

Article

Work-Related Well-Being Profiles among Health Education Teachers

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Abstract: The aim of this cross-sectional study was to examine the well-being of Finnish health education teachers ($n = 108$) by examining the latent profiles of work burnout and work engagement by using a person-centered approach. Additionally, this study explored to what extent different job and personal resources (social support, pedagogical self-efficacy, and social belonging) and job demands (work overload) are associated with teachers' belonging to the work-related well-being profiles. The Job Demands-Resources model was used as the theoretical framework for this study. The study found that three different work-related well-being profiles could be identified among health education teachers: those who were engaged (45%), those who were already experiencing burnout (43%), and those at risk of burnout (12%). The more demands the teachers experienced, the likelier they were to belong to the burnout profile. Experiences of pedagogical self-efficacy, social belonging, and social support increased the probability of belonging to the engaged profile group. Determining job and personal resources and job demands might be beneficial for health education teacher well-being.

Keywords: health education teachers; well-being; demands-resources; personal-centered approach



Citation: Laitinen, S. Work-Related Well-Being Profiles among Health Education Teachers. *Educ. Sci.* **2022**, *12*, 343. <https://doi.org/10.3390/educsci12050343>

Academic Editor: John De Nobile

Received: 4 April 2022

Accepted: 10 May 2022

Published: 13 May 2022

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1. Introduction

According to previous studies and reports, there have been alarming decreases in teachers' work-related well-being in many countries [1–5]. While such well-being has increased recently [2,4,6], teachers' job satisfaction has simultaneously decreased [4,5,7]. Work-related well-being has been shown to be involved in both work engagement and burnout and is associated with job performance [8]. However, previous research has suggested that teachers' self-reported job performance (i.e., energy-driven and motivational factors) may be associated with experienced work-related well-being [9]. Therefore, health education teachers' work-related well-being is a crucial issue to explore, because burnout has been found to have a negative association with teachers' devotion to their profession [10] as well as teacher-student interactions [11] and students' well-being [12–14]. Teachers' work in stressful environments [15], in particular health education teachers' competence to cope with challenging ethical and emotionally sensitive issues and multidisciplinary knowledge of health education, can be reflected in their work-related well-being [16]. In addition, work-related well-being may be associated with resources such as leadership [17] and social [18] and motivational factors [19,20]. Hence, there is a need to identify the number of health education teachers suffering from burnout. Moreover, there is a need to identify the risk and protective factors for developing well-being among health education teachers.

However, two aspects are neglected in the research on the role of demand resources in work-related well-being. First, there is little literature that has asked health education teachers themselves to report their work-related well-being. Second, studies examining teachers' well-being have almost exclusively adopted a variable-oriented approach that focuses on universal relations between variables [21], whereas a person-centered approach would identify groups of individuals with different combinations of values on different

variables [22]. Thus, the present study aims to bridge this gap by identifying health education teachers' work-related well-being profiles and by exploring the extent to which job resources (social support from colleagues and work leaders) and personal resources (pedagogical self-efficacy and social belonging), as well as job demands (work overload) are associated with work-related well-being profile membership.

1.1. Work-Related Well-Being

Ample evidence suggests that a long-term and growing interest in well-being and job quality exists in work organizations; for a review, see [23]. Following the ideas of Waterman [24], well-being incorporates both subjective measures of life satisfaction, such as positive emotions (e.g., enthusiasm and enjoyment) and the simultaneous absence of negative emotions (e.g., anxiety, feeling calm) [25], as well as feelings of autonomy, mastery, positive relations with others (see also "psychological needs of humans"; [26]), personal growth, and self-acceptance. Thus, workers' well-being belongs to the more general class of constructs associated with personal efficacy and is a potentially important cognitive construct related to work functioning (see [27]). Therefore, teachers' self-efficacy can be understood as teachers' self-referent appraisal of their competence in the teaching role or as teachers' perceptions of their ability to positively influence the learning and development of their students [28].

Recently, work intensification has attracted interest because of changes in working conditions, particularly accelerated ICT use in working life [29]. For instance, Minkinen and colleagues [29] studied the impact of intensified job demands (i.e., tightening work pace and increased workload, increased decision making, increased career planning, and increased learning demands) among teachers and identified three latent profiles with strongly, moderately, and slightly intensified work. They found that the more teachers reported intensified job demands in teaching, the higher the level of risk the teachers faced for impaired occupational well-being. In addition, online teaching during the COVID-19 pandemic has challenged teachers' well-being (e.g., [30–32]). For instance, Korcz and colleagues [33] studied physical education teachers' perceptions of online physical education teaching during the first wave of the COVID-19 pandemic in European countries. These teachers reported a general decrease in the motivation for work. A lack of proper equipment at home and a lack of proper training in ICT use, as well as the use of different platforms for online teaching, were among the highest-ranking difficulties during online teaching reported by physical education teachers. Importantly, these challenges have been supplemented by a reported decrease in the physical activity levels of children in many countries [33]. Health issues and topics have been strongly connected with physical education and health education [16]. However, the well-being of health education teachers has not been adequately researched.

