What is the prevalence of burnout amongst first contact physiotherapists working within primary care?

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RESEARCH ARTICLE

WILEY

What is the prevalence of burnout amongst first contact physiotherapists working within primary care?

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Abstract

Background: It has long been known general practitioners suffer with burnout. First contact physiotherapists (FCP's) are a new role to primary care. However, concerns have been raised around the longevity and sustainability of the role and the risk of clinician burnout.

Aims: To assess the prevalence of burnout amongst the FCP workforce.

Method: A self-reporting online questionnaire was developed and captured key demographical data and burnout scores amongst FCP's between February 2022 and March 2022. The burnout assessment tool (BAT12) was used to assess clinician burnout.

Results: A total of 332 responses were collected. Overall, 13% of clinicians were burnt out, and 16% at risk. The BAT12 also found 43% of the clinicians are exhausted and a further 35% are at risk of exhaustion. Non-clinical hours were significantly associated with burnout score. Clinicians who had more non-clinical time per month were the least burnt out. Increased non-clinical hours was significant in reducing burnout score.

Conclusions: This study found 13% of clinicians are suffering from burnout with a further 16% at risk. Worryingly 78% of clinicians are either exhausted or at risk of exhaustion. Non-clinical hours have a direct impact on burnout and every effort is needed by employers to increase non-clinical time. This study supports the release by the Chartered Society of Physiotherapy whereby they recommend sufficient time be allocated within job plans for appropriate supervision, training and continued professional development. Further research is needed to explore the association of non-clinical time and clinician burnout.

KEYWORDS
burnout, non clinical time, physiotherapist, risk factors

1 | INTRODUCTION

Burnout is a metaphor used to describe physical and mental exhaustion from work related activity and was first used in the 1970's (Schaufeli et al., 2020).

Burnout represents a major public health concern (Shi et al., 2019), has recently been added to the international classification of diseases (ICD-11) by the World Health Organisation (WHO) (2019) and is recognised in some European countries as a work-related disorder and occupation disease (Koutsimani & Montgomery, 2021). Symptoms of burnout can include withdrawal, fatigue, low work morale, decreased job satisfaction (Shi et al., 2019) and has been shown to predict psychological and physical consequences, including type 2 diabetes, musculoskeletal disorder (Armon et al., 2010), cardiovascular disease (Toker et al., 2012), insomnia and depressive symptoms (Armon et al., 2008).

It has long been known that general practitioners (GP) suffer with burnout (Linzer et al., 2009). In a recent BMA survey over 51% of GP's reported they are burnt-out (BMA, 2022), this is in complete contrast to previous literature quoting just 25% sum 12 years ago where 30% additionally intended to leave in less than 2 years (Linzer et al., 2009).

Low back and neck pain are the leading cause of morbidity within the UK (Public Health England, 2020) and account for £4.76 billion of NHS spending each year (NHS England, 2022). These musculoskeletal disorders account for 30% of GP consultations in England (NHS England, 2022). To combat this pressure, first contact physiotherapists (FCP) were introduced into primary care following successful pilot schemes to help increase capacity within primary care, improve signposting, and reduce the number of referrals and investigations to secondary care (Mercer & Hensman-Crook, 2022). These FCP pilot schemes and local audits have shown GP appointments become more readily available, referrals to secondary care and imaging requests are reduced, patient satisfaction improves, and money is saved for the health system (CSP, 2020b; CSP, 2020a). However, there is an awareness that FCP services within England are more akin to GP workloads as opposed to traditional physiotherapy clinics and their long-term and systems impact is unknown (Halls et al., 2020).

Despite their recent integration evidence already suggests signs of burnout amongst these clinicians (Greenhalgh et al., 2020). Further research is needed however to explore the prevalence of burnout amongst FCP's working within primary care as the Greeenhalgh et al. (2020) study did not quantify the number of clinicians suffering from burnout and did not use a validated burnout tool. The study also failed to link the themes discussed as a contributor of burnout.

Previous rates of burnout amongst physiotherapists have been quoted in the region of 13% (Anderson, 2014). This is comparable with burnout rates seen in surgeons (Balch et al., 2011; Shanafelt et al., 2017). This is worrying as burnout has been seen to predict occupational consequences such as sickness related absences (Shaufeli et al., 2009) and turnover intention (Lin et al., 2013) leading to ever-growing financial impacts on organisations (Shanafelt et al., 2017). This casts doubt over the long-term feasibility of FCP roles within primary care.

