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Work related well-being in the UK physiotherapy workforce: Part I. Quantitative findings from the YOURvieWS cross-sectional e-survey

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Abstract

Objectives To explore burnout, professional fulfilment, work related stress, well-being and working patterns within the physiotherapy workforce.
Design A cross-sectional, convenience, voluntary, open e-survey.
Setting Online.
Participants UK physiotherapy workforce, including physiotherapists, students, support workers across all workplace settings and across the UK.
Intervention Following development and pre-testing, the e-survey was widely advertised and ran from 08/03/2023 to 30/04/2023 via Bristol Online Survey.
Main outcome measures Stanford Professional Fulfilment Index (SPFI), a score for work related and private life related stress, work-life balance, WHO 5 well-being questionnaire and questions to capture working patterns, diversity and inclusivity questions and demographic data.
Results Following data cleaning, 666/764 (87%) female and 92/764 (12%)male respondents. SPFI: burnout prevalence was 49%(376/764). 436/564 respondents (57%) reported feeling stressed "often" or "very often" (past month). WHO 5 scores had a median of 45 (IQR: 30–60) indicating many have score ≤50 indicating poor wellbeing. 45%(340/764) respondents reported their work-life balance over the previous 2 weeks as unbalanced/very unbalanced.

57%(435/764) reported that they worked full time and 43%(329/764) part-time. 78%(598/764) reported having one physiotherapy role, 18%(139/764) reported having two roles, 3%(23/764) having four roles and 1%(4/764) having five roles and unpaid hours were raised as problematic. 54% (411/764) reported being absent from work/study in the last year and 10%(76/764) reported adjusted work/study. 9%(72/764) reported additional non-physiotherapy roles/jobs.
Conclusions This e-survey obtained snapshot views from self-selecting participants. The positive workforce developments being experienced within the physiotherapy profession are threatened by poor work-related well-being, including burnout and stress. Action is required.

Contribution of the Paper

- Identifies important concerns, and urgent action needed, regarding work related well-being in the physiotherapy workforce.
- Provides evidence for policy makers and to inform policy and strategic planning.
- Profession specific strategies to measure and improve WRWB in the physiotherapy workforce should be implemented and monitored at national, local and departmental level.

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Introduction

Stress, depression or anxiety accounted for 16.4 million working days lost in the United Kingdom (UK) due to work-related ill health in 2023/24; with an average of 21 days lost per person [1]. The latest National Health Service (NHS) staff survey for England raised serious concerns regarding staff feeling unwell due to work related stress, reported inadequate staffing levels, feeling undervalued, lack of involvement in change and being dissatisfied with payment for work [2]. Waiting lists are resulting in prolonged waits for patients and placing demands on staff [3]. NHS staff are 50% more likely to experience high levels of work related stress compared with the general working population [3,4]; damaging to individual health and work related well-being (WRWB) and affecting care quality and organisational performance [5]. There is limited evidence available about WRWB in the physiotherapy workforce. During our KNOWBEST project to inform guidance for pre-registration training, workforce members spoke of burnout and prolonged exposure to multiple work stressors [6]. The lack of data about WRWB in the physiotherapy workforce leads directly to limited evidence and guidance to inform policy, direct actions and improve WRWB.

The World Health Organization (WHO) describes burnout as an occupational phenomenon, rather than a medical diagnosis, resulting from chronic workplace stress that has not been successfully managed [7]. Three key dimensions of burnout are overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and lack of accomplishment [8]. Burnout has long been recognized as an occupational hazard for healthcare and education professions due to the level of personal and emotional contact with others [8]. The prevalence of burnout across the UK physiotherapy workforce is unknown. Additionally, there is a lack of evidence exploring risks and factors for burnout for UK physiotherapists with only one UK study identified in Burri *et al.*'s global systematic review [9].

As the NHS survey findings indicate, WRWB is a more complex phenomenon than burnout alone. This survey therefore aimed to explore current WRWB within the UK physiotherapy workforce. The objectives of the YOURvieWS (YOUR views about Work/Study) internet e-survey were to:

1. identify the prevalence and severity of burnout, professional fulfilment and work related stress of the physiotherapy workforce
2. identify levels of general well-being of the physiotherapy workforce
3. describe the working patterns of the UK physiotherapy workforce
4. obtain data from across the four countries of the UK which is representative of the profession's wide ranging work settings and diversity of members

This paper reports the e-survey's quantitative findings. Part 2, the open comments findings, are presented in a linked paper.

Methods

Design

A cross-sectional, convenience, voluntary, open online e-survey reported according to the Checklist for Reporting Results of Internet E-Surveys (CHERRIES) [10].

Target population

The UK physiotherapy workforce, including physiotherapists, students, physiotherapy assistants/support workers across all workplace settings and across the UK plus people no longer working within physiotherapy. In 2024 there were 74,000 physiotherapists registered in the UK [11] and 28, 500 working in the NHS [12] In the NHS physiotherapy roles are banded; support workers/assistants are usually banded below Band 5, newly qualified physiotherapists are usually Band 5 posts and more senior roles progress from Band 5 upwards.

The survey

Following a literature review of existing outcome measures a draft survey was developed and refined by the team and widely pre-tested. The development of the e-survey and its pre-testing are reported in Supplementary File 1 and the full questionnaire in Supplementary file 2.

