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Occupational Well-Being: A Structural Equation Model of Finnish and Estonian School

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Abstract

This study aimed to test the original Occupational Well-being of School Staff Model (OWSS Model) from 2005. This model was tested using data collected in two stages (in 2010 and in 2013) from school staff in Finnish and Estonian public primary and secondary schools. In 2010, there were 486 Finnish respondents (Finnish study 1), and in 2013, there were 545 Finnish respondents (Finnish study 2). Correspondingly, there were 1330 Estonian respondents in 2010 (Estonian study 1), and 974 Estonian respondents in 2013 (Estonian study 2). Based on structural equation modelling, Finnish data from 2010 and 2013 suited the OWSS Model well. Based on Estonian data from 2010 and 2013, the model was slightly improved, but its main structures remained largely unchanged. On the whole, the results support the previous notion that the occupational well-being of school staff should be examined with reference to a broad spectrum of four viewpoints covering working conditions, worker and work, the working community and professional competence. General occupational well-being of the working community and subjective occupational well-being were best explained by working atmosphere and appreciation of others' work, especially in Finland. In Estonia, occupational well-being was best explained by working atmosphere and appreciation of others' work and working space, postures and equipment. Long-term testing with data from two countries and from two different testing periods confirmed that the model may continue to be applied in school contexts for planning, implementation and evaluation of occupational well-being, as well as for promoting public health.

Keywords: health promotion, occupational health, school, structural equation model, well-being, work

1. Introduction

There is no uniform definition of occupational well-being, although it plays a significant role from a public health point of view. It may be defined as a summative concept describing the quality of an individual's working life (occupational health and safety considerations included) (Schulte & Vainio, 2010). It is perceived as a subjective (Juniper, 2011) and multidimensional phenomenon (Horn, Taris, Schaufeli, & Schreurs, 2004; Juniper, 2011). The multidimensional structure consists, among other things, of emotional-related cognitive, occupational, social and psychosocial issues and dimensions, and it may be best described as a multidimensional model (Horn et al., 2004). Models developed for health promotion are useful tools for theoretical thinking and for the development of new strategies and new ways of working (Naidoo & Wills, 2016).

The Job Demand–Control Model, also known as the Job Strain Model, may be perceived as the traditional model for addressing the origin of work-related stress (Karasek, 1979). Other traditional methods of addressing occupational well-being are the model of affective well-being (Warr, 1987; Warr, 1990) and the Effort-Reward Imbalance Model at Work, which is based on the relationship between work efforts and rewards (Siegrist, 1996). The Job Demands-Resources Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) has been frequently used in studies on occupational well-being, as well as in school contexts (Hakanen, Bakker, & Schaufeli, 2006; Vera, Salanova, & Lorente, 2012; Salmela-Aro & Upadyaya, 2014). In this model, occupational well-being is examined

from the viewpoint of job demands (arising from physical, social and organizational factors, such as time pressure and workload) and resources (factors that help in achieving goals, coping and developing work skills, e.g., feedback, participation in decision-making and support from supervisors) (Demerouti et al., 2001).

Models describing occupational well-being have also been developed from the perspective of the school community. The Structural Equations Model of Demands, Personal Resources and Job Resources in Teacher Well-being, for example, is a model that describes teachers' well-being from the viewpoint of burnout and commitment, which not only reflect work demands and occupational resources (autonomy, social support from colleagues and supervisors, varying work tasks and feedback) but also subjective resources (self-efficacy and cognitive and behaviouristic resources for coping) (Bermejo-Toro, Prieto-Ursúa, & Hernández, 2016). Occupational well-being in schools is also well described in the Occupational Well-being of School Staff Model (OWSS Model), in which occupational well-being comprises four aspects: working conditions, worker and work, working community and professional competence. In the OWSS Model, subjective well-being and the working community's well-being are explained from the perspective of all four aspects and the following factors: working spaces, postures and equipment (working conditions); workload (worker and work); working atmosphere and appreciation of others' work (working community) and substantive competence and interaction (professional competence) (Saaranen, Tossavainen, Turunen, Kiviniemi, & Vertio, 2007).