According to Hakanen and colleagues [34] and Upadyaya and colleagues [8], work engagement and work burnout are separate constructs of employees' well-being. Work engagement is characterized as a positive, work-focused state of emotion and motivation and is associated with high energy, dedication, and absorption at work [19]. A vigorous employee has a lot of energy, mental resilience, and persistence, as well as a willingness to invest effort in the face of challenges at work [35]. Experiences of enthusiasm, a sense of significance, pride, and inspiration represent dedication at work [35]. Absorption is characterized by the employee being fully concentrated and engrossed in their work and by time passing quickly [36]. High correlations between work engagement dimensions may be appropriate for studying dimensions as a unitary phenomenon [37]. In this study, engagement was examined as a work engagement consisting of three dimensions.

Work burnout, by contrast, develops because of prolonged stress [38], and has its basis in various load factors, such as imbalances in demands and skills and conflict situations in the workplace [39]. Work burnout is examined through three dimensions: exhaustion, cynicism, and inadequacy feelings at work [35,40]. Exhaustion is described as overtaxing feelings and strain from work [35,40], whereas cynicism reflects a decreasing sense of

significance and interest [40], and an increasing distal attitude in work [40,41]. Feelings of inadequacy manifest as weakened self-beliefs of competence and decreased work achievement [35,40], and, therefore, this is described as professional self-esteem. In this study, work burnout was examined by separate dimensions; see also [42].

Latent profile analysis has made it possible to create the capacity to identify the ideal number of well-being profiles in burnout and engagement (see [43]). However, few studies have examined teachers' work-related engagement and burnout profiles [44], and previous research on health education teachers' work-related engagement and burnout profiles is lacking. In the educational context, previous research identified three to five profiles, namely engaged, engaged-burnout, and burnout profiles among elementary [45], high school [46], and higher education [47] students rather than teachers. In the occupational context, previous research has mainly identified two profiles: engaged and burnout [48]. In light of the previous research, three profiles were suggested for study among health education teachers, namely, engaged, engaged-burnout, and burnout. In terms of professional profile, it was assumed that exhaustion would be more common than cynicism [44], since health education teachers may have a good chance in general of experiencing work-related autonomy, competence, and belonging, which support intrinsic motivation, autonomy, and personal competence and engagement [49–51].

1.2. Job and Personal Resources and Job Demands

The Job Demands-Resources (JD-R) model combines stress and motivation research traditions to explore the significance of demands and resources for work-related well-being [36,52]. Both demands and resources can be divided into physical (work overload), psychological (motivation and individual resources), social (management and colleague support), and organizational (workplace atmosphere) factors, which have been found to be associated with employees' well-being [36,52,53]. Previous studies have shown that work overload increases teachers' work-related burnout [54]. However, earlier research has shown that resources such as social support [41,55] as well as basic psychological needs such as autonomy, competence, and social belongingness [56] are positively associated with work engagement and contribute to intrinsic motivation [36].

In addition to the resources, work-related well-being is influenced by the personal resources of the employee, such as persistence, self-efficacy, and importance to the organization, that have been found to increase work engagement [53,55], and against buffering claims load [8,57,58]. This study focused on key job demands that may be particularly important among health education teachers, such as work overload and challenging emotions; job resources that may be particularly important for health education teachers, such as social support from colleagues and work leaders, can increase work engagement or may increase burnout if they are lacking. Finally, personal resources as a major motivation can function as a buffer and lead to work engagement. The present study included pedagogical self-efficacy and social belonging as personal resources.

1.3. Finnish Health Education Teachers

There is a growing interest among researchers in the field of school health education and health promotion. This is partly explained by the convention that education and health are interconnected (e.g., [59]) and the view that health promotion of health education teachers has a positive impact on how health issues are addressed to pupils [60,61]. It is interesting to note that such claims are by no means new. For example, Rood [62] considered how teachers' competence regarding health issues could affect the implementation and outcomes of school health programs.