Where possible, validated, reliable, established outcome measures were used. The 5 item WHO (World Health Organisation) well-being questionnaire is a valid, reliable measure of general well-being [13–15]. The 5-item WHO-5 instrument was scored by assigning values from 0 to 4 to each response option ("At no time" = 0; "Less than half of the time" = 1; "More than half of the time" = 2; "Most of the time" = 3; "All of the time" = 4), yielding a raw score range

of 0 to 20. To enable comparability with the standard WHO-5 scoring system (0 to 100), these raw scores were subsequently multiplied by 5 (see Supplementary file 5 for statistical analyses for the use of the altered score). The 16-item Stanford Professional Fulfilment Index (SPFI) measures professional fulfilment and burnout: it includes six survey questions to measure professional fulfilment and two dimensions of burnout: work exhaustion (four items) and interpersonal disengagement (six items) [16]. Since the SPFI was developed for the medical profession, it underwent confirmatory factor analysis demonstrating it was appropriate, reliable and valid for use in Physiotherapy. Two previously validated item scores for work related and private life related stress were included [17] and up to 14 questions from the NSS22-Core-Questionnaire [18] captured diversity and inclusivity data. Additional questions were developed by the team to optimise content validity (Table 1). Demographic questions allowed objective 4 to be explored. Responses were automatically captured and exported into SPSS (v28). No processes to prevent someone participating multiple times were included.

Consent

Respondents were informed the e-survey took 7–12 minutes to complete during testing but might take longer (15 minutes) for multiple job/roles. Responses were anonymous unless the respondent provided expressed interest in taking part in a subsequent qualitative interview/focus group. Respondents were informed the provision of contact details meant their survey results would then be linked to their name to inform purposive sampling and that contact details would be securely and confidentially held within a university private SharePoint site and destroyed when recruitment to the qualitative study was completed. No incentives were offered.

e-survey content

The e-survey content, and how this supported the study objectives is presented in Table 1. The WHO-5 outcome was deliberately placed early in the survey before topics such as stress and exhaustion were mentioned which might alter how respondents answer this outcome. Respondents could not move backwards to previous questions. For main outcomes (SPFI, WHO-5) all items had to be completed to progress.

Survey recruitment

The e-survey ran via the Bristol Online Survey (JISC) platform from 08/03/2023 to 30/04/2023 and advertised using social media (twitter/X, Instagram) the Chartered Society of Physiotherapy (CSP) newsletter, member magazine, peer-to-peer network (iCSP) and snowballing was encouraged. Professional networks, special interest groups and independent providers were emailed and asked to disseminate an invitation, advert and direct link to the e-survey.

Quantitative data analyses

Data were cleaned, responses were identified and removed from individuals who did not indicate working/having left the physiotherapy workforce and outliers reporting unrealistic working hours (1 reporting 150 hours physiotherapy per week, 2 reporting mothering hours). Demographic data were summarised. Outcome measures were statistically analysed as per validated instructions. Descriptive statistical analyses were used for the additional questions created by the team, having first explored the distribution of the data where appropriate. No statistical corrections were made to adjust for non-representative sampling. The participation rate, the ratio of those who agreed to participate divided by unique first survey page visitors, was calculated.

Results

There were 2156 survey page visitors with 788 respondents who agreed to participate resulting in a participation rate of 0.4. which is estimated at approximately 1% of the physiotherapy workforce.

Of 788 people who responded, six (0.8%) were excluded due to data non-conformity. Of 782 responses five (0.6%) did not specify whether they worked /had worked within physiotherapy so 777 (99.4%) were eligible for inclusion. Thirteen respondents (1.7%) were not working within physiotherapy, 12 had previously worked within physiotherapy for over 11 years, with nine leaving the profession within the last 5 years. Reasons for leaving included: retirement (4 respondents, 0.4%), career change (3 respondents, 0.4%) carer responsibilities (2 respondents, 0.3%), work related stress (1 respondent, 0.1%), physical health conditions (1 respondent, 0.1%), employment by a non-therapy directorate (1 respondent, 0.1%) and other work (1 respondent, 0.1%). 764 (98.2% of the total) were currently either employed in the physiotherapy field or studying physiotherapy. Data were obtained from diverse respondents across the whole UK with a wide variety of physiotherapy settings and roles; demographic data are presented in Table 2. From Table 2 it can be seen that 57% work full time in their main role and approximately one quarter of respondents reported having long term physical or mental health conditions or illnesses.

SPFI

Table 3 presents the measures of professional wellbeing: professional fulfilment (PF), work exhaustion (WE),

Table 1
The content of the e-survey.

Questionnaire Format (in order)	e-survey content	Study Objective/s being supported
Consent	One question which sought valid consent.	
Working for the Physiotherapy Workforce	Up to 4 questions about working/no longer working in the workforce, timescales and reasons for leaving.	1
Part One: Outcome measures	- 5 item WHO well-being questionnaire [26–28]	3
	- Two item score for work related and private life related	2
	stress [29] with two created similar questions to allow respondents to compare their levels of the last month to pre-COVID levels	2
Part two: Physiotherapy Workforce Information & Working patterns (hours, jobs, beliefs)	- 16 item Stanford Professional Fulfilment Index (SPFI) which measures burnout, intention to quit the profession, job satisfaction and professional fulfilment [25]	2
	- Single item (Likert scale 5 response option) Work-life balance	2
	- Open Comments for factors impacting most upon work related well-being within the physiotherapy workforce (reported in a separate publication). - Up to four questions regarding absence from work and	1, 2
	adjusted working, developed by the team.	1
Part three: Background questions.	Questions developed by the team. Up to 30 questions (filtered) for each job/role (up to five) to capture data regarding role, setting, banding/ seniority, courses for students, commute time, hours paid/unpaid, country/ region, taking work breaks, reported control over their role and ability to provide quality of care Up to 14 Questions from the NSS22-Core-Questionnaire [30] to capture data regarding diversity and inclusivity.	4

Table 2
Demographic data for survey respondents (n = 764).