Given the prevalence of burnout amongst GP's (BMA, 2022), intent to leave (Linzer et al., 2009), the ever-growing demand seen within primary care (BMA, 2021) and the need for long term sustainability of the FCP role in line with the NHS long term plan (NHS, 2019) and GP contract (BMA, 2019), this study aims to be the first study of its kind to assess the prevalence of burnout amongst the current UK FCP workforce. Previous evidence has shown a large variance of burnout amongst physiotherapists internationally (Anderson, 2014; Rodriquez-Noguerira et al., 2021) but no study to this date has explored the current rate of burnout amongst FCP's within the UK.

2 | METHODOLOGY

2.1 | Participants and procedures

The study design is an online survey and ethical approval was obtained from the Ethics Committee at Sheffield Hallam University in January 2022. A reflective statement was submitted for ethical approval and questions where piloted with clinicians not wedded to the study in an aim to reduce bias. Inclusion criteria included anyone who is currently working as a FCP within the United Kingdom. As this is such a recent role, there was no attempt to recruit people who had previously worked in this role but may need to be considered in any future studies into this population. A summary of participant demographics can be found in Table 1. A pragmatic recruitment strategy was used, including a varied non-probability sample of email invitations that were sent to professional contacts and the FCP CSP peer network directory from within the United Kingdom. Individuals assisted with snowball recruitment. FCP employers were also asked to participate nationally. The survey was also advertised via social media on Twitter. The current FCP workforce is suggested to have around 800 FTE FCP staff in a recent CSP publication (CSP, 2022b). Using data and setting CI at 95% and $p < 0.05$ gave a target sample size of 260 responses.

2.2 | Data collection and measures

Data was collected over a 6-week period from (09 February 2022–24 March 2022). A 21-item questionnaire was developed for the purpose of this study. An initial 9-item questionnaire captured basic demographical data, including gender, ethnicity, age, hours of FCP per week, years post qualified, number of FCP clinics covered, amount of non-clinical hours per month, pay scale and appointment time allocation. This was then followed by completion of BAT-12 questions (Schaufeli et al., 2020). The BAT-12 is broken down into four categories: Exhaustion, mental distance, emotional impairment, and cognitive impairment. It is validated across all genders and age groups (Hadzibajramovic et al., 2020), internationally for different populations (Beer et al., 2020) and has been shown to have positive relationships with job demands and turnover intention (Sakakibara et al., 2020). It has been validated and can be used as a unidimensional measurement to assess,

TABLE 1 Demographical data.

		Number
Gender	Male	132
	Female	200
Ethnicity	White	285
	Mixed or multiple ethnic groups	3
	Asian or Asian British	37
	Black, African, Caribbean or Black British	3
	Prefer not to say	2
	Other	2
Age	25–34	93
	35–44	143
	45–54	73
	55+	23
Hours per week	0–10	44
	11–20	72
	21–30	72
	31–40	130
	41+	14
Years qualified	0–2	3
	3–5	24
	6–10	59
	11–15	88
	16–20	71
	21+	87
Clinics covered	1	74
	2	89
	3	83
	4	41
	5 or more	45
Non-clinical hours per month	0–2	104
	2–5	88
	6–9	43
	10+	97
Pay	Less than £29,999	6
	£30,000–£36,000	17
	£36,001–£40,000	51
	£40,001–£45,000	112
	£45,001–£50,000	88
	£50,001–£55,000	49
	£55,001 or above	9
Appointment time	10 min	1
	15 min	28
	20 min	214
	30 min	82
	40 min	3
	Other	4

diagnose, and monitor burnout in individuals (Sakakibara et al., 2020). Overall scores are then divided by 12 to give an average score. <2.58 signifies no burnout, 2.59–3.02 signifies risk of burnout and >3.02 signifies burnout is likely (Schaufeli et al., 2020).

2.3 | Data analysis

Data collected was initially analysed using descriptive statistics. The averages and variability of the data was discussed. The use of ANOVA focussed on the impact of predictors in BAT-12 scores. Further statistical analysis has then been conducted using MANOVA, multiple regression analysis and decision tree analysis looking for relationships between the categorical data and BAT-12 scores.

3 | RESULTS

A total of 332 participants completed the online survey (See Table 1). Figure 1 shows overall burnout scores and subcategories for clinicians. All information submitted via the online questionnaire link was used within the study, no data was discarded, and no data was lost, with the aim of minimising confirmation bias. 13% of clinicians scored higher than or equal to 3.02 on their BAT score signifying burnout. A further 16% were at risk and 71% of clinicians experienced no signs of burnout. For the exhaustion sub-score 43% of clinicians scored equal to or higher than 3.02 putting them in the burnout category for this subcategory. A further 35% are at risk and 22% showed no signs of burnout in this aspect. For mental distance 18% of clinicians were burnt out, 22% at risk and 60% showed no signs of burnout for this category. The lowest scoring category was emotional impairment were only 3% of clinicians scored for burnout, 9% were at risk and 89% had no burnout. For cognitive impairment 8% were classed as burnt out, 24% at risk and 67% no signs of burnout. The highest overall subcategory and risk factor for burnout was exhaustion however no statistically significant results were found when comparing exhaustion scores to demographical data captured.