In Finland, Health Education (HE) has already been an independent subject in secondary schools and general upper secondary education for two decades (for more details, see [16,61]). This means that Finnish students learn to make the kind of health decisions that benefit their own health and that of others and the wider world in which they live, excluding health behavior (or changes in such), mainly through HE classes [16]. In addition

to the students' practical and factual knowledge, developing critical thinking skills in an ethically sensitive and responsible way is important when reflecting on health matters, such as when thinking from a personal perspective about citizenship in everyday life [63,64]. Hence, the crucial elements in the teaching of HE is understanding health as a comprehensive, multilayered, and multidisciplinary entity [16]. Consequently, HE teacher training is built around competence as a critical factor for qualified HE teachers e.g., [16,65,66].

As noted above, there is a need the role of job resources, personal resources, and job demands in teachers' well-being to be addressed in the literature [44], but studies of HE teachers with such a focus are rare. Therefore, to fill this research gap, the present study investigated the job resources, personal resources, and job demands in relation to HE teachers' well-being. The first aim was to identify profiles among the teachers based on their self-reported work engagement and burnout. On the basis of previous studies, e.g., [44–47], it was expected that two or three profiles would be identified among teachers: engaged, engaged-burnout, and burnout (H1). The second aim focused on examining whether the identified well-being profiles differed in job resources, personal resources, and job demands. Following the JD-R model, it was assumed that HE teachers' expected profiles would differ in terms of self-reported job resources, personal resources, and job demands (H2). It was also expected that those teachers in the more engaged profile group would report more job resources and personal resources, such as social support, pedagogical self-efficacy, and social belonging, while those in the burnout profile group would report more work demands, such as work overload, including challenging emotions, than those in the more engaged profile group.

2. Materials and Methods

2.1. Participants and Procedure

The participants in the present study were 108 Finnish HE teachers in basic education ($n = 38$), upper secondary education ($n = 41$), and both education contexts ($n = 29$) (80 females, 48 males; $M_{\text{age}} = 46$, $SD = 9.80$ years). The average experience as a HE teacher was 17.61 years ($SD = 9.94$). In spring 2020, HE teachers were invited to participate in the study through an email sent to approximately 600 members of the Finnish Physical and Health Education Teachers' Association. The HE teachers who participated provided written consent, and the data were collected by asking them to fill in a questionnaire, including structured questions on work engagement, burnout, job and personal resources, and job demands. There were some differences between teachers' working contexts. The HE teachers' classrooms in basic education were smaller on average ($M = 17$, range 14–19 students) as well as in classrooms in both education contexts ($M = 16$, range 13–19), while upper secondary HE teachers' classrooms had, on average, 21 students (range 13–21). However, the results of the t-tests showed that basic, upper secondary, and both education contexts did not differ statistically significantly regarding their well-being-related variables.

2.2. Measures

2.2.1. Work Engagement

Work engagement was measured with a version of the Utrecht Work Engagement Scale, UWES-S [35,67]. The scale consisted of nine items measuring energy (e.g., "When I work, I feel that I am bursting with energy"), dedication (e.g., "I am enthusiastic about my work"), and absorption at work (e.g., "Time flies when I'm working"); for more detail, see [8]. The responses were rated on a 7-point scale (1 = not at all; 7 = daily). A sum score was formed to measure the teachers' overall engagement at work. Cronbach's alpha reliability was 0.94.

2.2.2. Work Burnout

Work Burnout was measured with the Bergen Burnout Inventory [68,69] which consists of 15 items measuring three factors of job burnout: (1) exhaustion at work (e.g., "I feel overwhelmed by my work"); (2) cynicism about the meaning of work (e.g., "I feel lack of

motivation in my work and often think of giving up"); (3) inadequacy about the meaning of work (e.g., "I often have feelings of inadequacy in my work") to be rated on a 6-point scale (1 = strongly disagree; 6 = strongly agree); for more detail, see [8]. The sum scores were formed to measure teachers' exhaustion, cynicism, and sense of inadequacy at work. Cronbach's alpha reliabilities were 0.84 for exhaustion, 0.81 for cynicism, 0.81 for inadequacy, and 0.90 for the whole scale.

2.2.3. Job Demands and Resources

Job demands were measured with three questions measuring HE teachers' work overload and challenging emotions in relation to different aspects of their work (e.g., increasing tasks and responsibilities and emotionally challenging situations) (cf. 8; see also [70]). The responses were rated on a 5-point scale (1 = totally disagree; 5 = totally agree). A sum score was formed to measure teachers' job demands. The Cronbach's alpha reliability for the sum score was 0.82.