Question	Categories	Frequency number	Percentage rounded to nearest integer
What of the following best describes you?	Female Male	666	87
	Prefer not to say	92	12
	Non-binary	6	1
	Prefer to self-describe	0	0
		0	0
In which country or region of the UK are you currently employed as a physiotherapist in your primary role? (multiple answer question)	England	480	63%
	Midlands	94	12%
	South East	89	12%
	London	84	11%
	South West	65	9%
	North West	59	8%
	East of England	52	7%
	North East and Yorkshire	40	5%
	Northern Ireland	34	4%
	Scotland	206	27%
	Wales	36	5%
	Across the UK	1	0%
In this physiotherapy role, do you work/study full time or part time?	Full-time	435	57
	Part-time	329	43
In this physiotherapy role, what your role?	A clinical physiotherapist	578	76%
	A physiotherapy manager	67	9%
	A physiotherapy assistant or support worker	48	6%

Table 2 (*Continued*)

Question	Categories	Frequency number	Percentage rounded to nearest integer
	A physiotherapy student	18	2%
	A physiotherapy educator working in an HEI/ university	15	2%
	A physiotherapy researcher	9	1%
	A member of a professional organisation (e.g. NHS Improvement, NHS Health Scotland, etc…)	4	1%
	A service provider	3	0%
	A CSP employee	2	0%
	Other	20	3%
Do you have any physical or mental health conditions or illnesses lasting or expected to last for 12 months or more?	Yes	186	24
	No	578	76
If Yes, has your employer made reasonable adjustment(s) to enable you to carryout your Work?	Yes	81	11
	No	27	4
	No adjustment required	78	10
Have you been absent from work/study in the last year?	Yes	411	54
	If yes, how long?	171	42
	1 to 5 days	104	25
	6 to 10 days	62	15
	11 days to 1month	35	9
	1 to 2 months	32	8
	3 to 6 months	7	2
	7 to 12 months	353	46
	No		
Have you been on adjusted work/study?	Yes	76	10
	If yes, how long?	10	13
	1 to 5 days	14	18
	6 to 10 days	14	18
	11 days to 1 month	13	17
	1 to 2 months	15	20
	3 to 6 months	8	11
	7 to 12 months	688	90
	No		
What is your ethnic group?	White	714	94
	Asian/Asian British	23	3
	Prefer not to say	10	1
	Mixed/Multiple ethnic background	8	1
	Black/African/Caribbean/Black British	5	1
	Other ethnic group	4	1
What is your religion? Are you…	No religion	354	46
	Christian	341	45
	I would prefer not to say	35	5
	Muslim	10	1
	Hindu	9	1
	Jewish	6	1
	Buddhist	5	1
	Any other religion	4	1
Which of the following best describes how you think of yourself?	Heterosexual or straight	694	91
	I would prefer not to say	29	4
	Gay or Lesbian	19	3
	Bisexual	19	3
	Other	3	0

interpersonal disengagement (ID), and burnout—a composite measure derived from both work exhaustion and interpersonal disengagement. The 6-item PF subscale yielded a median composite score of 13 (IQR = 9 to 17), alongside a median average item score of 2.2 (IQR = 1.5 to 2.8). 165 respondents achieved an average score of at least 3.00, suggesting that 21.8% of respondents reported high levels of professional fulfilment. For the 4-item WE, the median composite score was recorded at 7 (IQR = 5 to 11), with an average item score of 1.8 (IQR = 1.3 to 2.6). 519 respondents scored an average WE score of 1.33 or higher, indicating that 68.7% experienced significant work exhaustion. The ID variable, measured with a 6-item scale, presented a median composite score of 6 (IQR = 2 to 9) and an average item score of 1 (IQR = 0.3 to 1.5). 252 individuals registered an average ID score of 1.33 or above, highlighting that 33.2% of respondents experienced high levels of interpersonal disengagement. Lastly, the integrated 10-item Burnout scale, combining WE and ID scores, revealed a median composite score of 13 (IQR = 8 to 19) with a median average item score of 1.3 (IQR = 0.8 to 1.9). Among the 756 surveyed, 369 respondents had an average score exceeding 1.33, demonstrating a high burnout prevalence of 49% within the study population. Supplementary File 4 reports results for the individual items for each subscale of the Index.

Table 3
Work related well-being (n = 764).

Modified World Health Organization-Five Well-Being Index WHO-5 instrument was scored by assigning values from 0 to 4 to each response option ("At no time" = 0; "Less than half of the time" = 1; "More than half of the time" = 2; "Most of the time" = 3; "All of the time" = 4), yielding a raw score range of 0 to 20. To enable comparability with the standard WHO-5 scoring system (0–100), these raw scores were subsequently multiplied by 5.

	At no time	Less than half of the time	More than half of the time	Most of the time	All the time
I have felt cheerful and in good spirits	10 (1)	204 (27)	230 (30)	298 (39)	22 (3)
I have felt calm and relaxed	36 (5)	299 (39)	241 (32)	179 (23)	9 (1)
I have felt active and vigorous	48 (6)	298 (39)	237 (31)	169 (22)	12 (2)
I woke up feeling fresh and rested	118 (15)	377 (49)	184 (24)	75 (10)	10 (1)
My daily life has been filled with things that interest me	7 (1)	197 (26)	249 (33)	264 (35)	47 (6)
Questions about stress Count (%, rounded to the nearest integer)					
How often within the last month have you felt stressed because of your private life?	Never 33 (4)	Rarely 258 (34)	Sometimes 306 (40)	Often 121 (16)	Very often 46 (6)
Compared to your pre-COVID level of well-being in your private life, how would you rate your private life wellbeing over the last month?	Very much worse 28 (4)	Worse 210 (28)	Similar 404 (53)	Better 98 (13)	Very much better 24 (3)
How often within the last month have you felt stressed because of your work life?	Never 11 (1)	Rarely 84 (11)	Sometimes 233 (31)	Often 232 (30)	Very often 204 (27)
Compared to your pre-COVID level of work related well-being, how would you rate your work life well-being over the last month?	Very much worse 128 (17)	Worse 264 (35)	Similar 274 (36)	Better 72 (9)	Very much better 26 (3)

Professional Fulfilment Index: 16 items scored as 'Not at all' 'Very little' 'Moderately' 'A lot' 'Extremely'. See Supplementary File 4 for results for every item. Professional fulfilment is captured through a 6-item, 5-point scale with scores ranging from 0 ('not at all true') to 4 ('completely true'). Burnout is evaluated from work exhaustion and interpersonal disengagement. Both WE and ID scales are rated from 0 ('not at all') to 4 ('extremely').