3.1 | Non-clinical hours and BAT, exhaustion and mental distance scores

ANOVA testing revealed a significant interaction between amount of non-clinical hours and overall BAT score ($p = 0.004$), exhaustion

score (p = 0.024) and mental distance (p = 0.000) (Supplementary Table S1). Post-Hoc Tukey HSD testing revealed a significantly worse BAT score in clinicians who had 0–2 non-clinical hours per month compared to 10+ non-clinical hours per month (p = 0.011), and a increase in BAT score for clinicians who had between 2–5 non-clinical hours per month in comparison to 10+ non-clinical hours which is nearing significance (p = 0.08) (See Table 2).

A non-significant trend was seen for exhaustion scores amongst clinicians who had 0–2 non-clinical hours per month in comparison to 10+ non-clinical hours. Those clinicians with less non-clinical time scored worse for exhaustion in comparison to the 10+ group (p = 0.06). Mental distance was also significantly worse in those clinicians again with 0–2 non-clinical hours per month in comparison to the 10+ hours group (p = 0.000) and those with 2–5 h of non-clinical per month in comparison to 10+ plus (p = 0.013) (See Table 2). Overall, those clinicians who have more non-clinical hours per month appear to experience significantly less burnout than those who have little or no non-clinical time.

3.2 | Identifying impact of non-clinical time on burnout scores

Regression showed a significant interaction between the number of non-clinical hours increasing and a subsequent reduction in burnout score (p = 0.002) (See Table 3). Regression shows for every increase in non-clinical hours category, burnout score is reduced by 0.350.

Spearman's correlation (See Table 4) shows a weak negative trend for overall BAT scores, exhaustion score and mental distance score. This suggests as non-clinical hours are increased individual scores show a meaningful reduction of overall burnout (BAT p = 0.008, Exhaustion p = 0.011, Mental distance p = 0.000). Interestingly, as seen in Figure 1. Exhaustion scores remain the highest in

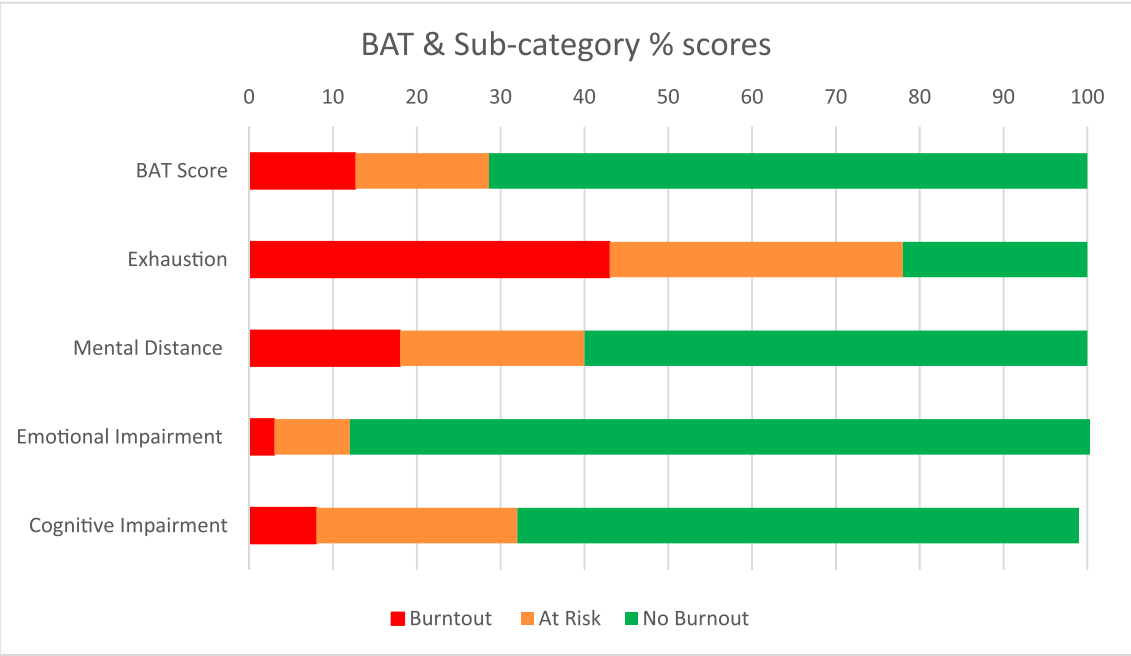

FIGURE 1 Overall burnout and sub-category percentage score.