Job resources were measured with three questions measuring HE teachers' social support from colleagues and work leaders (e.g., "I have received from the principal help with teaching") (cf., [70]). The responses were rated on a 5-point scale (1 = totally disagree; 5 = totally agree). A sum score was formed to measure teachers' job resources. The Cronbach's alpha reliability for the sum score was 0.80.

2.2.4. Personal Resources

Personal resources were measured by self-efficacy beliefs and social belonging. Self-efficacy beliefs were measured with four questions (cf., [71]) on having an optimistic sense of personal and pedagogical competence at work (e.g., "If I come up against difficulties at work, I usually figure out a way" and "I feel confident that I have sufficient pedagogical skills in teaching positions"). The responses were rated on a 5-point scale (1 = totally disagree; 5 = totally agree). A sum score was formed to measure teachers' pedagogical self-efficacy beliefs at work. The Cronbach's alpha reliability for the sum score was 0.81.

Social belonging comprised three items based on teachers' social needs in belonging to the work community and working with the people there (e.g., "I feel I belong to the work community", and "I experience a warm feeling with the people that I work with") (see [71]). The responses were rated on a 5-point scale (1 = totally disagree; 5 = totally agree). A sum score was formed to measure teachers' social belonging at work. The Cronbach's alpha reliability for the sum score was 0.83.

2.3. Analysis Strategy

All models in this study were estimated using Mplus software, version 8.4 [72]. The estimating method used in all models was maximum likelihood with robust standard errors (MLR). The analyses were conducted via latent profile analysis (LPA) to identify HE teachers with similar patterns of work-related well-being (i.e., a combination of engagement, exhaustion, cynicism, and a sense of inadequacy). The LPA is model-based variant of traditional cluster analysis, aiming to find the unobserved subpopulations (latent classes) within the data (see [73–75]). The LPA was carried out as a mixture in which 1000 and 100 were used as random start values in the model estimation to ensure the validity of the solution [76]. First, to identify distinctive work-related well-being profiles, the LPA model was computed. Second, to explore the extent to which job demands (i.e., work overload) and resources (i.e., social support), and personal resources (pedagogical self-efficacy, social belonging) related to belonging to work-related well-being profile group membership, multinomial logistic regression was computed and auxiliary variable function employed in Mplus (e.g., [77]).

To compare the models with different work-related well-being profile groups, the log-likelihood (Log L) value (where a higher number indicates a better fit), the Akaike information criterion (AIC), the Bayesian information criterion (BIC), and the sample-size-adjusted BIC (aBIC) was used. The AIC, BIC, and aBIC estimate guides for choos-

ing between competing statistical models showed that the smaller the value, the more parsimonious the model [76]. In addition, the entropy value was used, and the probability estimates of HE teachers belonging to each group, with values close to 1 or at least 0.8 indicating high precision and reliability of classification [78]. Furthermore, a significant result from the parametric bootstrapped likelihood ratio test (BLRT) supported the G-group solution in comparison with the G–1-group solution. In other words, the result from that particular model of teachers' work-related well-being groups was better than the model with one less work-related well-being group. Finally, the interpretability of the results was also considered in the decision on the number of work-related well-being groups.

3. Results

3.1. HE Teachers' Work-Related Well-Being Profile Groups

The first aim of the present study was to examine different work-related well-being groups among HE teachers. To identify distinctive work-related well-being profile groups, a series of LPAs was conducted. After investigating the goodness of fit of the models, distinguishability of the latent groups, latent group sizes, and theoretical justification and interpretability (see [76]) to separate HE teachers' self-reported well-being, the three-group solution was chosen as the best (see Table 1 for the information criteria and profile sizes for the alternative well-being profiles).

Concerning the maximum likelihood criteria, the BIC is the most used information criterion estimate [22], and in this study, the BIC supported the three-group solution. Of the statistic tests, BLRT has been found to prove the best criterion [79] and in the present study, BLRT p -value indicated superiority of the three-group solution by smaller than 0.05. Furthermore, the entropy value suggests that the three-group solution of well-being provides a parsimonious fit for the data of HE teachers, indicating that profiles differed not only according to the level of high and low engagement, but also according to the level of work burnout. Consequently, three profile groups emerged concerning HE teachers' reported well-being: *engaged*, *engaged-burnout*, and *burnout* (see Figure 1 for the profiles based on HE teachers' self-reported well-being).