The study described in this article is part of a project called "Promoting the Occupational Well-Being of School Staff—Action Research Project in Finland and Estonia, 2009–2014". This long-term action research project applied a multidisciplinary approach (combined qualitative and quantitative methodology) and the triangulation of data (quantitative initial and final measurement, qualitative interim evaluation on implementation of interventions). The purpose of this study was to test the original OWSS Model from 2005 (Figure 1). This study was based on the following hypothesis: the data collected in Finnish and Estonian schools in 2010 and 2013 corresponds to the original OWSS Model from 2005. The model can be utilized by school staff and administration in school communities, professionals in nursing as well as educators and researchers working in health promotion as several examples.

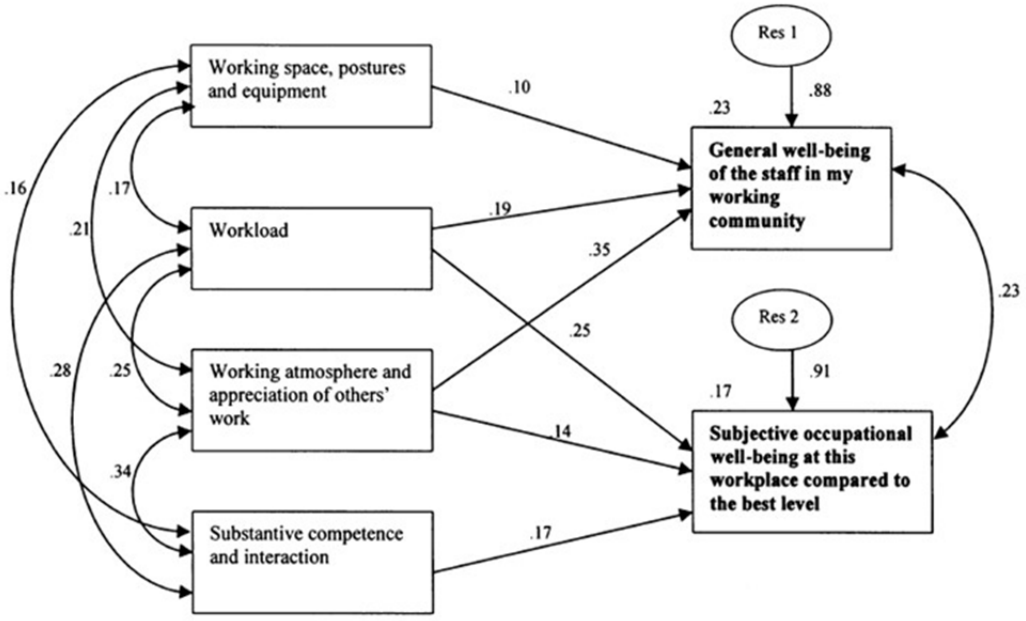

Figure 1. Original Occupational Well-being of School Staff Model (OWSS model), standardized estimates (Saaranen et al., 2007)

2. Method

2.1 Participants and measures

Schools that were members of the Schools for Health in Europe (SHE) network in Finland and Estonia (Schools for Health in Europe, 2017) were all invited to participate in the action research project. The number of participating schools were 21 in Finland and 40 in Estonia. In 2010, 486 Finnish participants ($N = 879$) responded from 21 public primary and secondary schools, and 1330 Estonian participants ($N = 1978$) responded from 40

public primary and secondary schools. The response rates were 55% in Finland and 67% in Estonia. In 2013, 545 Finnish participants (N = 961) responded from 21 schools, and 974 Estonian participants (N = 1871) responded from 38 schools. Consequently, response rates were 57% in Finland and 52% in Estonia. The schools in Finland and Estonia participated in both the initial and final measurements. Three Finnish schools involved in the initial measurement dropped out due to other obligations and therefore did not participate in the final measurement. Furthermore, three Finnish schools joined the project later, after the initial measurement, and therefore only participated in the final measurement. Background variables and the levels of subjective occupational well-being and the working community's occupational well-being are described in Table 1.

