merits

MDPI

Article

Comparing Psychological Wellbeing and Work-Related Quality of Life between Professional Groups within Health and Social Care during the COVID-19 Pandemic in the UK

Ruth D. Neill [1,*], Patricia Gillen [2,3], John Moriarty [4], Jill Manthorpe [5], John Mallett [6], Heike Schroder [7], Denise Currie [7], Patricia Nicholl [4], Jermaine Ravalier [8], Susan McGrory [2] and Paula McFadden [1]

1 School of Applied Social Policy Sciences, Magee Campus, Ulster University, Londonderry BT48 7JL, UK
2 School of Nursing, Jordanstown Campus, Ulster University, Shore Road, Newtownabbey BT37 0QB, UK
3 Southern Health and Social Care Trust, 10 Moyallen Road, Gilford BT63 5QQ, UK
4 School of Social Sciences, Education and Social Work, Queen's University Belfast, 69–71 University Street, Belfast BT7 1HL, UK
5 NIHR Health and Social Care Workforce Research Unit, King's College London, 22 Kingsway, Holborn, London WC2B 6LE, UK
6 School of Psychology, Coleraine Campus, Ulster University, Cromore Road, Coleraine BT52 1SA, UK
7 Queen's Management School, Queen's University Belfast, Riddel Hall, 185 Stranmillis Road, Belfast BT9 5EE, UK
8 School of Science, Bath Spa University, Newton Park, Newton St Loe, Bath BA2 9BN, UK
* Correspondence: r.neill@ulster.ac.uk

Citation: Neill, R.D.; Gillen, P.; Moriarty, J.; Manthorpe, J.; Mallett, J.; Schroder, H.; Currie, D.; Nicholl, P.; Ravalier, J.; McGrory, S.; et al. Comparing Psychological Wellbeing and Work-Related Quality of Life between Professional Groups within Health and Social Care during the COVID-19 Pandemic in the UK. *Merits* **2022**, *2*, 374–386. https://doi.org/10.3390/merits2040026

Academic Editors: Gabriela Topa and Wendy M. Purcell

Received: 3 August 2022
Accepted: 25 October 2022
Published: 2 November 2022

Abstract: This paper shared the compared results on the psychological wellbeing and work-related quality of life amongst health and social care workers during the COVID-19 pandemic in the UK. Health and social care professionals within nursing, midwifery, allied health professions, social care and social work occupations working in the United Kingdom (UK) during the pandemic were recruited. Repeated cross-sectional online surveys were conducted during two time periods of the pandemic (May–July 2020 and May−July 2021). A total of 4803 respondents completed the survey. The findings revealed that over the pandemic, psychological wellbeing (SWEWBS measure) and work-related quality of life (WRQoL scale) scores significantly decreased in all five occupations ($p < 0.001$) with midwives having the lowest scores on both scales at all time points. Respondents were found to significantly ($p < 0.001$) use of negative coping strategies such as behavioural disengagement and substance usage. Analysis of variance revealed a statistical difference between occupations and wellbeing across 2020 and 2021, while work-related quality of life was only statistically significantly different in 2021. The findings revealed that due to this decrease, there is a distinct need for more support services and flexible working conditions within health and social care services, to improve wellbeing and work-related quality of life.

Keywords: healthcare workforce; social care workforce; United Kingdom; coping; wellbeing; quality of working life

1. Introduction

A global health threat, COVID-19 has impacted all aspects of society such as the economy, education, politics and health [1–3] and the daily personal and professional lives of many individuals. COVID-19 has challenged the way the workforce has operated over the course of the pandemic. Since March 2020, when the United Kingdom (UK) went into its first national lockdown, working conditions and relationships drastically changed for everyone, particularly for all health and social care professionals. The introduction of social distancing guidelines, personal and protective equipment (PPE) guidance, compulsory mask wearing and restricted movement and social activity all changed working relationships, communication pathways and connections with service users in these sectors [4–8].

The adoption of working from home where possible, reduced physical contact with patients/service users and the use of online technology were long-lasting [9–12] and some of these changes and hybrid working arrangements are being sustained at the time of writing (July 2022).

Such changes in working conditions (e.g., changing in working procedures, some professionals working from home, mask wearing, increase in responsibilities and staff absences/turnover) in response to the pandemic have been reported as having a negative psychological impact on the health and social care workforce [5,13–16]. Even prior to the beginning of the COVID-19 pandemic health and social care professionals were reporting a range of psychological problems such as burnout, anxiety and depression [17–20] due to limited resources and increase in work pressures. The added stress of a pandemic created further pressure from higher staff turnover, more staff absences from illness and risk management, increased service demands and more burnout [21–25]. Further examination of individual occupations within this sector is required to fully understand the impact the pandemic has had on the well-being and work-related quality of life of key professionals in the health and social care sector.