TABLE 2 ANOVA comparing non-clinical hours to BAT, exhaustion and mental distance.

Dependent variable	(I) How many non-clinical hours do you get per month?	(J) How many non-clinical hours do you get per month?	Mean difference (I–J)	Std. error	Sig.	95% confidence interval	
						Lower bound	Upper bound
BAT score	0–2	10+	0.2559*	0.08223	0.011*	0.0435	0.4684
	2–5	10+	0.2055	0.08576	0.080	–0.0161	0.4271
Exhaustion score	0–2	10+	0.2663	0.10821	0.068	–0.0133	0.5459
Mental distance	0–2	10+	0.5031*	0.11865	0.000*	0.1966	0.8097
	2–5	10+	0.3773*	0.12375	0.013*	0.0575	0.6970

* Correlation is significant at the 0.05 level.

TABLE 3 Regression analysis.

Model		Unstandardised coefficients		Standardised coefficients			95.0% confidence interval for B	
		B	Std. error	Beta	t	Sig.	Lower bound	Upper bound
1	(Constant)	3.221	0.269		11.960	0.000*	2.691	3.751
	BAT score	−0.350	0.112	−0.170	−3.140	0.002*	−0.569	−0.131

* Correlation is significant at the 0.05 level.

TABLE 4 Spearman's correlation.

			How many non-clinical hours do you get per month?	BAT score	Exhaustion score	Mental distance	Emotional impairment	Cognitive impairment
Spearman's rho	How many non-clinical hours do you get per month?	Correlation coefficient	1.000	−0.145**	−0.139*	−0.204**	0.012	−0.101
		Sig. (2-tailed)		0.008	0.011	0.000	0.822	0.066
		N	332	332	332	332	332	332

** Correlation is significant at the 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed).

comparison to overall BAT score and sub scores, but no clear demographical data gives a reason for this. Non-clinical time appears to reduce all scorers except for emotional impairment.

3.3 | Identifying groups at largest risk of burnout

Regression tree analysis enabled further grouping to identify a wider combination of variables and their effect on burnout scores. Figure 2 shows BAT score combined with non-clinical hours groups. Those individuals who have 10+ hours of non-clinical time scored a mean average lower burnout score in comparison to those in other non-clinical hours groups 0–2, 2–5, and 6–9. Further regression tree analysis (Figure 3) looked at Mental distance sub-scores in comparison to amount of non-clinical hours and gender. The analysis showed those individuals who have between 0 and 9 non-clinical hours per month and are male were in the 'at risk' category of burnout as per the BAT scoring system. Those who were female scored a lower average and those again who had 10+ non-clinical hours per week scored even lower. Those clinicians aged 45 and over who complete between 31 and 40 h per week suffer the highest emotional impairment (See Figure 4) compared to those under the age of 44.

3.4 | Mental distance and gender

There was a significant interaction between male and females, and mental distance scores. Females scored significantly better than males for mental distance ($p = 0.002$) (See Table 2) but combined overall BAT scores for male and females was not significant on ANOVA testing ($p = 0.20$) (See Supplementary Table S1) (See Figure 5).

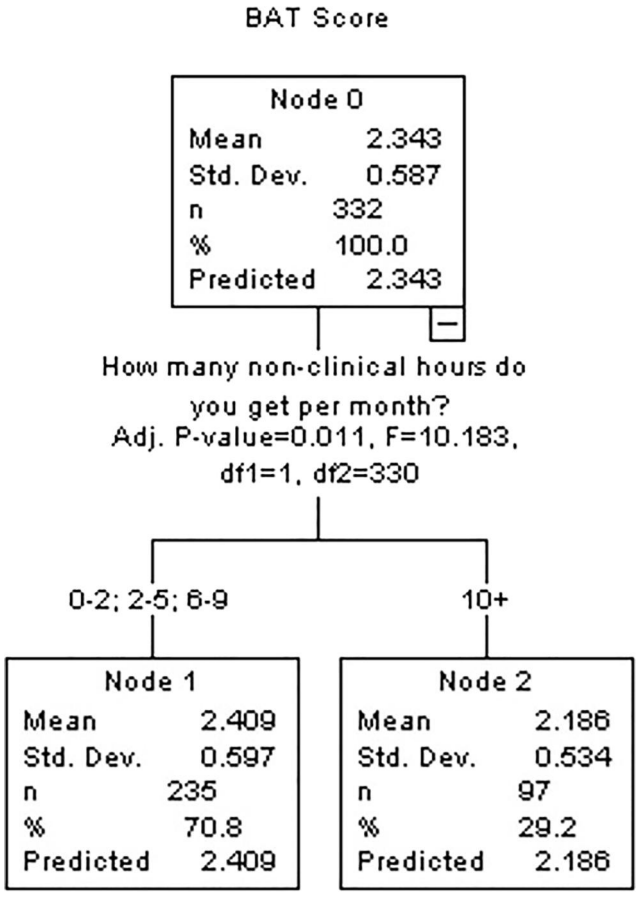

FIGURE 2 Burnout assessment tool score.