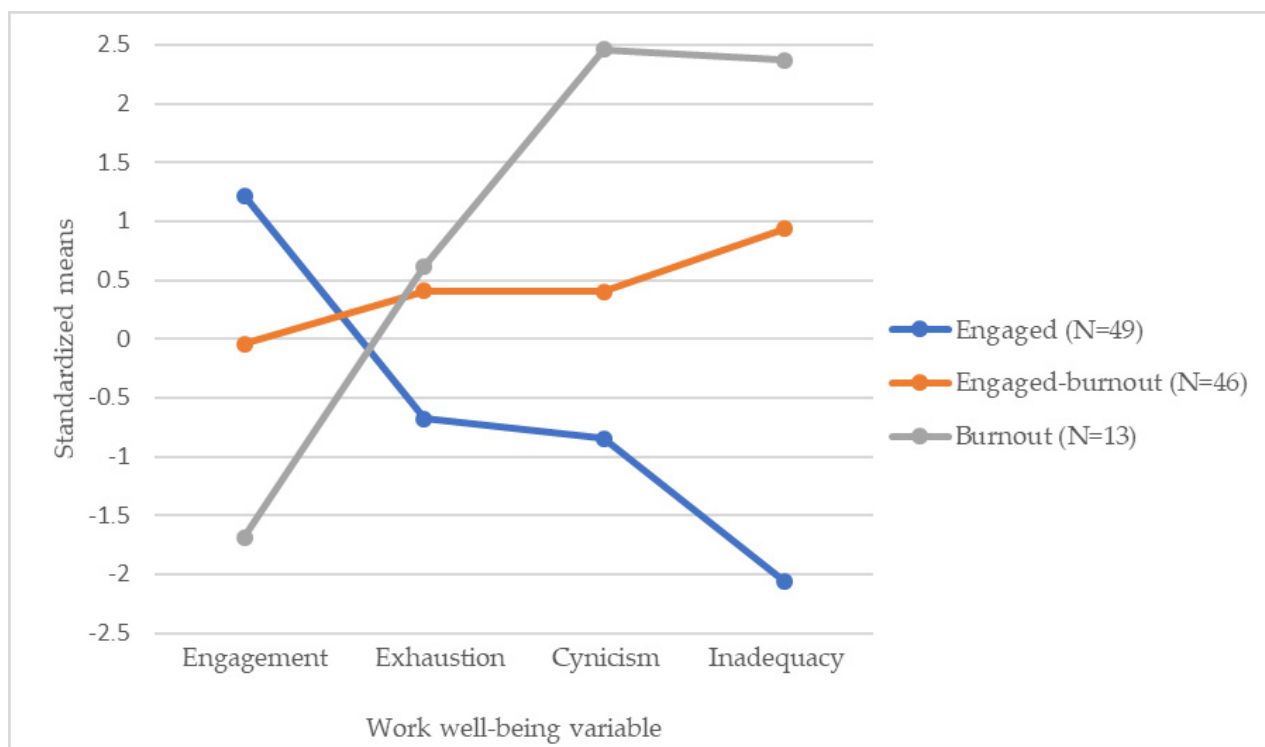


Figure 1. Profiles based on HE teachers' work-related well-being.

Table 1. Information criteria estimates, distinguishability estimates, class proportions, BLRT values, and profile sizes for the alternative HE teachers' work-related well-being profiles.

Number of Profiles	Log L.	AIC	BIC	aBIC	Entropy	Class Proportions	Average Latent Class Posterior Probabilities	BLRT (p)
1	−610.97	1237.94	1259.40	1234.12	1.00	1.00	1.00	-
2	−516.92	1057.84	1113.44	1059.72	0.82	0.50/0.50	0.98/0.97	<0.00
3	−497.50	1047.00	1112.74	1034.58	0.86	0.45/0.43/0.12	0.97/0.93/0.91	0.04
4	−481.90	1033.80	1127.68	1017.09	0.85	0.34/0.11/0.12/0.43	0.91/0.88/0.92/0.93	0.16
5	−470.52	1029.03	1147.05	1008.02	0.85	0.11/0.12/0.35/0.40/0.04	0.97/0.91/0.91/0.92/0.99	0.43

Note. Log L. = Log-likelihood; AIC = Akaike information criterion; BIC = Bayesian information criterion; aBIC = sample-size-adjusted BIC; BLRT = bootstrapped likelihood ratio test.

3.2. Work-Related Well-Being Groups Regarding Job and Personal Resources and Job Demands

The second aim of the study was to investigate the extent to which job and personal resources and job demands would be associated with belonging to a certain work-related well-being group that HE teachers perceived. To this end, multinomial logistic regression analyses were carried out for the well-being group variables.