	Average Scores	Composite scores
	Median [IQR]	Median [IQR]
Professional Fulfilment score	2.2 [1.5 to 2.8]	13 [9 to 17]
Work Exhaustion score	1.8 [1.3 to 2.6]	7 [5 to 11]
Interpersonal Disengagement score	1 [0.3 to 1.5]	6 [2 to 9]
Burnout score	1.3 [0.8 to 1.9]	13 [8 to 19]
Burnout (average Burnout score ≥ 1.33) - n (%)	376 (49.2%)	

Work life balance:					
How would you rate your work-life balance, the division of one's time and focus between working and family or leisure activities, during the last two weeks?	Very well balanced 58 (8)	Well balanced 116 (15)	Balanced 250 (33)	Unbalanced 258 (34)	Very unbalanced 82 (11)

Table 4
Job/Role 1 working for the NHS (n = 630).

			Contracted hours a week	On average, how many additional PAID hours do you work per week over and above your contracted hours?								On average, how many additional UNPAID hours do you work per week over and above your contracted hours?								Do you work from home?						How many hours did you spend commuting to and from work in the last working week?									
				0		Up to 5		6 to 10		11 or more		0 hour		Up to 5		6 to 10		11 or more		Yes		No		Hybrid		Less than 1		1 to 5		6 to 10		11 to 15		More than 15	
			Median [IQR]	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
NHS banding	2	FT	37 [37]	2	100	0	0	0	0	0	0	2	100	0	0	0	0	0	0	0	0	2	100	0	0	0	0	2	100	0	0	0	0	0	0
		PT	22.5 [22,23]	2	100	0	0	0	0	0	0	0	0	2	100	0	0	0	0	0	0	2	100	0	0	1	50	1	50	0	0	0	0	0	0
	3	FT	37 [37, 37.5]	8	100	0	0	0	0	0	0	8	100	0	0	0	0	0	0	0	0	6	75	2	25	0	0	4	50	2	25	0	0	2	25
		PT	19 [14,26]	6	60	3	30	1	10	0	0	6	60	4	40	0	0	0	0	0	0	10	100	0	0	2	20	4	40	4	40	0	0	0	0
	4	FT	37 [37]	11	78.6	2	14.3	1	7.1	0	0	7	50	6	42.9	0	0	1	7.1	0	0	9	64.3	5	35.7	4	28.6	3	21.4	5	35.7	1	7.1	1	7.1
		PT	23 [22,26]	9	100	0	0	0	0	0	0	2	22.2	7	77.8	0	0	0	0	0	0	8	88.9	1	11.1	5	55.6	3	33.3	0	0	0	0	1	11.1
	5	FT	37 [37,38]	30	75	7	17.5	2	5	1	2.5	17	42.5	21	52.5	2	5	0	0	0	0	36	90	4	10	4	10	18	45	13	32.5	5	12-.5	0	0
		PT	22 [21,29]	2	66.7	0	0	1	33.3	0	0	1	33.3	2	66.7	0	0	0	0	0	0	3	100	0	0	0	0	2	66.7	1	33.3	0	0	0	0
	6	FT	37 [37,38]	72	66.1	33	30.3	4	3.7	0	0	25	22.9	72	66.1	11	10.1	1	0.9	3	2.8	76	69.7	30	27.5	13	12.3	55	51.9	29	27.4	8	7.5	1	0.9
		PT	22 [19,30]	63	84	7	9.3	5	6.7	0	0	24	32	42	56	8	10.7	1	1.3	2	2.7	51	68	22	29.3	11	15.1	46	63	15	20.5	0	0	1	1.4
	7	FT	37 [37]	93	71.5	32	24.6	5	3.8	0	0	22	16.9	86	66.2	15	11.5	7	5.4	0	0	84	64.6	46	35.4	11	8.5	68	52.3	38	29.2	12	9.2	1	0.8
		PT	25 [20,30]	105	76.1	26	18.8	7	5.1	0	0	26	18.8	93	67.4	15	10.9	4	2.9	2	1.4	81	58.7	55	39.9	22	16.2	88	64.7	24	17.6	0	0	2	1.5
	8a	FT	37 [37]	38	80.9	7	14.9	2	4.3	0	0	7	14.9	30	63.8	5	10.6	5	10.6	2	4.3	23	48.9	22	46.8	3	6.7	24	53.3	14	31.1	3	6.7	1	2.2
		PT	27 [19,30]	20	80	5	20	0	0	0	0	0	0	16	64	9	36	0	0	0	0	14	56	11	44	0	0	15	60	9	36	1	4	0	0
	8b	FT	37 [37]	10	90.9	1	9.1	0	0	0	0	0	0	4	36.4	6	54.5	1	9.1	1	9.1	4	36.4	6	54.5	0	0	2	20	5	50	2	20	1	10
		PT	28.5 [23,34]	2	100	0	0	0	0	0	0	0	0	2	100	0	0	0	0	0	0	1	50	1	50	0	0	1	50	1	50	0	0	0	0
	8c	FT	37 [37]	0	0	1	100	0	0	0	0	0	0	1	100	0	0	0	0	0	0	0	0	1	100	0	0	1	100	0	0	0	0	0	0
		PT	34 [34]	1	100	0	0	0	0	0	0	0	0	0	0	1	100	0	0	0	0	0	0	1	100	0	0	1	100	0	0	0	0	0	0
	8d	FT	39 [38,40]	2	100	0	0	0	0	0	0	0	0	0	0	2	100	0	0	0	0	2	100	0	0	0	0	0	0	1	50	1	50	0	0
	Other	PT	30 [30]	1	100	0	0	0	0	0	0	0	0	0	0	0	0	1	100	0	0	1	100	0	0	0	0	0	0	1	100	0	0	0	0

Table 5
Job/Role 1 working in a non-NHS setting (n = 108).