Currently while there are studies examining the effects of COVID-19 on the health and social care sector and the impact of restrictions on the general population, there are limited studies within the UK examining midwives, allied health professionals, social care workers, nurses and social workers during different stages of the pandemic. Therefore, this study aimed to compare cross-sectional data from five different occupations of the health and social care workforce (nurses, midwives, allied health professionals (AHPs), social care workers and social workers) within the United Kingdom (UK) at two time points (Phase 1: May–July 2020; Phase 2: May–July 2021) during the COVID-19 pandemic. It is important to explore the influence of COVID-19 on wellbeing, work-related quality of life and coping over this challenging period. While experiences may be different across the UK countries (England, Scotland, Wales and Northern Ireland), at the time of the first phase in May 2020 of this study similar restrictions and social distancing measures were implemented. These included the introduction of wearing masks in certain settings particularly indoors and advice to work from home in occupations where this was possible. By the next phase in May 2021, preventative and protective measures were still deemed necessary in indoor settings especially, however these measures were reduced as vaccination programmes had started to reduce the risk of hospitalizations and deaths. Across the UK 'living with COVID' appeared to become a priority as the pandemic progressed, over the initial 'protect NHS' slogan. As the situation began to normalize through 2021, then any possible improvements in staff wellbeing health may have been offset by increased challenges for those in the health and social care professions as general services resume and patient-facing services increase. Therefore, being cognizant of these changes in conditions, it is important to investigate any differences in wellbeing and work-related quality of life over the course of this period of the pandemic and if coping strategies varied between and within UK-based health and social care workers (nurses, midwives, allied health professionals (AHPs), social care workers and social workers). The final sample across Phases 1 and 2 contained of 4803 respondents (Phase 1: n = 2555; Phase 2: n = 2248).

2. Materials and Methods

2.1. Study Design and Recruitment

This study forms a part of an ongoing (May 2020-present) mixed methods research project entitled 'Health and Social Care workers' quality of life and coping while working during the COVID-19 pandemic.' The overall project explores the impact of the pandemic on mental wellbeing, coping strategies, work-related quality of life and burnout of UK-based health and social care workers (HSC) (nurses, midwives, allied health professionals (AHPs), social care workers and social workers) across five study phases [26–28]. The data examined in this repeated cross-sectional analysis were collected during two of these phases (known in this study as Phase 1 and Phase 2); Phase 1 (May-July 2020)

and Phase 2 (May–July 2021) to explore what may have changed over that first year of the pandemic for these professionals. The research used an anonymous online survey with validated measures to assess wellbeing, work-related quality of life and coping, as well as a small number of open-ended qualitative questions to further understand the self-reported impact of COVID-19 had the HSC workforce.

Convenience sampling was used to recruit participants voluntarily through professional associations, workplace unions and regulators, professional communications, employers, and regulatory bodies as well as through social media platforms (e.g., Facebook and Twitter). Using the Raosoft sample calculator (http://www.raosoft.com/samplesize.html, accessed on 1 October 2019) with a confidence interval of 95%, the number of health and social care workers from each occupation was calculated (see Full reports for more details) [29]. Participants were able to withdraw from the study at any time by not completing the survey. The survey data was collected anonymously through the online platform Qualtrics©, which enables the exclusion of respondent IP addresses. Participants followed an electronic link or QR code which linked them to the Participant Information Sheets, consent statement and survey.

2.2. Ethical Approval

Ethical approval was attained from the Research Ethics Filter Committee of the School of Nursing Ulster University (Ref No: 2020/5/3.1, 23 April 2020, Ulster University, IRAS Ref No. 20/0073)for the study and Trust Governance approval (for Northern Ireland only) was gained from the Health and Social Care Trusts for Phase 2. Permission for the use of the scales used in the questionnaire was provided by the original authors, and consent and confidentiality were addressed in the Participant Information Sheets provided at the start of the survey.

2.3. Measures

The following measures were included.

Demographics and work-related characteristics: Respondents were asked about their demographic and work-related characteristics. The variables that were consistent across all timepoints of the wider study and relevant to the analysis in this present paper are sex, age, country of work, ethnicity, occupation, years of work experience, place of work, disability status and redeployment status during the pandemic.