The correlational results (see Table 2 and Figure 2) demonstrated different patterns of associations between work engagement and burnout; thus, they provided a significant and quite linear relation to each other. For example, work engagement was negatively related to work burnout factors, and factors such as exhaustion, cynicism, and inadequacy were negatively related to each other. Work engagement was positively and work burnout was negatively related to both job resources and personal resources, whereas work burnout factors related positively to job demands, providing a more or respectively less linear relationship.

Table 2. Correlations between work well-being and job and personal resources and job demands of HE teachers.

	1	2	3	4	5	6	7	8
<i>Work Well-Being</i>								
1. Engagement	-							
2. Exhaustion	−0.21 *	-						
3. Cynicism	−0.62 **	0.45 **	-					
4. Inadequacy	−0.55 **	0.49 **	0.72 **	-				
<i>Job resources</i>								
5. Support by colleagues and work leaders	0.24 *	−0.09	−0.26 **	−0.15	-			
<i>Personal resources</i>								
6. Self-efficacy	0.41 **	−0.28 **	−0.53 **	−0.38 **	0.310 **	-		
7. Social belonging	0.60 **	−0.16	−0.56 **	−0.52 **	0.48 **	0.42 **	-	
<i>Job demands</i>								
8. Work overload	−0.09	0.35 **	0.07	0.20 *	0.04	−0.02	−0.03	-

Note. N = 108 * Correlation is significant at the 0.05 level (2-tailed) ** Correlation is significant at the 0.01 level (2-tailed).

The results of the multinomial logistic regression analyses showed that the more social support from colleagues and work leaders, the likelier the HE teachers were to be assigned to the *engaged* group ($B = 1.17, p = 0.04$) than to the *burnout* group ($B = 0.59, p = 0.01$), as compared with the *engaged-burnout* group. Additionally, when estimating group membership based on personal resources, both pedagogical self-efficacy and social belonging contributed significantly to the probability of belonging in the well-being profile groups. HE teachers with a higher pedagogical self-efficacy were likelier to belong to the *engaged* group ($B = 3.59, p = 0.04$) than to the *burnout* group ($B = 0.41, p < 0.01$), as compared with the *engaged-burnout* group, and likelier to belong to the *engaged-burnout* group ($B = 0.30, p < 0.01$) than to the *burnout* group ($B = 0.12, p < 0.01$), as compared with the *engaged* group. Finally, the more the teachers experienced social belonging in the workplace,

the likelier they were to be in the *engaged* group ($B = 2.60, p = 0.04$) than the *burnout* group ($B = 0.16, p < 0.01$), as compared with the *engaged-burnout* group, and likelier to be in the *engaged-burnout* group ($B = 0.38, p < 0.01$) than the *burnout* group ($B = 0.06, p < 0.01$), as compared with the *engaged* group.