		Contracted hours a week	On average, how many additional PAID hours do you work per week over and above your contracted hours?								On average, how many additional UNPAID hours do you work per week, over and above your contracted hours?								Do you work from home?						How many hours did you spend commuting to and from work in the last working week?									
			0		Up to 5		6 to 10		11 or more		0		Up to 5		6 to 10		11 or more		Yes		No		Hybrid (both home and on-site workplace/ study place)		Less than 1		1 to 5		6 to 10		11 to 15		More than 15	
		Median [IQR]	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Private Practice Owner (n = 29)	FT	34 [24,37]	14	93.3	1	6.7	0	0	0	0	8	53.3	1	6.7	4	26.7	2	13.3	3	20	8	53.3	4	26.7	4	33.3	2	16.7	2	16.7	1	8.3	3	25
	PT	17.5 [15,30]	11	78.6	3	21.4	0	0	0	0	8	57.1	4	28.6	1	7.1	1	7.1	2	14.3	8	57.1	4	28.6	4	33.3	5	41.7	1	8.3	1	8.3	1	8.3
Other (n = 23)	FT	37 [36,40]	7	87.5	1	12.5	0	0	0	0	4	50	4	50	0	0	0	0	1	12.5	2	25	5	62.5	1	14.3	3	42.9	1	14.3	1	14.3	1	14.3
	PT	20 [16,23]	10	66.7	4	26.7	0	0	1	6.7	4	26.7	8	53.3	3	20	0	0	1	6.7	10	66.7	4	26.7	6	42.9	7	50	1	7.1	0	0	0	0
Independent Health Care Sector (n = 21)	FT	38 [37,38]	3	60	2	40	0	0	0	0	3	60	1	20	1	20	0	0	0	0	4	80	1	20	0	0	3	60	2	40	0	0	0	0
	PT	22 [18,22]	13	81.3	3	18.8	0	0	0	0	8	50	7	43.8	1	6.3	0	0	0	0	10	62.5	6	37.5	1	6.3	11	68.8	4	25	0	0	0	0
HEI/ University (n = 18)	FT	36.5 [35,37]	11	91.7	1	8.3	0	0	0	0	2	16.7	3	25	2	16.7	5	41.7	1	8.3	0	0	11	91.7	1	9.1	7	63.6	2	18.2	0	0	1	9.1
	PT	23 [21,28]	6	100	0	0	0	0	0	0	0	0	1	16.7	5	83.3	0	0	0	0	0	0	6	100	0	0	3	50	3	50	0	0	0	0
Private Practice employee (n = 17)	FT	38 [30,40]	4	57.1	1	14.3	1	14.3	1	14.3	4	57.1	2	28.6	1	14.3	0	0	0	0	5	71.4	2	28.6	0	0	3	42.9	4	57.1	0	0	0	0
	PT	15 [13,18]	10	100	0	0	0	0	0	0	1	10	9	90	0	0	0	0	0	0	7	70	3	30	3	30	6	60	0	0	1	10	0	0

Work-life balance

Many respondents 335(44.3%) reported their work-life balance over the previous 2 weeks as unbalanced/very unbalanced.

WHO 5 well-being scores

(n = 764) had median of 45 (IQR: 30 to 60) (zero indicates worst imaginable well-being, 100 best imaginable well-being). Scores are presented in Table 3.

Working patterns

630 respondents reported their main physiotherapy job/role was within the NHS (Table 4) and 108 in non-NHS settings (Table 5). Paid and unpaid hours are reported (Tables 4 and 5). Due to the complexity and wide variety of physiotherapy and non physiotherapy roles, settings, hours and number of jobs it was not considered meaningful to provide an overall figure which oversimplifies the data. Hybrid working (a mix of on-site and home working) was reported by 207 NHS workers and by 46 non-NHS workers. Commuting times were less than 10 hours per week for 620 NHS workers and 90 non-NHS workers; commute times were 10 hours or more per week for 44 NHS and 10 non-NHS workers. NHS bandings, settings and commute times (main roles) are presented in Tables 4 and 5. 50 respondents reported a second NHS job/role and 108 a secondary non-NHS setting role; 27 reported details for their third job/role, 4 for their fourth and 11 reported additional non-physiotherapy jobs/roles (additional data to provide an overall picture of roles is presented in Supplementary File 3).

Discussion

This research identifies clear concerns regarding WRWB in the physiotherapy workforce. Following discussion around the four objectives, possible strategies to improve WRWB are presented.

Work related well-being

SPFI Findings indicated that two thirds (68.7%) of respondents working within physiotherapy experienced work exhaustion. Concerningly, nearly half (48.8%) were classified with burnout with a third (33.2%) experiencing high levels of interpersonal disengagement. Yet approximately a fifth (21.8%) scored high levels of professional fulfilment. In contrast, a systematic review exploring prevalence of burnout among physiotherapists (32 articles, 5984 physiotherapists, 17 countries) reported an overall pooled burnout prevalence rate of 8% (95% CI 4 to 15) with a range of 0% to 43% and with substantial heterogeneity (I^2 = 94%, t^2 = 1.9277, $p < 0.01$) [19]. However, studies dated from 1984 to 2021 and burnout rates may have increased over time. The majority used the Maslach Burnout Inventory dimensions (MBI). High variability was reported for the three components of the MBI, with prevalence ranging from 6% to 62% for emotional exhaustion, from 4% to 93% or depersonalisation and from 4 % to 93% for low personal accomplishment. Furthermore, differences in the definition of burnout and differences in health care systems, organisations, cultural and socio-economic factors might also explain the variety [19]. Our results are higher than those reported in this systematic review, we used a different outcome measure, the SPFI, and collected data after the COVID-19 pandemic. To place this into a wider context, a review of burnout in trainee and practicing physicians reports epidemic levels of approximately 50%, similar to our e-survey rates, and indicates burnout is not a new issue [20]. A 2021 survey of American healthcare administrative leaders suggested that healthcare leaders had lower burnout scores than clinicians, with a third of healthcare leaders with burnout scores that fell in the high range [21]. More than half of leaders had high professional fulfilment scores. The authors hypothesized that autonomy, respect, prestige, and compensation may account for some of the differences between health care leaders and clinicians [21].