3.5 | Exhaustion and ethnicity

ANOVA testing revealed a significant interaction between exhaustion scores and ethnicity. Post Hoc Tukey test however, revealed a

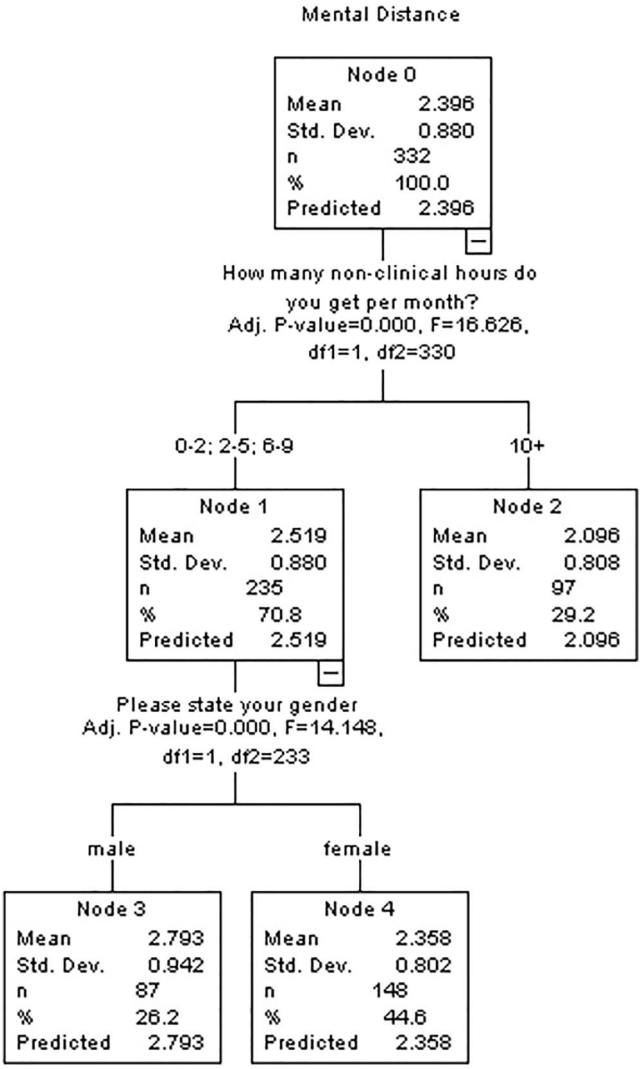

FIGURE 3 Mental distance.

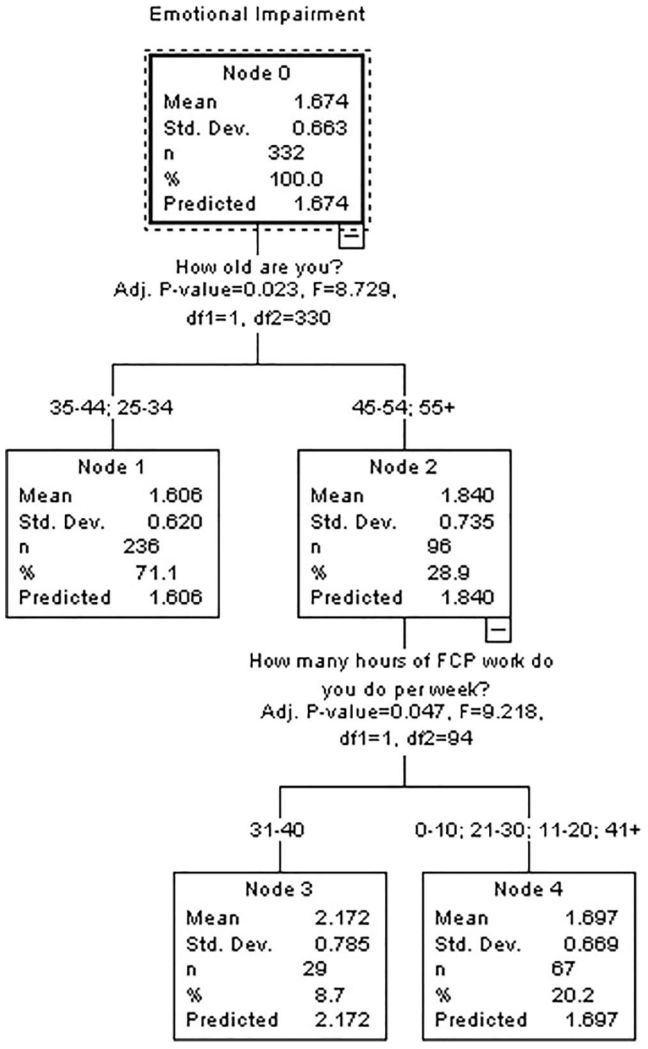

FIGURE 4 Emotional impairment.