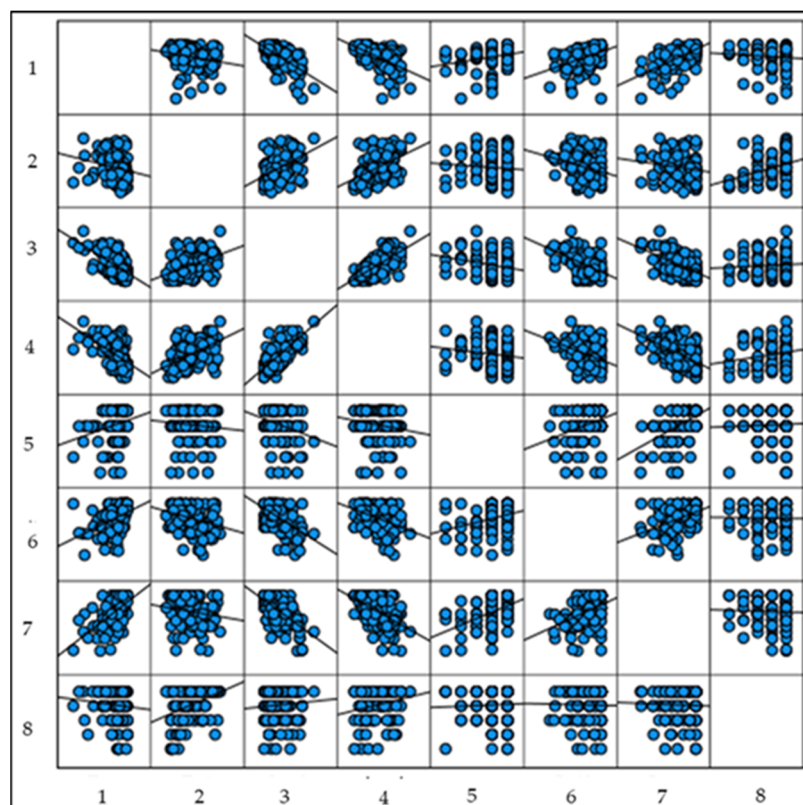


Figure 2. Associations between work well-being and job and personal resources and job demands of HE teachers by scatterplot and regression line. *Note.* Work well-being: 1 = Engagement, 2 = Exhaustion, 3 = Cynicism, 4 = Inadequacy; Job resources: 5 = Support from colleagues and work leaders; Personal resources: 6 = Self-efficacy, 7 = Social belonging; Job demands: 8 = Work overload.

The results further showed that the higher the work overload as job demands HE teachers reported, the likelier they were to belong to the *burnout* group ($B = 1.02, p = 0.03$) than to the *engaged* group ($B = 0.67, p = 0.04$), as compared with the *engaged-burnout* group.

4. Discussion

The aims of the study were to examine the latent profiles identified among HE teachers according to their work-related well-being and to examine the relationship between the profiles and the teachers' job resources, personal resources, and job demands. The study contributes to the literature by expanding understanding of this area through the use of a person-centered approach to study HE teachers' experiences of well-being and the role of job resources, personal resources, and job demands (a focus also emphasized by [44]). According to knowledge, such an approach has not been used before among HE teachers.

The results demonstrated that three work-related well-being profiles could be identified among HE teachers on the basis of their work engagement and burnout: *engaged*, *engaged-burnout*, and *burnout*. These profiles represented three different types of HE teacher and supported the hypothesis. The engaged profile, which was slightly larger (45%) than the engaged-burnout profile (43%), comprised teachers who were very engaged and reported lower levels of burnout symptoms. The finding is in line with previous studies among higher education students [47] and is confirmed by another study [44]. The engaged-burnout group consisted of teachers who were engaged to an average extent, experienced

exhaustion and cynicism at a slightly above-average level, and felt quite inadequate. Even if the signs of work burnout were only emergent, this was an important profile and was also identified by a prior study [44]. The results also showed that a relatively high number of HE teachers identified with the burnout profile, which supported a previous study [47] indicating that 12% of participants suffered from acute burnout.

Interestingly, the person-centered approach used in the current study showed that four out of five HE teachers were engaged, two out of five were high in engagement, two reported simultaneous signs of engagement and burnout, and one in five was burned out. HE teachers seem to be very strongly committed, engaged, and enthusiastic about their work, but many also suffer from some signs of exhaustion, particularly cynicism and inadequacy as an HE teacher. This is in line with a previous study among class teachers [80], which found that exhaustion, cynicism toward work, and professional inadequacy were associated with lower work engagement. In particular, the HE teacher's work, when characterized as a facilitator of health promotion, highlights the significance of overall well-being and work-related well-being e.g., [16], and thus the results indicate that teachers may experience cynicism and professional inadequacy in relation to multiple work-related requisites e.g., see [81,82]. In the past, exhaustion was considered the primary symptom of burnout. However, recent research has pointed out that cynicism and decreased professional inadequacy may equally be primary symptoms of burnout [83]. The teaching profession is interpersonal and experienced as a vocational profession. Thus, it may be that cynicism and a decrease in their own sense of professional inadequacy are more strongly associated with the enjoyment of work and the quality of interaction among HE teachers. However, this result requires further research with a larger dataset.

With regard to the JD-R model and H2, the results further showed that the engaged, engaged-burnout, and burnout profile groups differed in terms of key job resources, personal resources, and job demands [41,58]. HE teachers with a higher experience of support from colleagues and work leaders were more likely to belong to the engaged profile group, whereas HE teachers who reported work overload were more likely to belong to the burnout profile group. With regard to personal resources, the higher the HE teachers reported pedagogical self-efficacy and social belonging, the more they reported being in the engaged or engaged-burnout profile group than in the burnout profile group. This result also reflects the basic psychological needs raised by Deci and Ryan [49] in their theory of self-determination: People want to feel that they are at the reins of their own life and that they influence decisions about their own work, feeling competence, sense of meaning, and social belonging in the workplace. Without empowerment, a loss in motivation and in the meaningfulness of work may arise, and burnout at work may result. Even when facing high challenges and work overload, pedagogical self-efficacy and social belonging, along with support from colleagues and work leaders, may help HE teachers cope with their work without becoming exhausted or cynical or feeling professionally inadequate. However, the results should be put into a larger context: high work overload may lead to HE teachers losing control over their own work and may therefore be a school-level problem in terms of their crucial role in HE [82], the school's learning and social environment [84], and enhancement of students' perception of HE and school engagement [85]. The fact that most teachers in the current study experienced at least some signs of burnout indicates that municipalities and policy makers should pay serious attention to working conditions.