The Well-being at Your Work Index Questionnaire was developed based on literature and has been utilized in previous national and international studies (Saaranen, Tossavainen, Turunen, & Naumanen, 2006; Saaranen et al., 2012). It includes ten questions relating to background variables, four Likert scale (1–5) questions relating to occupational well-being and actions promoting occupational well-being, and one open question relating to actions that promote occupational well-being. The questionnaire includes individual variables relating to the four aspects of occupational well-being: 1) working conditions, 2) worker and work, 3) working community and 4) professional competence (see Table 2). After each section, the respondent has the chance to answer two open questions and to give additional information pertaining to prior statements or to name other factors affecting occupational well-being.

Table 1. Background variables of school staff members in the years 2010 (study 1) and 2013 (study 2) in Finland (n = 486 and n = 545) and Estonia (n = 1330 and n = 974)

Variables	**Finnish study 1**		**Finnish study 2**		**Estonian study 1**		**Estonian study 2**	
	n	***%***	***n***	***%***	***n***	***%***	***n***	***%***
Background variables								
Sex								
Female	363	76	402	74	1135	87	852	88
Male	114	24	140	26	164	13	116	12
Total	477	100	542	100	1299	100	968	100
Age								
<35	110	23	110	20	289	22	176	18
36–50	227	48	257	48	541	42	400	41
>51	139	29	173	32	458	36	391	41
Total	476	100	540	100	1288	100	967	100
Position								
Subject/special teacher	299	63	316	59	572	44	493	52
Primary school teacher	87	18	101	19	282	22	202	21
Principal/school director	17	4	23	4	92	7	72	8
School nurse	3	1	8	1	8	1	2	0
Other support staff	37	8	60	11	116	9	65	7
Other occupational group	30	6	30	6	217	17	119	12
Total	473	100	538	100	1287	100	953	100
Number of staff in my school								
<20	42	9	66	12	72	5	88	9
21–40	202	42	180	34	332	26	314	33
>41	231	49	289	54	886	69	554	58
Total	475	100	535	100	1290	100	956	100

Total number of years in this position								
<2	39	8	40	8	108	8	88	9
3–10	142	30	136	26	436	34	269	28
11–20	140	30	187	35	302	23	259	27
>21	149	32	165	31	446	35	338	36
Total	470	100	528	100	1292	100	954	100
My contract type								
Permanent	361	76	437	82	1155	90	855	89
Temporary	113	24	98	18	133	10	105	11
Total	474	100	535	100	1288	100	960	100
Level of well-being								
Subjective occupational well-being at this workplace compared with the best level								
Very good	73	16	100	18	151	12	99	10
Quite good	258	55	285	53	646	51	474	50
Moderate	117	25	113	21	446	35	347	37
Quite poor	15	3	36	7	32	2	18	2
Very poor	5	1	4	1	3	0	6	1
Total	468	100	538	100	1278	100	944	100
General well-being of the staff in my working community								
Very good	20	4	34	6	79	6	48	5
Quite good	209	45	255	47	647	51	468	50
Moderate	192	41	175	33	532	42	404	43
Quite poor	40	9	64	12	17	1	16	2
Very poor	7	1	10	2	3	0	1	0
Total	468	100	538	100	1278	100	937	100

2.2 Phases of Model Construction and Its Analysis and Further Testing

The original OWSS Model from 2005 (Saaranen et al., 2007) and the theory (Saaranen, Tossavainen, Sormunen, Laine, & Turunen, 2015) created based on it were tested and developed with data collected in Finland and Estonia in 2010 and 2013. To test the model, the following endogenous variables based on the original OWSS Model were used: 1) the working community's general staff well-being (GW) and 2) school staff members' subjective occupational well-being at this workplace compared with the best level (SW) (Likert scale 1–5). Both the Finnish and Estonian models had two endogenous variables, which required using a genuine multivariate approach. As exogenous variables, sum variables were used, which were formulated based on the previous OWSS Model and on factoring (Saaranen et al., 2006). As in the original model, the exogenous variables used were: 1) working space, postures and equipment, 2) workload, 3) working atmosphere and appreciation of others' work and 4) substantive competence and interaction. With the Cronbach's alpha coefficient calculated for the factors, the uniformity of a given factor was investigated with the data collected in Finland and Estonia in 2010 and 2013, and with a fluctuation margin of 0.53–0.89 (Table 2). A commonly accepted value falls between 0.60–0.70 (Hair, Black, Babin, & Anderson, 2010). The relationship between the endogenous variables and the exogenous variables was unidirectional.