non-significant interaction between the groups ($p = 0.06$). Additionally, only 1% of responses were in the 'other' category in comparison to 86% who were white. Although black, African, Caribbean, or black British are similar in terms of sample size to 'other' the overall group sizes are unequal and has a large variation within their mean difference and confidence intervals (MD −2.4444, CI 95% −4.4519, −0.4370).

3.6 | Age range, emotional impairment, and hour per week

ANOVA testing revealed a significant interaction between age range and emotional impairment scores ($p = 0.012$) (See Supplementary Table S1). Post Hoc Tukey HSD testing revealed a borderline significant increase in emotional impairment scores for both age range 55+ ($p = 0.05$) and 45–54 ($p = 0.05$) in comparison to age ranges 35–44. Lowest average scores were in the age category 35–44, followed by aged 25–34. Highest emotional impairment scores came from the 55+ age group (See Figure 6). Combined testing of age ranges and amount of FCP hours per week was non-significant ($p = 0.28$) however does highlight the increase in emotional impairment for those working full time in FCP and aged over 45 (See Figure 7).

3.7 | Non-significant findings

Gender, ethnicity, age, salary, years qualified, number of clinics covered, and appointment times all had no significant correlation with burnout scores in this study.

4 | DISCUSSION

This study set out to measure individual burnout scores and take key demographical data to try and establish contributors of burnout attached to the role.

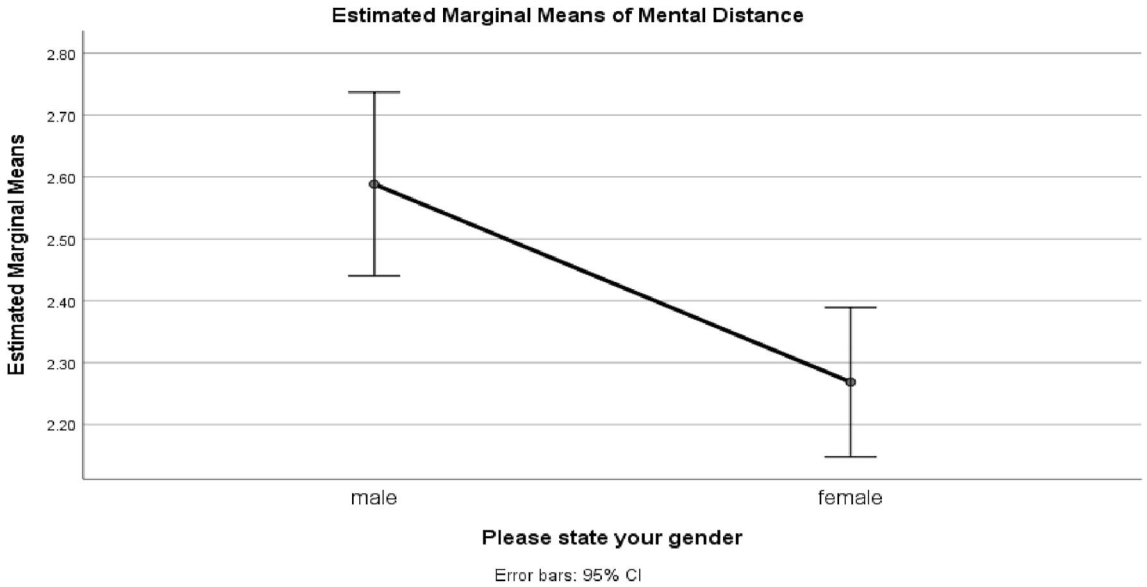

FIGURE 5 Mental distance comparison between male and females.