A small study (106 participants) in Poland during COVID-19 suggested that burnout rates amongst physiotherapists may have significantly increased during the pandemic with high burnout rates in all three MBI domains [22]. A systematic review of burnout among healthcare workers during COVID-19 (30 studies) reported an overall burnout rate of 52% (95% CI 40% to 63%), rising to 66% (95% CI 51% to 81%) for doctors and nurses [23]. It is not clear how many physiotherapists were included in the mixed healthcare workers studies but our findings are similarly high and were collected at a later date: this supports Ghahramani *et al.*'s identified need for follow-up studies to observe rates over a longer timeframe post-COVID [23].

Nearly 90% of respondents reported feeling stressed (over last month) due to their work; concerningly the majority 430/576 (57%) reported feeling stressed 'often/very often' and approximately half reported this was 'worse/very much worse than pre-COVID'. These high levels are worrying since there can be a cumulative effect of stress leading to burnout in physiotherapists [24]. In education, higher anxiety scores adversely impact upon academic placement scores for physiotherapy students on placements [25]. It is also troubling that stress levels were worse than pre-COVID; this may be due to factors such as increasingly complex caseloads and the NHS elective waiting lists in England pre-pandemic, which grew rapidly during the pandemic and remain significant [26]. It is also concerning that CSP workforce data reveals that 20% of recent graduates are not working as physiotherapists 15 months post qualification physiotherapy [27].

General well-being

The WHO 5 well-being scores median = 45 (IQR: 30 to 60) indicated that a significant number of respondents reported low well-being and many respondents 340/764 (45%) reported

their work-life balance over the previous 2 weeks as unbalanced/very unbalanced which impacts adversely upon work, family, and health [28]. The majority, 430/576 (57%) reported feeling stressed in the last month due to their work life, over a fifth feeling stressed 'often/very often' and 'worse/very much worse' than pre-COVID. Again this is concerning since incompatibility of health professionals' work and private life has been significantly associated with health professionals stress reactions, job satisfaction, intention to leave, and health-related outcomes [29].

Working patterns

Many respondents reported having more than one role/job. Understanding of multiple job holding is limited, an integrated systematic review identified three main motivations to work several jobs: financial (pertinent due to the current UK cost of living crisis), career development, and psychological fulfilment [30]. This review highlights that depletion and enrichment are both possible/likely outcomes of multiple job holding: depletion due to role conflict and overload may yield poor performance at work and problems at home, enrichment due to being energized, with enhanced well-being, and experiencing meaning/gratification from multiple roles. However, many studies report aggregate data from samples of physiotherapists employed in different clinical settings making it hard to explore the variability amongst work environments and specialities [19]. With regard to commuting, whilst the effects of commuting on mental health and the correlations between different dimensions of mental health and well-being are unclear, objective commute characteristics such as duration and mode, affect experiential aspects of well-being [31]. This research captures early data regarding varying commute times and supports the need for future research to capture additional data regarding the impact of hybrid working and commuting to work, for example the mode of travel, attitude to travel and others to obtain a clearer picture [31].

Representative data

Table 2 indicates a wide range of respondents from across the UK, from many different backgrounds and settings however, see limitations section below.

Strategies to improve WRWB

A systematic review of interventions to prevent and reduce physician burnout (including 15 randomised trials with 716 physicians and 37 cohort studies with 2914 physicians) indicated that both individual-focused and structural or organisational strategies can result in clinically meaningful reductions in burnout among physicians [32]. A systematic review of risk factors associated with physical therapist burnout identified fifty-three risk factors, of which most (49) were avoidable/modifiable suggesting that positive actions can be made to lessen/prevent burnout and improve WRWB [9]. Avoidable risk factors were categorized as either i) structural/organizational (32%) factors such as workload and career progression, ii) psychological/emotional (19%) factors such as lack of support and stress, iii) environmental (19%) factors such as resources and working environment, or iii) socio-demographic (13%) factors such as education and poor health. Health care organisations need to act upon the 'crescendo' of burnout since evidence demonstrates links between burnout with quality of care and patient outcomes, and health care professionals with burnout are more likely to work part-time, change employers, or leave the profession [33]. Drivers to motivate health care leaders to build well-being programs include the moral-ethical case (caring for their people), the business case (cost of turnover, lower quality), the tragic case (suicide/harm), and the regulatory case requirements for accreditation [33]. Although broad interdisciplinary initiatives may have great political appeal, their execution often becomes diffuse and ineffectual [33]. Strategy/ies to promote health care professional well-being is/are most effective when designed to meet the unique challenges, opportunities, and goals of each organization [34]. A blueprint for organizational strategies to promote the well-being of health care professionals [34] proposes four components:

- Foundational programmes which encompass effective, evidence-based interventions for which best practices exist to facilitate well-being. Including regular assessment of well-being.
- Cultural transformation with deliberate approaches to assess and strengthen key aspects of organizational culture regarding well-being, including catalysing change and building a coalition to advance well-being.
- Rapid iterative experimentation when a driver dimension that contributes to burnout or professional fulfilment) is identified but for which effective tactics to improve that driver are not yet established.
- Sustainability with respect to personnel, time, authority, influence, and financial resources and determining how to optimally deploy these with an operational infrastructure for people management, budget oversight, event planning, project management, communications, scheduling, and administrative support.