The data from Finland and Estonia collected in 2010 (Finnish study 1 and Estonian study 1) and 2013 (Finnish study 2 and Estonian study 2) were tested using the original OWSS Model. Statistical modelling (parameters estimation) was formulated using the AMOS software, which was also used in the construction of the original

model. The effects of the standardized estimates of the model were interpreted as follows: the effect is minor if the standardized estimate is < 0.10, the effect is average if the standardized estimate is around 0.30, and the effect is significant if the standardized estimate is > 0.50 (Kline, 1998). The standardized estimates for the models from the Finnish and Estonian studies (2) are presented graphically in Figures 2 and 3.

The Finnish materials were compatible with the original model (Finnish study 1 and 2). While testing the original model with the Estonian materials, it was discovered that its standardized estimates remained minor and that the statistics used for measuring its adequacy and goodness seemed weak. For this reason, the Estonian model was supplemented with one item from the variable working space, postures and equipment to the variable subjective occupational well-being at the workplace compared to the best level. This alteration seemed to improve the Estonian model's suitability (Figure 3).

The suitability and goodness of the structural equation models were evaluated using several criteria (Table 3). A chi-square test was used to measure the model's adequacy in describing the materials; if the p-value of the chi-square test was > 0.05, the model was deemed acceptable. Other suitability measures used were the Comparative Fit Index CFI (> 0.95), the Normed Fit Index NFI (> 0.95) (Schreiber, Nora, Stage, Barlow, & King, 2006; Schreiber, 2017) and Root Mean Square Error of Approximation (RMSEA) statistics (the upper limit of acceptable values is 0.06-0.08) (Schreiber et al., 2006).

Table 2. Sum variables of the structural equation model and their alpha coefficient values

Sum variables of the aspects of occupational well-being	Individual variables	Alpha coefficient in Finnish study 1 (n = 486)	Alpha coefficient in Finnish study 2 (n = 545)	Alpha coefficient in Estonian study1 (n = 1330)	Alpha coefficient in Estonian stydy2 (n = 974)
Working conditions Working space, postures and equipment	Uncomfortable working postures have been considered Ergonomics when working with a screen are satisfactory I have access to my own quiet and comfortable working space when needed The equipment and devices needed for my work are appropriate	0.68	0.63	0.56	0.60
Worker and work Workload	The mental workload of my work is suitable The physical workload of my work is suitable I am satisfied with my workload My workload is divided evenly, so that there is no rush to do work	0.68	0.66	0.66	0.73
Working community Working atmosphere and appreciation of others' work	In my working community people can openly discuss things related to work I get help and support from my colleagues when needed I regard my own work in the working community as important and significant Personal relationships between workers at my workplace are fine There is a spirit of 'fair play' at my workplace, and there is no harassment of workers Superior-subordinate relationships are fine at	0.85	0.89	0.85	0.85

	my workplace				
	There is mutual understanding of colleagues' work/tasks in my working community				
	There is trust in others' work input in my working community				
	My work is appreciated in my working community				
Professional competence Substantive competence and interaction	I have received sufficient education/training for the tasks I carry out at my work	0.58	0.59	0.53	0.62
	I have sufficient readiness when acting as a group leader and when the group needs to communicate				
	I have sufficient readiness to face special situations (e.g. problematic people/customers)				
	I have had a possibility to efficiently utilize my own skills and competence at my work				

3. Results

3.1 Finnish Study 1 and 2

In the Finnish model of 2010 (study 1), working atmosphere and appreciation of others' work explained the working community's occupational well-being, which was also found to have the highest standardized estimate (0.50). Also, working space, postures and equipment were found to have an effect of medium value (0.13), and workload (0.08) had a minor effect on the working community's general occupational well-being. Workload (0.26) and working atmosphere and appreciation of others' work (0.25) were the most significant factors explaining subjective occupational well-being. Additionally, substantive competence and interaction correlated with subjective occupational well-being (0.13).