Work-related Quality of Life: Work-related quality of life was assessed with the 23-item WRQoL scale [30] which reports employees' perceived quality of life measured through 6 sub-domains (job career satisfaction, stress at work, working conditions, control at work, general wellbeing, and home-work interface). Respondents were asked to rate the items using a five-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree) to indicate their attitudes to the factors that influence their quality of working life with higher scores indicating better work-related quality of life. The Cronbach's alpha coefficients for the scale were acceptable in all phases and in this present analysis (a = 0.88).

Psychological Wellbeing: The 7-item, short version of the Warwick-Edinburgh Mental Wellbeing scale (SWEMWS) was used to assess psychological wellbeing [31]. The scale contains a series of statements about thoughts and feelings. The SWEWMWBS scale is scored by summing the scores for each item, which range from 1 (None of the time) to 5 (All of the time), then the total raw scores are transformed using the SWEMWS conversion table into metric scores. Scores range from 7 to 35, with higher scores indicating positive wellbeing. The scale has shown good psychometric properties within the current study (a = 0.88).

Coping: Coping was assessed by two scales, the Strategies for Coping with Work and Family Stressors Scale [32] and the Brief COPE scale [33]. A total of 15 items from Clark et al.'s scale assessed five different coping strategies (family-work segmentation, work-family segmentation, working to improve skills/efficiency, recreation and relaxation and exercise). A six-point Likert scale (1 = 'Never have done this' to 6 = 'Almost always do this') was used to specify how often respondents had been doing what was derived by the statements. Each coping strategy is represented by 3 items and a mean score for each

domain computed. The Cronbach's alpha coefficients for the scale were acceptable in all phases and in this present analysis ($\alpha = 0.83$).

The Brief COPE scale is a 28-item self-report tool to measure ways of coping under stressful events. Within this study only 20 items from the scale were used to assess ten different coping strategies (active coping, planning, acceptance, positive reframing, use of emotional support, use of instrumental support, venting, substance use, behavioural disengagement, self-blame). The scale uses a four-point Likert scale ranging (1 = 'I haven't been doing this at all' to 4 = 'I've been doing this a lot'). The Cronbach's alpha for the 20-item scale was acceptable in this present study ($\alpha = 0.82$).

2.4. Data Analysis

The datasets from the respective phases (Phases 1 and 2) were recoded and merged into one SPSS data file. Data analyses were conducted using SPSS 26 and any missing data were addressed prior to analysis. Respondents who did not complete all items on one or more of the scales (SWEMWBS, WRQOL, Brief COPE, Clark's coping) were excluded from the merged dataset ($n = 1208$). The remaining missing data on the variables relevant to the analyses were minimal (0.31%). The SWEMWBS, WRQOL, and coping items were treated as continuous variables with missing data estimated using the EM algorithm for single imputation in SPSS. Missing values on the demographic and work-related variables were minimal (0.10%) and they were not estimated. Following listwise deletion of participants with incomplete demographic information, the final sample across Phases 1 and 2 contained of 4803 respondents (Phase 1: $n = 2555$; Phase 2: $n = 2248$).

Summary statistics of wellbeing-related scale scores and demographic characteristics are shown in Tables 1–3. Multivariate statistics using independent t-tests and ANOVAs were carried out to examine differences in the various scales over the two study phases and across occupations. To account for the uneven distributions across five occupational groups and four countries of the study phases, descriptive statistics for the outcome variables (wellbeing, quality of working life, burnout, coping strategies) used a two-factor weighting by occupation and region (i.e., country of work) procedure. Comparisons by occupation were weighted by region only and comparisons by region were weighted by occupation only (more detail on weighting can be found in the wider study reports [29].

Table 1. Demographic and work-related characteristics (Phase 1: $n = 2555$; Phase 2: $n = 2248$).