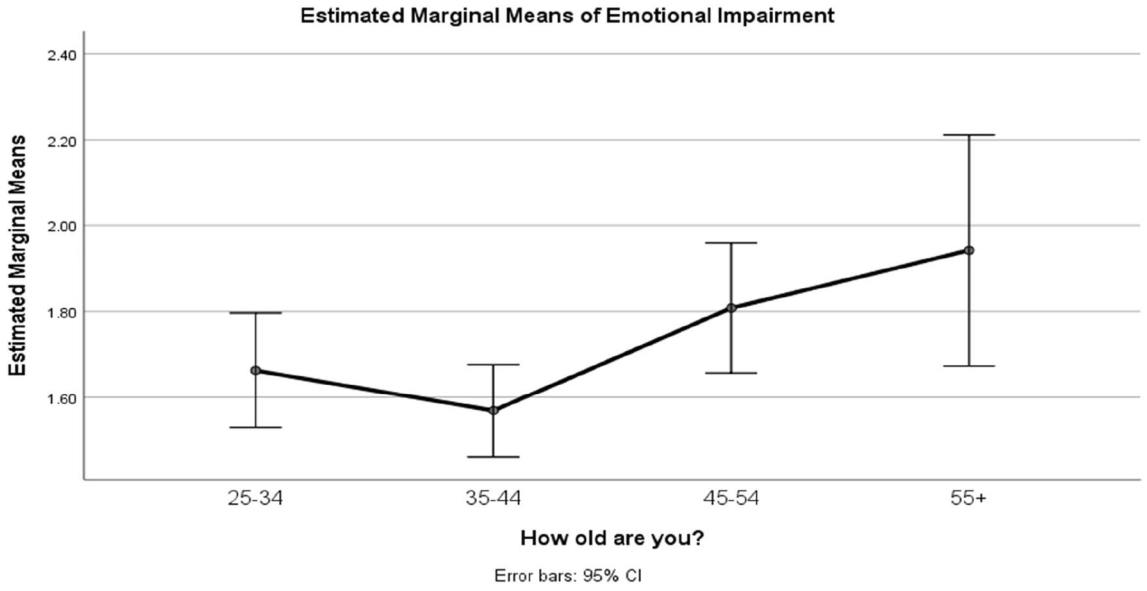

FIGURE 6 Emotional impairment between age groups.

The main finding of this study showed a significant correlation between those clinicians who had more non-clinical time in comparison to those with little non-clinical time. Clinicians who have more than 10+ hours per month of non-clinical time had significantly lower burnout scores than those clinicians who had just less than 2 h. There was also a significant result for BAT scores for clinicians who had between 2 and 5 h of non-clinical time in comparison to 10+ hours per month, and a nearing significance for exhaustion sub-score for clinicians who had 0–2 h per month again in comparison to 10+ hours per month. Mental distance sub-scores were also significantly reduced in those clinicians who had 10+ hours of non-clinical time per month in comparison to those clinicians who had just 0–2 and 2–5 h per month.

Jacome et al. (2021) evaluated the rates of burnout in 511 Portuguese physiotherapists during the COVID-19 pandemic. Their study showed that physiotherapists in direct patient facing roles, like that of the FCP's, were more burnt out than those with reduced patient facing roles and home working (non-clinical time). This fits with the results of this study as those with more non-clinical time had lower overall BAT scores than those with little to no non-clinical time although the type of clinics in the study where like that of an outpatient service, not FCP.

The results from this study show that 10+ hours of non-clinical time per month significantly reduces burnout when compared to 2 h or less per month and highlights a positive trend in that the more non-clinical time per month the lower the burnout score of that