The current study makes a number of theoretical and practical contributions. First, the study highlights the importance of a person-centered approach for capturing possible subgroups of HE teachers' well-being, and of awareness of the prevalence of engagement and burnout and their relation to teachers' experiences of distress. Second, the study provides information on the associations between work engagement and burnout, on the one hand, and job resources (i.e., support from colleagues and work leaders), personal resources (i.e., pedagogical self-efficacy and social belonging), and job demands (work overload) on the other. However, longitudinal studies examining similar associations

at more time points are crucial to explore, for instance, whether developmental cycles (positive or negative) exist between work engagement and burnout (see [8]).

Because the highest tendency to belong to the engaged profile group seemed most beneficial for HE teachers' well-being, it would be important for HE teachers to get to know themselves and thus develop clear self-concepts to identify those resources that will best help them to cope in different kinds of situations. As the teachers in the burnout profile group reported the lowest well-being in relation to work engagement, it could be suggested that support from colleagues and work leaders, as well as a sense of social belonging in the workplace, may benefit their well-being. Even where work overload was significantly positively related to exhaustion and inadequacy, the well-being of the engaged-burnout profile group was in a more preferable direction than that of the burnout profile group with regard to all well-being indicators, except for inadequacy. In addition, previous research supports this finding. The engaged-burnout profile group, according to HE teachers' self-reports, would suggest the need for both individual and system-wide approaches that enhance job design, introduce a range of other practices, and focus on worker welfare (e.g., [23]), such as translating strategy into action (e.g., working on things at hand, organizing, planning, and preparing), setting limits to one's work (e.g., not working at home or during free time in school, prioritizing tasks; see [86]), and supporting working together with others (asking for and receiving advice, sharing work, bringing out concerns), as well as awareness of the early signs of work overload (see [87]).

The present study has some limitations and implications for future research directions. First, the small sample size limits the generalizability of the results, even if the three-group model was theoretically and empirically justified. Second, the study was cross-sectional, and no causal inferences could be made. Future studies are needed with larger samples and a longitudinal approach. A long-term design could reveal the possible dark side of the engaged-burnout and burnout groups. Third, there is also a need to study principals, who play an important role in motivating and empowering teachers, as well as the school organization. Fourth, it is necessary to examine both HE teachers' and students' motivation and well-being (for a review, see [88]) at the same time to enlarge understanding of possible spillover and buffering effects. Finally, the current study was conducted in Finland, where both teacher education and the education system differ from those of many other countries. For instance, Paakkari and Välimaa [16] note that Finland is one of a number of administrations (including Cyprus, Ireland, and some US states) that have a school subject focusing on health issues. In many countries, health topics are taught as a part of a dual-subject entity (e.g., health and physical education in New Zealand; see [89]) or are integrated within various other subjects in the mode of a content theme (e.g., in South Korea; see [90]). Thus, caution should be taken when the findings are generalized, and the study could be repeated in other countries to determine whether the results are also obtained there.

5. Conclusions

The present study shows that HE teachers report different well-being profiles derived from work. However, when it comes to HE teacher well-being, the importance of finding job and personal resources, such as support from co-workers, pedagogical self-efficacy, and social belonging, should be acknowledged as potentially increasing teachers' work engagement, whereas job demands, such as work overload, are more associated with signs of work burnout. The study reveals, for the first time, the well-being profiles of HE teachers and the role of job and personal resources and job demands. This has practical implications for both pre-service and in-service HE teachers' training as a site for learning about these work aspects.

Funding: The APC was funded by [Faculty of Education, University of Turku].

Institutional Review Board Statement: The study was conducted according to the guidelines for scientific research of the University of Turku Ethics Committee and the Academy of Finland.

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

Data Availability Statement: Data available on request due to privacy and ethical restrictions.

Acknowledgments: The author would like to thank all the health education teachers for their contribution to the research, and Raili Välimaa and Kristiina Ojala from the University of Jyväskylä, Finland for elucidatory comments.

Conflicts of Interest: The author declares no conflict of interest.

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