Variable	Phase 1 (7 May–3 July 2020)	Phase 2 (10 May–5 July 2021)
	Sex	
Female	2221 (87.2%)	1970 (88.2%)
Male	325 (12.8%)	263 (11.8%)
	Age	
16–29	306 (12.0%)	192 (8.5%)
30–39	541 (21.2%)	417 (18.6%)
40–49	755 (29.6%)	606 (27.0%)
50–59	757 (29.5%)	796 (35.4%)
60–65	178 (7.0%)	217 (9.7%)
66+	17 (0.7%)	18 (0.8%)
	Ethnic background	
White	2402 (94.2%)	2162 (96.3%)
Black	74 (2.9%)	32 (1.4%)
Asian	29 (1.1%)	19 (0.8%)
Mixed	46 (1.8%)	32 (1.4%)
	Country of work	
England	910 (35.6%)	443 (19.7%)
Scotland	107 (4.2%)	624 (27.8%)
Wales	147 (5.8%)	272 (12.1%)
Northern Ireland	1391 (54.4%)	909 (40.4%)
	Occupational group	
Nursing	142 (5.6%)	465 (20.7%)
Midwifery	139 (5.4%)	139 (6.2%)
Allied Health Professionals	312 (12.2%)	315 (14.0%)
Social Care	922 (36.1%)	687 (30.6%)
Social Work	1040 (40.7%)	642 (28.6%)

Table 1. *Cont.*

Variable	Phase 1 (7 May–3 July 2020)	Phase 2 (10 May–5 July 2021)
	Place of Work	
Hospital	251 (9.8%)	464 (20.7%)
Community	1451 (56.9%)	1007 (44.9%)
General Practice Based	12 (0.5%)	31 (1.4%)
Care Home	303 (11.9%)	205 (9.1%)
Day Care	48 (1.9%)	62 (2.8%)
Other	486 (19.1%)	475 (21.2%)
Area of Practice		
Children	534 (20.9%)	392 (17.4%)
Midwifery	138 (5.4%)	140 (6.2%)
Adults	486 (19.0%)	564 (25.1%)
Physical Disability	50 (2.0%)	36 (1.6%)
Learning Disability	287 (11.2%)	238 (10.6%)
Older People	603 (23.6%)	478 (21.3%)
Mental Health	217 (8.5%)	223 (9.9%)
Other	239 (9.4%)	177 (7.9%)
	Number of years of work experience	
Less than 2 years	211 (8.3%)	118 (5.3%)
2–5 years	377 (14.8%)	289 (12.9%)
6–10 years	407 (15.9%)	309 (13.8%)
11–20 years	688 (26.9%)	605 (26.9%)
21–30 years	575 (22.5%)	495 (22.0%)
More than 30 years	297 (11.6%)	430 (19.1%)
	Disability status	
Yes	225 (8.8%)	292 (13.0%)
No	2273 (89.0%)	1891 (84.2%)
Unsure	57 (2.2%)	64 (2.8%)
Redeployed		
Yes	363 (14.2%)	303 (13.5%)
No	2192 (85.8%)	1945 (86.5%)

Note. Presented are column percentages, which are valid percentages to account for missing data.

Table 2. Means and standard deviations (in brackets) for Wellbeing, Work-Related Quality of Life (WRQoL), and Coping strategies across study phases.

Variable	Phase 1	Phase 2	Mean Difference	Phase Comparison
	M (SD)			*p*-Value
Wellbeing	20.94 (3.79)	20.18 (3.78)	−0.76	<0.001
Quality of working life	78.04 (17.51)	71.97 (15.78)	−6.07	<0.001
	Coping strategies			
Active coping	6.00 (1.64)	5.29 (1.84)	−0.71	<0.001
Planning	5.81 (1.81)	5.53 (1.77)	−0.28	<0.001
Positive reframing	5.85 (1.65)	5.35 (1.59)	−0.50	<0.001
Acceptance	6.39 (1.53)	5.99 (1.48)	−0.40	<0.001
Use of emotional support	4.93 (1.76)	4.67 (1.77)	−0.26	<0.001
Use of instrumental support	4.34 (1.83)	4.09 (1.74)	−0.25	<0.001
Venting	3.51 (1.43)	4.06 (1.60)	0.55	<0.001
Substance use	2.76 (1.41)	2.97 (1.56)	0.21	<0.001
Behavioural disengagement	2.73 (1.25)	3.21 (1.52)	0.48	<0.001
Self-blame	3.42 (1.80)	4.23 (1.87)	0.81	<0.001
Family-work segmentation	5.14 (0.84)	5.12 (0.86)	−0.02	0.577
Work-family segmentation	4.67 (1.06)	4.43 (1.25)	−0.24	<0.001
Working to improve skills/efficiency	4.49 (1.09)	4.12 (1.15)	−0.37	<0.001
Recreation and relaxation	3.76 (1.23)	3.45 (1.23)	−0.31	<0.001
Exercise	3.96 (1.42)	3.34 (1.40)	−0.62	<0.001

Table 3. Means and standard deviations (in brackets) for the Wellbeing, Work-Related Quality of Life (WRQoL) and Coping by occupation and across phases.