All sum variables correlated with each other (Table 3), and their values were mediate (0.33–0.39). The exogenous variables explained 35% of the occupational well-being of the working community and 25% of the subjective occupational well-being (see squared multiple correlations in Table 3). The equivalent expression of the percentages is the coefficient of determination. The compatibility of material from 2010 with the model was tested, and all compatibility tests (x^2, NFI, CFI and RMSEA) supported its suitability (Table 3).

In the Finnish model (study 2; Figure 2), working atmosphere and appreciation of others' work continued to have the most common and significant relationship with the working community's occupational well-being (0.56). It was also found that working space, postures and equipment (0.10) and workload (0.11) were related to the working community's occupational well-being. Working atmosphere and appreciation of others' work were most significantly related to subjective occupational well-being (0.36). Also, workload (0.25) and substantive competence and interaction (0.12) were related to subjective occupational well-being.

The sum variables correlated with each other (Table 3), and the effects between them were of medium value (0.20–0.43). Exogenous variables explained 43% of the working community's occupational well-being and 34% of subjective occupational well-being.

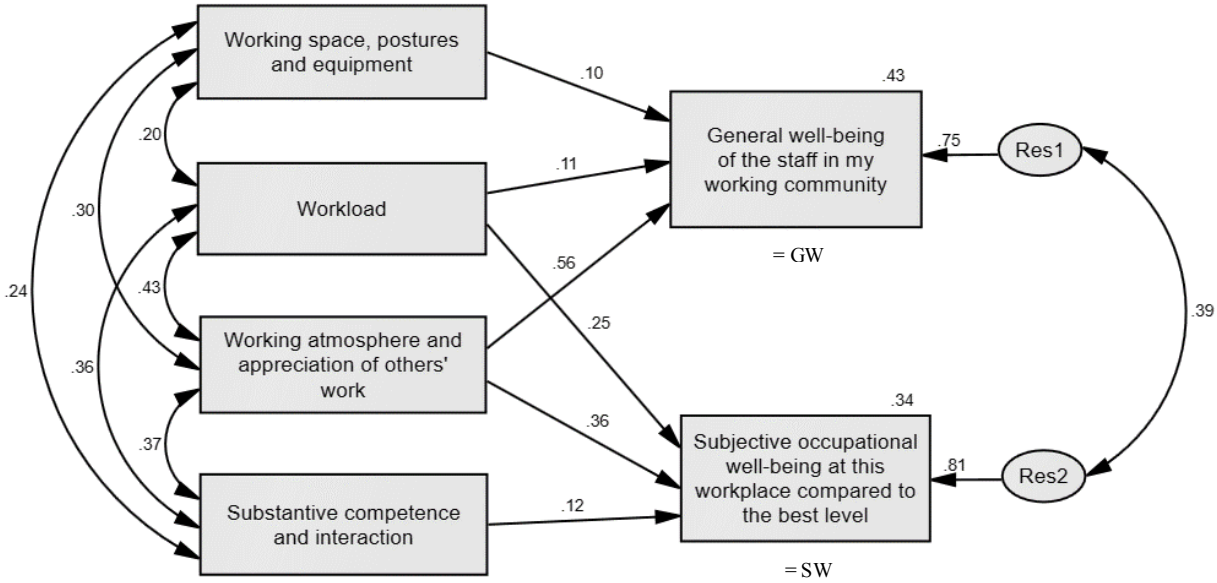

Figure 2. Further tested Occupational Well-being of School Staff Model (Finnish study 2), standardized estimates

3.2 Estonian Study 1 and 2

In the Estonian model of 2010 (study 1), working atmosphere and appreciation of others' work (0.27) and working space, postures and equipment (0.23) were the most significant factors explaining the working community's occupational well-being. Moreover, workload had a minor effect on the working community's occupational well-being (0.09). All sum variables explained subjective occupational well-being. Working atmosphere and appreciation of others' work (0.24) and working space, postures and equipment (0.28) had the most significant effect on subjective occupational well-being. Effects of workload (0.10) and substantive competence and interaction (0.04) had medium/minor values in relation to subjective occupational well-being.

Correlations 0.24–0.40 were found between the sum variables (Table 3). Exogenous variables explained 22% of the working community's occupational well-being and 25% of subjective occupational well-being. Tests indicating suitability supported the model's suitability (Table 3).