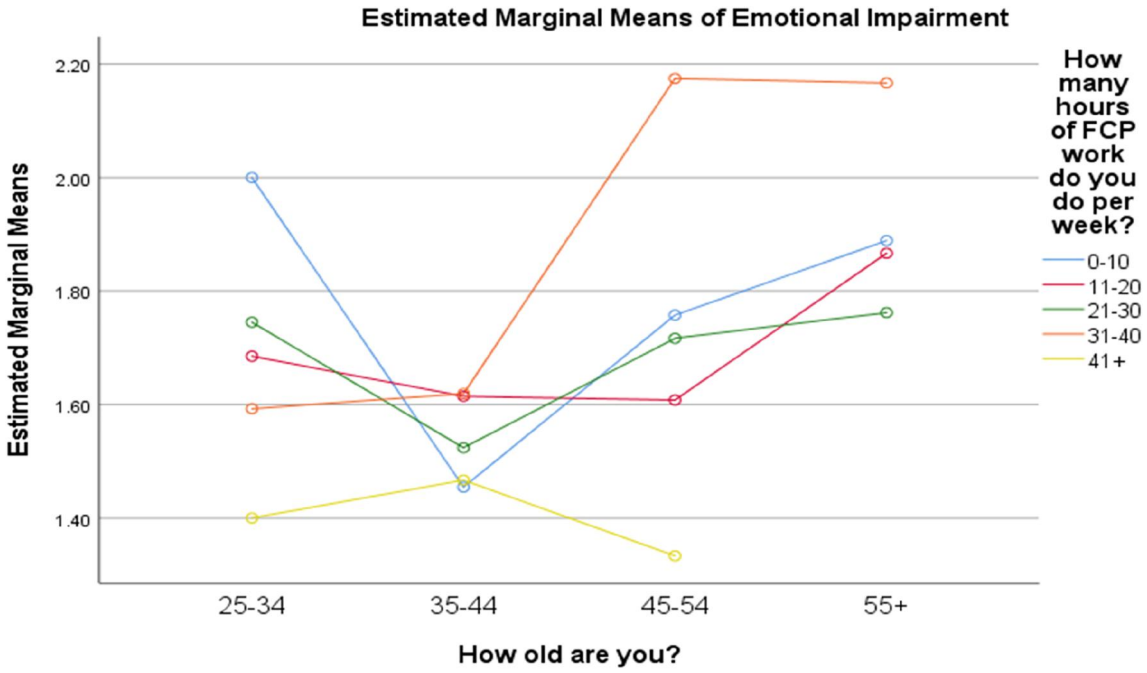

FIGURE 7 Emotional impairment interaction with age range and hours per week.

individual. A recent CSP publication (CSP, 2022a) suggests employers should adopt a 70:30 or 80:20 split between clinical/non clinical workloads, depending upon job role, to ensure sufficient time is allocated within job plans to allow for appropriate supervision, further training and continued professional development. The results from this study would support that case as non-clinical time is a clear indicator for burnout amongst FCP's.

Overall results of this study show that 13% of FCP's in the UK are burnt out and 16% are at risk. Worryingly 43% are burnt out on exhaustion subscales, and a further 35% are at risk. The main contributor to burnout found in this study is non-clinical time. The results of this study seem to echo pre-pandemic rates of burnout as previous literature suggests between 10% and 20% of physiotherapists suffer from burnout (Corrado et al., 2019; Pavlakis et al., 2010; Sliwinski et al., 2014). This is the first study of its kind to assess the rate of burnout amongst FCP's yet the results from this study appear to echo the current burnout rate across the workforce.

More research is needed however to understand the link between non-clinical hours and burnout scores. Although this study does not look at appreciation of individual employers it does highlight that non-clinical time is a cause for concern in the literature and in practice as non-clinical time is often used for continued professional development and forms part of the Health & Care Professions Council (HCPC) continued professional development standards who regulate physiotherapists as a profession within the UK. Similar results can be seen in a recent national evaluation of advanced clinical practitioner (ACP) roles across the UK. Fothergill et al. (2022) evaluated 4013 ACP responses from a variety of healthcare settings. Results showed that clinicians felt that they were not given enough time allocated within their job roles to allow them to work on the other pillars of advanced practice. Given that there is now the roadmap for FCP's and ACP's within MSK in primary care (Health Education England, 2021) greater focus and time may be needed to allow clinicians to work across these 4 pillars of advancing practice and avoid burnout.

Future research should focus on clinicians' opinions on how non-clinical time could be used to improve their workflow, and work-life balance, whilst working in line with the roadmap set out by Health Education England (2021). Allowing clinicians greater flexibility with their work appears to improve and lower burnout as suggested by Maglalang et al. (2021). This study suggests increasing clinicians non-clinical time to factor in organisational factors as previously discussed by Rehder et al. (2021) would lead to a better overall working environment for clinicians and lower rates of burnout. This study supports the recent CSP (2020a) document in which it states sufficient time should be allocated for CPD, training and supervision.

Limitations of this study include volunteer bias as some clinicians may not have had the time to complete the survey. Furthermore, more details of the content of the non-clinical time and roles would have been useful with a view of further qualitative study in the future.

5 | CONCLUSION

This is the first study within the UK to report on the prevalence of burnout amongst FCP's. This study has found that 13% of FCP's are burnt out in the UK and a further 16% are at risk of burnout. Worryingly 78% are either exhausted or at risk of exhaustion. The results from this study appear to echo previous levels of burnout rates within the literature of physiotherapists working within

different settings pre-pandemic. Given the ever-growing demand on primary care more work is needed to support clinicians in these ever-changing roles. Non-clinical time has a direct influence on reducing burn out in clinicians and more effort is needed by employers to increase or implement this into FCP roles to protect the longevity and sustainability of the role in primary care, and to also facilitate clinicians through the roadmap to practice set out by HEE. Further research is needed however to better understand the link between non-clinical time and burnout.

AUTHOR CONTRIBUTIONS

Lewis Nozedar: Study concept and design; data collection; data anlysis; manuscript consultation and writing. **Simon O'Shea:** Study concept and design; data collection; data anlysis; manuscript consultation and writing.

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CONFLICT OF INTEREST STATEMENT

There are no known conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that supports the findings of this study are available in the supplementary material of this article.

ETHICS STATEMENT

Ethical approval was granted from Sheffield Hallam University.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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