Occupation	Social Care			Social Work			Nursing			Midwifery			AHP		
	2020	**2021**	***p*-Value [1]**	**2020**	**2021**	***p*-Value [1]**	**2020**	**2021**	***p*-Value [1]**	**2020**	**2021**	***p*-Value [1]**	**2020**	**2021**	***p*-Value [1]**
Wellbeing	20.87 (3.93)	19.82 (3.88)	<0.001 **	21.32 (9.34)	19.83 (3.22)	<0.001 **	21.15 (3.68)	20.57 (3.46)	0.118	20.87 (3.24)	19.28 (5.04)	<0.001 **	21.32 (3.31)	20.73 (3.54)	0.015 *
WRQOL	79.06 (15.65)	70.62 (15.72)	<0.001 **	80.68 (13.55)	69.92 (15.87)	<0.001 **	75.11 (18.64)	73.53 (15.23)	0.401	77.43 (15.28)	64.41 (12.98)	<0.001 **	82.09 (12.43)	75.03 (18.19)	<0.001 **
Active Coping	5.87 (1.66)	5.33 (1.82)	<0.001 **	5.96 (1.57)	5.39 (1.70)	0.001 *	6.38 (1.60)	5.20 (1.83)	<0.001 **	5.88 (1.51)	5.13 (1.58)	<0.001 **	5.86 (1.67)	5.87 (1.81)	0.926
Planning	5.77 (1.83)	5.51 (1.81)	0.030 *	5.74 (1.67)	5.51 (1.74)	<0.001 **	5.97 (1.75)	5.44 (1.83)	0.005 *	5.73 (1.71)	5.32 (1.74)	0.012 *	5.79 (1.72)	5.98 (1.83)	0.096
Positive reframing	5.80 (1.69)	5.37 (1.71)	<0.001 *	5.88 (1.60)	5.35 (1.72)	<0.001 **	5.89 (1.60)	5.44 (1.66)	0.009 *	5.83 (1.44)	5.23 (1.55)	<0.001 **	5.78 (1.64)	5.78 (1.90)	0.955
Acceptance	6.31 (1.53)	6.10 (1.51)	0.044 *	6.42 (1.40)	5.84 (1.50)	<0.001 **	6.59 (1.43)	5.77 (1.48)	<0.001 *	6.11 (1.43)	5.84 (1.44)	0.046 *	6.49 (1.29)	6.53 (1.53)	0.651
Use of emotional support	4.85 (1.81)	4.36 (1.84)	<0.001 **	5.33 (1.63)	5.06 (1.63)	<0.001 **	5.12 (1.82)	4.76 (1.64)	0.042 *	5.26 (1.91)	4.81 (1.45)	0.007 *	5.39 (1.55)	5.11 (1.84)	0.015 *
Use of instrumental support	4.41 (1.74)	3.93 (1.70)	<0.001 **	4.64 (1.70)	4.52 (1.60)	0.068	4.48 (1,99)	4.36 (1.81)	0.572	4.39 (2.07)	4.58 (1.74)	0.294	4.72 (1.55)	4.19 (1.59)	<0.001 **
Venting	3.34 (1.35)	4.13 (1.68)	<0.001 **	3.57 (1.39)	4.51 (1.70)	<0.001 **	3.97 (1.50)	4.11 (1.61)	0.367	3.66 (1.61)	4.81 (1.37)	<0.001 **	3.49 (1.40)	4.05 (1.85)	<0.001 **
Substance use	2.72 (1.35)	2.82 (1.55)	0.266	2.81 (1.44)	3.11 (1.74)	<0.001 **	2.78 (1.27)	3.09 (1.59)	0.03 *	3.03 (178)	3.32 (1.67)	0.071	2.73 (1.30)	2.82 (1.38)	0.281
Behavioural disengagement	2.66 (1.19)	3.22 (1.61)	<0.001 **	2.63 (1.15)	3.13 (1.43)	<0.001 **	2.84 (1.33)	2.26 (1.54)	0.05 *	2.50 (0.91)	3.19 (1.37)	<0.001 **	2.51 (1.44)	2.99 (1.45)	<0.001 **
Self-blame	3.35 (1.60)	4.30 (1.95)	<0.001 **	3.30 (1.54)	4.57 (2.00)	<0.001 **	3.52 (2.00)	4.34 (1.92)	<0.001 **	3.99 (1.07)	4.82 (2.05)	<0.001 **	3.25 (1.44)	3.89 (2.09)	<0.001 **
Family-work segmentation	5.06 (1.02)	5.28 (0.78)	0.001 *	4.99 (0.86)	4.89 (0.95)	0.008 *	5.36 (0.62)	4.95 (1.04)	<0.001 **	4.74 (1.21)	5.01 (0.87)	0.010 *	4.94 (0.89)	5.01 (0.88)	0.189
Work-family segmentation	4.73 (1.13)	4.46 (1.35)	0.002 *	4.79 (0.91)	4.43 (1.07)	<0.001 **	4.72 (1.10)	4.53 (1.13)	0.103	4.39 (1.16)	3.95 (1.24)	<0.001 **	4.57 (0.96)	4.40 (1.05)	0.011 *
Working to improve skills/efficiency	4.36 (1.14)	4.67 (1.22)	<0.001 **	4.36 (0.98)	4.25 (1.07)	0.004 *	4.75 (1.05)	4.24 (1.11)	<0.001 **	4.16 (0.87)	3.94 (1.12)	0.018 *	4.43 (1.03)	4.59 (1.00)	0.026 *
Recreation and relaxation	3.70 (1.24)	3.33 (1.19)	<0.001	4.04 (1.11)	3.66 (1.16)	<0.001 **	3.82 (1.18)	3.54 (1.21)	0.03 *	3.35 (1.33)	2.86 (1.12)	<0.001 **	3.94 (1.21)	3.60 (1.28)	<0.001 **
Exercise	3.63 (1.40)	3.16 (1.32)	<0.001	4.03 (1.38)	3.70 (1.41)	<0.001 **	4.18 (1.38)	3.60 (1.38)	<0.001 *	3.72 (1.35)	3.58 (1.33)	0.294	4.41 (1.19)	3.93 (1.40)	<0.001 **