The Estonian model of 2013 (study 2; Figure 3) showed that working space, postures and equipment (0.29) had the strongest correlation with the working community's occupational well-being. Working atmosphere and appreciation of others' work were correlated, with medium values (0.27), whereas the effect of workload (0.10) was medium. All sum variables explained subjective occupational well-being. Working space, postures and equipment (0.33) and working atmosphere and appreciation of others' work (0.23) had the largest effect on subjective occupational well-being. Workload (0.09) and substantive competence and interaction (0.09) had a minor effect on subjective occupational well-being.

Correlations were found between all sum variables, and their values varied between 0.24–0.43. Exogenous variables explained 27% of the working community's occupational well-being and 30% of subjective occupational well-being. The model's suitability was tested with different tests, which all supported its suitability (Table 3).

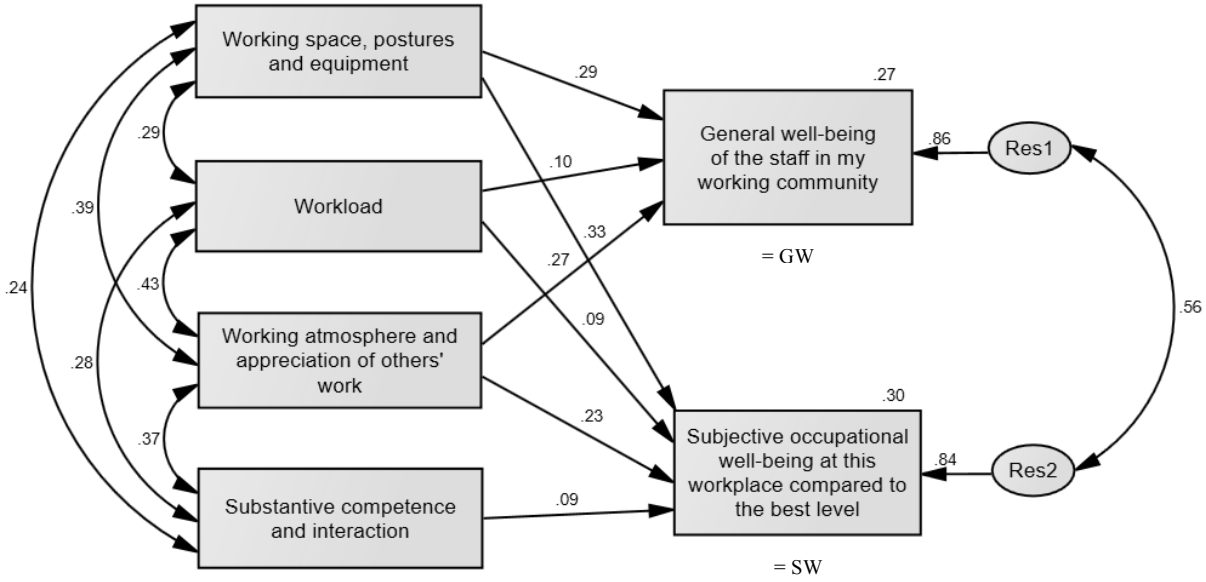

Figure 3. Enhancement Occupational Well-being of School Staff Model (Estonian study 2), standardized estimates

4. Discussion

To collect materials for the structural equation models, a previously developed and tested measure was used because its validity and reliability had been found to be good (Saaranen et al., 2007). The amount and content of the study materials are considered appropriate for structural equation models. The volume was larger compared to the materials used for constructing and testing the original OWSS Model. Response rates were reasonably good in both countries. The initial measurement comprised three Finnish schools, which did not participate in the final measurement. Additionally, three Finnish schools participated in the final measurement but not in the initial measurement. These changes were, however, small and had little effect on the whole project. The alpha values of the factors vary between 0.53–0.89, which provides a reasonable assurance of their functionality. While evaluating the suitability of the Finnish and Estonian models to the materials, acceptable p-values from the chi-square test were produced (except in the 2013 Estonian model). The models' compatibility with the materials was tested using RMSEA, and the results supported the models' suitability. Similar results were obtained from the CFI and NFI compatibility indexes (Table 3).