Organisations employing members of the physiotherapy workforce, higher education institutions and the CSP need to consider their strategy/ies to improve work related well-being, including regular assessment and action. The challenges with regard to economic pressures, staffing pressures, retention of staff are not underestimated but approaches for improvement have been developed for implementation.

Strengths and limitations

Conducting a gold standard survey with a well-developed sampling frame and sampling plan, a close to 100% response rate with nearly zero attrition and no missing data

has been called 'a worthy, but unattainable, goal' [35]. This e-survey was a cross-sectional snapshot of views from self-selecting respondents therefore the true generalisability of findings are unknown, the views of those deciding not to participate cannot be assumed to be similar to respondents. However, the diversity of the demographic data (Table 2) is encouraging in this regard.

The 'sometimes' option in the WHO-5 outcome was omitted from the e-survey. Statistical analyses were undertaken (reliability, exploratory factor analyses, confirmatory factor analyses in Supplementary File 5) for the re-score which provide assurance that the re-score can be used. Whilst analyses indicate the altered scoring is suitable for accurate assessments of well-being, and facilitates comparability with the standard WHO-5, this transformation might introduce subtle differences in measurement properties that warrant further investigation in other populations.

The majority of physiotherapy burnout previous studies have used the MBI. This limits comparison of our findings, although it has been indicated that similar rates of burnout are found amongst the full MBI and other burnout tools [23]. The SPFI was developed because previous measures exclusively focussed upon burnout; more recent research has supplemented burnout with professional satisfaction, engagement, meaningfulness, feeling worthwhile, professional self-efficacy thus a measure which also captured these intrinsic components of professional fulfilment was required [16]. We carried out a confirmatory factor analysis which supports the use of the SPFI as valid, reliable and appropriate for use in physiotherapy. The SPFI has no licensing costs, unlike the MBI, and, as more regular measuring of WRWB is needed, cost will not be a barrier to its use.

Conclusions

Action is needed to improve these concerning findings regarding WRWB within the UK physiotherapy workforce. The positive workforce developments being experienced within the physiotherapy profession are threatened by poor work-related well-being, including burnout and stress. Profession specific strategies to measure and improve WRWB in the physiotherapy workforce are needed at national, local and departmental level and these strategies need to be developed, implemented and assessed on an ongoing basis. Future research designed to explore associations between factors such as specific workplace settings, physiotherapy role, number of jobs, years worked and burnout would further inform the picture of burnout in the UK physiotherapy workforce.

Ethical approval

Ethics approval was provided by XXXXXXXXXXXX-XXXX ref: XXX/SF/XX/05244.

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Conflict of Interest

Declared on anonymised title page.

Declaration of Interest

Meredith Newman and Natasha Owusu are staff members of the Chartered Society of Physiotherapy.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.physio.2025.101806.

References

[1] Health and Safety Executive. Working days lost in Great Britain. ⟨https://www.hse.gov.uk/statistics/dayslost.htm⟩ [Last accessed 10 February 2025].
[2] NHS Survey Co-ordination Center. NHS staff survey 2022 national results briefing. ⟨https://www.nhsstaffsurveys.com/static/8fce170a75e46bc5b531253d2966c04b/National-Results-Briefing-2023-V3.pdf⟩; [Last accessed 13 February 2025].
[3] Care Quality Commission. Access to care; 2023. ⟨https://www.cqc.org.uk/publications/major-report/state-care/2022-2023/access-to-care⟩; [Last accessed 29 July 2024].
[4] Wall TD, Bolden RI, Borrill CS, *et al.* Minor psychiatric disorder in NHS trust staff: occupational and gender differences. Br J Psychiatry 1997;171(6):519–23.
[5] The King's Fund. What does the 2019 NHS Staff Survey truly tell us about how staff needs are being met?; 2020. ⟨https://www.kingsfund.org.uk/insight-and-analysis/blogs/2019-nhs-staff-survey-staff-needs-being-met⟩; [Last accessed 29 July 2024].
[6] Minns Lowe C, Heneghan N, Herbland A, Atkinson K, Beeton K. KNOWBEST: the KNOWledge, BEhaviours and Skills required of the modern physioTherapy graduate including the future role of practice based learning. Project Report for the Chartered Society of Physiotherapy; 2022. ⟨https://www.csp.org.uk/system/files/documents/2022–06/FINAL%20KNOWBEST%20Project%20Summary%20and%20Report%20June%202022%20%281%29.pdf⟩ [Last accessed 29 July 2024].
[7] World Health Organisation. Burn-out an "occupational phenomenon": international classification of diseases; 2019. ⟨https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases⟩; [Last accessed 29 July 2024].