Note: [1] *p*-value associated with independent samples *t*-tests * $p < 0.05$, ** $p < 0.001$.

3. Results

3.1. Sample Characteristics

Demographic and work-related characteristics of the final sample (n = 4803) by study phase are presented in Table 1. Across the combined respondent group, most respondents were female (87.7%), of white ethnicity (95.2%), and just under half of respondents worked in Northern Ireland (47.9%). Respondents were mostly from social care or social work (68.5%) with the overall sample mostly in the over 50 age group (40.4%), working in a community setting (51.3%) and just under half had 11–30 years' experience in their role (49.2%). The main area of practice for respondents was working with adults or older people (44.4%), most respondents were not redeployed as a result of the pandemic (86.1%) and reported no disability (86.7%).

3.2. Descriptives and Preliminary Analysis

Descriptive statistics of the outcome variables and across the different occupations for each phase are shown in Tables 2 and 3. The results from an independent t-test showed that across the sample, respondents' psychological well-being was significantly lower between Phase 1 (2020): 20.94 to Phase 2 (2021): 20.18 ($p < 0.001$). Similarly, across the sample, work-related quality of life significantly decreased from 78.04 in 2020 to 71.97 in 2021 ($p < 0.001$). Respondents' usage of positive coping strategies (active coping, positive reframing, acceptance, use of emotional support and use of instrumental support, work-family segmentation, working to improve skills/efficiency, recreation and relaxation and exercise) declined significantly ($p < 0.001$) from 2020 to 2021. The use of more negative avoidant type coping strategies significantly increased ($p < 0.001$) as the pandemic continued (Venting, Substance Use, Behavioural Disengagement, and Self-blame).

3.3. Comparison of Individual Occupations 2020 vs. 2021

Across Nursing respondents between Phases 1 (2020) and 2 (2021), there were significant decreases in their use of the following coping strategies; active coping, acceptance, planning, positive reframing, emotional support working to improve skills/efficiency, recreation and relaxation and exercise ($p < 0.05$). However, significant increases were reported in substance use, behavioural disengagement and self-blame ($p < 0.05$). Within Midwifery, significant decreases in wellbeing and work-related quality of life ($p < 0.001$) and among positive coping strategies, namely, active coping, planning, positive reframing, acceptance, emotional support, work-family segmentation, working to improve skills/efficiency and recreation and relaxation ($p < 0.05$). However, significant increases were reported in family-work segmentation, venting, behavioural disengagement and self-blame ($p < 0.05$)