Table 3. Estimates for the structural equation model parameters and model fit statistics

	Finnish study 1			Finnish study 2			Estonian study 1			Estonian study 2		
	Estimate	SE	*P*	Estimate	SE	*P*	Estimate	SE	*P*	Estimate	SE	*P*
Regression weights												
Subjective occupational well-being at this workplace compared whit the best level ← workload	0.250	0.044	<0.001	0.276	0.043	<0.001	0.092	0.028	<0.001	0.073	0.027	0.006
Subjective occupational well-being at this workplace compared with the best level ← working atmosphere and appreciation of others' work	0.272	0.050	<0.001	0.394	0.044	<0.001	0.279	0.033	<0.001	0.282	0.039	<0.001
Subjective occupational well-being at this workplace compared with the best level ← substantive competence and interaction	0.152	0.052	0.003	0.147	0.046	0.001	0.051	0.033	0.126	0.109	0.031	<0.001
Subjective occupational well-being at this workplace compared with the best level ← working space, postures and equipment	–	–	–	–	–	–	0.265	0.026	<0.001	0.308	0.028	<0.001
Subjective occupational well-being at this workplace compared with the best level Residual 1	0.669	0.022	<0.001	0.679	0.021	<0.001	0.616	0.012	<0.001	0.595	0.014	<0.001
General well-being of the staff in my working community ← working space, postures and equipment	0.100	0.030	0.001	0.103	0.031	<0.001	0.197	0.024	<0.001	0.238	0.025	<0.001
General well-being of the staff in my working community ← workload	0.077	0.041	0.057	0.123	0.040	0.002	0.072	0.025	0.004	0.077	0.024	0.001
General well-being of the staff in my working community ← working atmosphere and appreciation of others' work	0.539	0.046	<0.001	0.619	0.041	<0.001	0.280	0.029	<0.001	0.284	0.035	<0.001
General well-being of the staff in my working community ← Residual 1	0.618	0.020	<0.001	0.640	0.020	<0.001	0.561	0.011	<0.001	0.533	0.012	<0.001
Covariances												
Working space, postures and equipment ↔ workload	0.256	0.039	<0.001	0.134	0.029	<0.001	0.190	0.018	<0.001	0.180	0.021	<0.001
Working space, postures and equipment↔substantive competence and interaction	0.207	0.031	<0.001	0.134	0.025	<0.001	0.098	0.012	<0.001	0.101	0.014	<0.001
Workload ↔working atmosphere and appreciation of others' work	0.221	0.029	<0.001	0.255	0.028	<0.001	0.188	0.015	<0.001	0.208	0.017	<0.001
Workload ↔substantive competence and interaction	0.196	0.026	<0.001	0.180	0.023	<0.001	0.133	0.013	<0.001	0.129	0.016	<0.001
Working atmosphere and appreciation of others' work ↔ substantive competence and interaction	0.173	0.023	<0.001	0.184	0.023	<0.000	0.108	0.010	<0.001	0.121	0.011	<0.001
Working space, postures and equipment↔ working atmosphere and appreciation of others' work	0.237	0.033	<0.001	0.199	0.030	<0.000	0.186	0.014	<0.001	0.172	0.015	<0.001
Residual 1 ↔ Residual 2	0.593	0.082	<0.001	0.670	0.080	<0.001	0.666	0.043	<0.001	0.709	0.047	<0.001
Squared multiple correlations												
General well-being of the staff in my working community	0.350			0.432			0.219			0.266		
Subjective occupational well-being at this workplace compared with the best level	0.247			0.339			0.253			0.300		
Model fit summary												
x^2	3.278	(df=2)	0.194	1.216	(df=2)	0.545	0.009	(df=1)	0.924	7.307	(df=1)	0.007
NFI	0.995			0.999			1.000			0.995		
CFI	0.998			1.000			1.000			0.996		
RMSEA	0.036			0.000			0.000			0.081		

← = one-way arrow depicts a unidirectional effect between two variables. ↔ = two-way arrow depicts a correlation between variables.