[8] Maslach C, Leiter MP. Understanding the burnout experience: recent research and its implications for psychiatry. World Psychiatry 2016;15:103–11.
[9] Burri SD, Smyrk KM, Melegy MS, Kessler MM, Hussein NI, Tuttle BD, *et al.* Risk factors associated with physical therapist burnout: a systematic review. Physiotherapy 2022;116:9–24.
[10] Eysenbach G. Improving the quality of web surveys: the checklist for reporting results of internet E-surveys (CHERRIES). J Med Internet Res 2004;6:e34.
[11] CSP physiotherapy workforce data; 2024 ⟨https://app.powerbi.com/view?r=eyJrIjoiMWM1NjZhYWItM2JhZi00ZDlhLWE2YTUtYWUxZTZkMzc3Y2M3IiwidCI6IjZhNjg2ODA0LTMyM2ItNDA5Zi05ODEyLThjYzYxYzU1Zjg5ZSIsImMiOjh9⟩ [Last accessed 13 February 2025].
[12] CSP physiotherapy workforce data; 2024. ⟨https://app.powerbi.com/view?r=eyJrIjoiMWM1NjZhYWItM2JhZi00ZDlhLWE2YTUtYWUxZTZkMzc3Y2M3IiwidCI6IjZhNjg2ODA0LTMyM2ItNDA5Zi05ODEyLThjYzYxYzU1Zjg5ZSIsImMiOjh9⟩ [Last accessed 13 February 2025].
[13] Topp CW, Østergaard SD, Søndergaard S, Bech P. WHO-5 well-being index: a systematic review of the literature. Psychother Psychosom 2015;84:167–76.
[14] Linton M-J, Dieppe P, Medina Lara A. Review of 99 self-report measures for assessing well-being in adults: exploring dimensions of well-being and developments over time. BMJ Open 2016;6(7):e010641.
[15] Sischka PE, Costa AP, Steffgen G, Schmidt AF. The WHO-5 well-being index – validation based on item response theory and the analysis of measurement invariance across 35 countries. J Affect Disord Rep 2020;1:100020.
[16] Trockel M, Bohman B, Lesure E, Hamidi MS, Welle D, Roberts L, *et al.* A brief instrument to assess both burnout and professional fulfillment in physicians: reliability and validity, including correlation with self-reported medical errors, in a sample of resident and practicing physicians. Acad Psychiatry 2018;42:11–24.
[17] Vinstrup J, Jay K, Jakobsen MD, Andersen LL. Single-item measures of stress during work- and private time in healthcare workers. Work 2021;70(2):583–9.
[18] NHS. National NHS StaffSurvey 2022; 2022. ⟨https://www.nhsstaffsurveys.com/static/16b3c5040ef100531faf4350071257d9/NSS22-Core-Questionnaire-FINAL.pdf⟩; [Last accessed 29 July 2024].
[19] Venturini E, Ugolini A, Lapo B, Di Bari M, Paci M. Prevalence of burnout among physiotherapists: a systematic review and meta-analysis. Physiotherapy 2024;124:164–79.
[20] West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. J Intern Med 2018;283:516–29.
[21] Shanafelt T, Trockel M, Wang H, Mayer T, Athey L, *et al.* Assessing professional fulfillment and burnout among CEOs and other healthcare administrative Leaders in the United States. J Healthc Manag 2022:317–38.
[22] Pniak B, Leszczak J, Adamczyk M, Rusek W, Matłosz P, Guzik A. Occupational burnout among active physiotherapists working in clinical hospitals during the COVID-19 pandemic in South-eastern Poland. Work 2021;68:285–95.
[23] Ghahramani S, Lankarani KB, Yousefi M, Heydari K, Shahabi S, Azmand S. A systematic review and meta-analysis of burnout among healthcare workers during COVID-19. Front Psychiatry 2021;12:758849.
[24] Carmona-Barrientos I, Gala-León FJ, Lupiani-Giménez M, Cruz-Barrientos A, Lucena-Anton D, Moral-Munoz JA. Occupational stress and burnout among physiotherapists: a cross-sectional survey in Cadiz (Spain). Hum Resour Health 2020;18:91.
[25] Gallascha D, Conlon-Leard A, Hardy M, Phillips A, Gisela Van Kessel G, Stiller K. Physiotherapy variable levels of stress and anxiety reported by physiotherapystudents during clinical placements: a cohort study. Physiotherapy 2022;114:38–45.
[26] Warner M, Zaranko B . The past and future of NHS waiting lists in England; 2024. ⟨https://ifs.org.uk/publications/past-and-future-nhs-waiting-lists-england⟩; [Last accessed 29 July 2024].
[27] CSP physiotherapy workforce data portal; 2024. ⟨https://app.powerbi.com/view?r=eyJrIjoiMWM1NjZhYWItM2JhZi00ZDlhLWE2YTUtYWUxZTZkMzc3Y2M3IiwidCI6IjZhNjg2ODA0LTMyM2ItNDA5Zi05ODEyLThjYzYxYzU1Zjg5ZSIsImMiOjh9⟩ [Last accessed 13 February 2025].
[28] Gragnano A, Simbula S, Miglioretti M. Work–life balance: weighing the importance of work–family andwork–health balance. Int J Environ Res Public Health 2020;17:907.
[29] Peter KA, Voirol C, Kunz S, Gurtner A, Renggli F, Juvet T, *et al.* Factors associated with health professionals' stress reactions, job satisfaction, intention to leave and health-related outcomes in acute care, rehabilitation and psychiatric hospitals, nursing homes and home care organisations. BMC Health Serv Res 2024;24:269.
[30] Campion ED, Caza BB, Moss SE. Multiple jobholding: an integrative systematic review and future research agenda. J Manag 2020;46:165–91.
[31] Liu J, Ettema D, Helbich M. Systematic review of the association between commuting, subjective wellbeing and mental health. Travel Behav Soc 2022;28:59–74.
[32] West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. Lancet 2016;388:2272–81.
[33] Shanafelt T, Trockel M, Ripp J, Murphy ML, Sandborg C, Bohman B, *et al.* Building a program on well-being: key design considerations to meet the unique needs of each organization. Acad Med 2019;94:156–61.
[34] Shanafelt T, Stolz S, Springer J, Murphy D, Bohman B, Trockel M. M. A blueprint for organizational strategies to promote the well-being of health care professionals; 2020. ⟨https://primarycareipa.org/a-blueprint-for-organizational-strategies-to-promote-the-well-being-of-health-care-professionals/⟩; [Last accessed 29 July 2024].
[35] Keiding N, Louis TA. Perils and potentials of self-selected entry to epidemiological studies and surveys. J R Stat Soc A 2016;179(Part 2):319–76.