AHP respondents reported significant decreases in wellbeing ($p < 0.05$) and work-related quality of life ($p < 0.001$) and several coping strategies, use of instrumental support, work-family segmentation, recreation and relaxation and exercise ($p < 0.05$). However, significant increases were reported in venting, behavioural disengagement, and self-blame ($p < 0.001$). Across the social care respondents there was a significant difference in wellbeing and work-related quality of ($p < 0.001$). There were significant decreases in their usage of the following coping strategies; active coping, planning, positive reframing, acceptance, emotional support, instrumental support, family-work segmentation, work-family segmentation, working to improve skills/efficiency, recreation and relaxation and exercise ($p < 0.05$). However, significant increases were reported in venting behavioural disengagement and self-blame ($p < 0.001$). Social work (social work is a graduate profession with its title registered in the UK) respondents reported a significant difference in wellbeing and work-related quality of life ($p < 0.001$). There were significant decreases in their use of the following coping strategies; active coping, planning, positive reframing, acceptance, emotional support, family-work segmentation, work-family segmentation, working to improve skills/efficiency, recreation and relaxation and exercise ($p < 0.05$). However, significant increases were reported in venting, substance use, behavioural disengagement and self-blame ($p < 0.001$). More detail is provided in Table 3.

3.4. Wellbeing and WRQOL Comparision across Occupations in Phase 1 (2020) and Phase 3 (2021)

Findings from the ANOVA testing found that in 2020, there was a statistically significant difference between the occupations examined on wellbeing scores ($F(4, 2550) = 2.09$, $p = 0.08$) and work-related quality of life scores ($F(4, 2550) = 7.26$, $p < 0.001$) as determined by analysis of variance. Post hoc tests (Tukey post hoc) revealed that AHPs had significantly higher work-related quality of life scores than nurses, midwives and social care workers. These differences remained in 2021: wellbeing scores varied significantly ($F(4, 2243) = 10.44$, $p < 0.001$) as did work-related quality of life ($F(4, 2243) = 21.53$, $p < 0.001$). AHPs had significantly higher wellbeing scores than midwives, social workers and social care workers but there was no significant different between AHPs and nurses. Midwives meanwhile had significantly lower scores in work-related quality of life than all other occupations examined.

3.5. Coping Strategies Comparision across Occupations in Phase 1 (2020) and Phase 2 (2021)

In 2020, active coping was found to be significantly different between the occupations ($F(4, 2550) = 2.24$, $p = 0.06$), with nurses having higher scores than AHPs and social care workers. Acceptance was found to be significantly different between the occupations ($F(4, 2550) = 2.86$, $p = 0.02$). Emotional support was found to be significantly different across the groups ($F(4, 2550) = 9.56$, $p < 0.001$) with social care workers having lower scores than AHPs and social workers. Instrumental support was found to be statistically significantly different across the groups ($F(4, 2550) = 2.99$, $p = 0.002$) with social care workers having lower scores than AHPs. Venting was significantly different ($F(4, 2550) = 5.24$, $p < 0.001$), nurses had higher venting scores than midwives or social care workers. Self-blame was significantly different ($F(4, 2550) = 6.21$, $p < 0.001$), midwives having higher scores than AHPs, social care workers and social workers. Family-work segmentation was found to be significantly different ($F(4, 2243) = 10.59$ $p < 0.001$), with post hoc test revealing social care workers to have higher scores than all other groups. Work-family segmentation was found to be significantly different ($F(4, 2243) = 12.49$, $p < 0.001$), with post hoc testing revealing midwives to have lower scores than all other groups. Working to improve skills and efficiency was found to be significantly different ($F(4, 2243) = 16.12$, $p < 0.001$), with post hoc testing revealing AHPs had higher scores than all other groups. Recreation and relaxation were significantly different ($F(4, 2243) = 27.46$, $p < 0.001$), with post hoc revealing midwives had lower scores than all other groups. Exercise was found to be significantly different ($F(4, 2243) = 14.97$, $p < 0.001$), with post hoc testing revealing social care workers to have lower scores than all.