In this article, the original OWSS model from 2005 was further tested and developed with data collected in Finland and Estonia in 2010 and 2013. There are grounds for testing the model because testing and developing a theory is an ongoing process, which already began in 2002. Based on the results, the Finnish materials from 2010 and 2013 are compatible with the OWSS model, which supports the research hypothesis. However, the models did not fit the Estonian materials from 2010 and 2013 without alterations. Therefore, in this respect, the hypothesis was not fully supported by these materials. As a limitation of the study, the intervention may be considered to have a limited impact on the well-being of the school staff. The intervention was based on school-specific development activities, making development activities unique in every school. Occupational well-being is defined in the literature in different ways (Horn et al., 2004; Juniper, 2011), and the self-assessment of occupational well-being can also be understood by people in a subjectively different way.

All sum variables in all models had an effect on occupational well-being, and indirect correlations between s Num variables were observed. The coefficient of determination in the original model was 23% for the general well-being of the staff in the working community (GW) and 17% for subjective well-being at this workplace compared to the best level (SW) (Figure 1). Based on these materials, the corresponding coefficient of determination of the Finnish models was higher (study 1: GW 35% and SW 25%; study 2: GW 43% and SW 34%) compared to the original model. Because the Estonian models could not readily be applied to the original OWSS Model, they had to be slightly altered. All in all, the Estonian models exceeded the original model's coefficient of determination, but they fell below the Finnish models' coefficients of determination (study 1: GW 22% and SW 25%; and study 2: GW 27% and SW 30%). Therefore, the tested Finnish (study 2) OWSS Model is the most applicable of these models (Figure 2).

Testing the original OWSS Model with the new data (2010 and 2013) reasserted the notion that there are four aspects affecting school staff's occupational well-being: working conditions, work and worker, working community and professional competence. This study also reinforced the previous notion that the working community has a powerful impact on occupational well-being, particularly in Finland. The aspect of social support and working community/social support is also underlined in other models, which explain occupational well-being (Saaranen et al., 2007; Bermejo-Toro et al., 2016) It is also noteworthy that despite the enhancements of the Estonian models, the link between the variable of substantive competence and interaction remained insignificant, although this may be partly due to the fact that the questionnaire contained few variables related to this. This poses the future challenge of developing the Well-being at Your Work Index Questionnaire with this aspect in mind.

Workers experience occupational well-being subjectively (Juniper, 2011), which means modelling it can be a challenge. However, this model, which has been developed over a long period of time and has now been subjected to further testing, supports the conceptualization and theorization of occupational well-being. By means of this model, factors pertaining to occupational well-being can be identified, and it serves as a theoretical framework for understanding the phenomenon of occupational well-being. This previously produced model and its applicability have now been tested in two countries. With these justifications, this study further reinforces the previous perception that the structural model of occupational well-being can be used in practice in school contexts to promote occupational well-being. The results also show that the meaning and proportion of the working community in the model has a greater impact than the other sections, which must be taken into account when working to promote occupational well-being.

5. Conclusions

This model has been tested and developed in the framework of a long-term action research study. Initially, it was only tested in the Finnish school context, but now it has been tested further and developed in both the Finnish and the international school contexts with four different study materials. The model's further testing has reconfirmed the notion that school staff's subjective occupational well-being and the working community's general occupational well-being should be investigated with broad multi-disciplinary approaches and that they are affected by 1) working conditions (working space, postures and equipment), 2) worker and work (workload), 3) working community (working atmosphere and appreciation of others' work) and 4) professional competence (substantive competence and interaction). It seems, however, that working community has a larger effect on occupational well-being than the other aspects. This further testing has proven that the structural equation model continues to be a feasible tool for describing and explaining practice. It has been used and can be used to promote school staff's occupational well-being and to improve public health from the viewpoint of practice, education and theory. The model provides a concrete framework, which enables school staff's active participation in promoting subjective occupational well-being and the entire working community's occupational

well-being. The occupational well-being index and theory require further future testing and development in varying school contexts (e.g., vocational education and higher education). Moreover, this model can, to some extent, be applied and tested for promoting occupational well-being not only in schools but in other working communities as well.

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Competing Interests Statement

The authors declare that they have no competing or potential conflicts of interest.

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