–212. [[CrossRef](#)]
35. Kebritchi, M.; Lipschuetz, A.; Santiago, L. Issues and challenges for teaching successful online courses in higher education: A literature review. *J. Educ. Technol. Syst.* **2017**, *46*, 4–29. [[CrossRef](#)]
36. Jääskelä, P.; Poikkeus, A.-M.; Vasalampi, K.; Valleala, U.M.; Rasku-Puttonen, H. Assessing agency of university students: Validation of the AUS scale. *Stud. High. Educ.* **2017**, *42*, 2061–2079. [[CrossRef](#)]
37. Deci, E.L.; Ryan, R.M. The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychol. Inq.* **2000**, *11*, 227–268. [[CrossRef](#)]
38. Braun, V.; Clarke, V. Using thematic analysis in psychology. *Qual. Res. Psychol.* **2006**, *3*, 77–101. [[CrossRef](#)]
39. Ashencaen Crabtree, S.; Esteves, L.; Hemingway, A. A ‘new(ab)normal’?: Scrutinising the work-life balance of academics under lockdown. *J. Furth. High. Educ.* **2021**, *45*, 1177–1191. [[CrossRef](#)]
40. Nokkala, T.; Bladh, A. Institutional autonomy and academic freedom in the Nordic context—Similarities and differences. *High. Educ. Policy* **2014**, *27*, 1–21. [[CrossRef](#)]

41. Eringfeld, S. Higher education and its post-colonial future: Utopian hopes and dystopian fears at Cambridge University during COVID-19. *Stud. High. Educ.* **2021**, *46*, 146–157. [[CrossRef](#)]
42. Agasisti, T.; Soncin, M. Higher education in troubled times: On the impact of COVID-19 in Italy. *Stud. High. Educ.* **2021**, *46*, 86–95. [[CrossRef](#)]
43. Alqahtani, A.Y.; Rajkhan, A.A. E-learning critical success factors during the COVID-19 pandemic: A comprehensive analysis of e-learning managerial perspectives. *Educ. Sci.* **2020**, *10*, 216. [[CrossRef](#)]
44. Tarafdar, M.; Cooper, C.L.; Stich, J.-F. The technostress trifecta—Techno eustress, techno distress and design: Theoretical directions and an agenda for research. *Inf. Syst. J.* **2019**, *29*, 6–42. [[CrossRef](#)]