In 2021, active coping was found to be significantly different between the occupations ($F(4, 2243) = 9.93$, $p < 0.001$), with a post hoc test revealing that AHPs scored higher than all other occupations. Planning was significantly different across the groups ($F(4. 2243) = 7.32$, $p < 0.001$), with AHPs scoring significantly higher than all other occupations. Positive reframing was significantly different across the groups ($F(4. 2243) = 5.80$, $p < 0.001$), with AHPs scoring significantly higher than midwives, social care and social workers but there was no significant difference between AHPs and nurses. Acceptance was significantly different between the occupations ($F(4, 2243) = 17.68$, $p < 0.001$) with a post hoc test revealing that AHPs scored higher than all other occupations. Emotional support was significantly different across the groups ($F(4, 2243) = 12.32$, $p < 0.001$) with social care workers having lower scores than all other groups. Instrumental support was significantly different across the groups ($F(4, 2243) = 9.72$, $p < 0.001$) with social care workers having lower scores than nurses, midwives and social workers. Venting was significantly different across the groups ($F(4, 2243) = 13.59$, $p < 0.001$) with midwives having higher venting scores than nurses, AHPs and social care workers. Substance use was significantly different across the groups ($F(4, 2243) = 5.72$, $p < 0.001$) with midwives having higher venting scores than AHPs and social care workers. Self-blame was significantly different ($F(4, 2243) = 11.10$, $p < 0.001$), with midwives having higher scores than Nurses, AHPs and social care workers.

4. Discussion

The primary aim of this paper was to identify the differences in wellbeing and work-related quality of life and how coping strategies varied across five health and social care occupations, and how these differences evolved over the course of the first 12 months of the COVID-19 pandemic. Overall, across the sample, which included midwives, allied health professionals, social care workers and social workers, wellbeing and work-related quality of life scores decreased while the use of negative coping strategies such as venting and behavioural disengagement increased. The results showed that both mental wellbeing and the quality of working life decreased significantly from 2020 to 2021 for all health and social care professional groups examined in this study.

In terms of work-related quality of life scores, the findings from the Phase 1 (78.04/23 = 3.39) and Phase 2 (71.97/23 = 3.13) reveal lower scores than the mean normative score of 3.44 (78.09/23 = 3.40) from a UK NHS workforce study [30]. Two studies, one in Iran looked at WRQoL scores in Nurses [34] and one reported a mean score of 68.81 while the other in France [35] reported a mean score of 69.60 for nurses and a mean score of 70.20 for midwives. These scores were lower than the scores reported within this current study for nurses (Phase 1: 75.11 and Phase 2: 73.53) and lower than the Phase 1 score for midwives (77.43) but higher than the Phase 2 score (64.41). Other studies have found that over the course of the pandemic, particularly within the first year (similar to the time frame within this study), health and social care workers have faced substantial and sustained challenges to their working conditions, workplace support and communication pathways [7,8,34,36–38]. All these elements have led to increased stress at work, less control and decreased job satisfaction. Consequently, this has led to greater levels of burnout amongst the HSC workforce which has led to greater turnover and intention to leave for staff particularly in midwifery, nursing and social work [39–42].

Across all professional groups the use of negative coping strategies such as venting and self-blame increased between Phase 1 and Phase 2, coinciding with the decreasing wellbeing and WRQoL scores. Previous evidence has suggested the increased stressors in this work environment mixed with the daily challenges that COVID-19 brings to the workplace bring a lasting psychological impact resulting in changes to wellbeing and quality of working life [5,43–46]. This is often due to the link between stress and coping strategies [43,47,48]. In terms of coping, work-flexibility and increased PPE and better information between Phases 1 to 2 in the UK did not appear to reduce the use of negative, more avoidant, coping strategies. The decrease in positive strategies and increase in negative coping strategies identified in this study (see Tables 2 and 3) suggests that changes in coping may have a negative impact on work–life. Previous research suggested that the pandemic has led to the health and social care workforce experiencing numerous difficult challenges that have resulted in problems with coping due to increased uncertainty, changes in responsibilities and job demands [16,47,49].

Our results show that at these two time points in the first year of the pandemic HSC professionals in the UK were struggling to cope and this may have affected their health and wellbeing. The HSC workforce is dealing with a 'new normal' and the pressures they are facing do not appear to be reducing, instead the challenges are on an upward trend especially in terms of increasing caseloads, constantly changing working conditions and lack of resources [5,7,8,38]. Our findings may suggest that organisational support decreased over the 12 month period from the beginning of the first lockdown. This change in emotional and instrumental support may be problematic, as support has been known as a key coping strategy for positive wellbeing and improved quality of working life [37,50,51]. A study by Clair et al. [52] examined the effects of social isolation on wellbeing and life satisfaction during the pandemic. They reported that work satisfaction was significantly lower with social isolation. These findings further suggest that as work–life balance changed and isolation increased as a result of the COVID-19 pandemic, this has prompted the use of more avoidant coping strategies like substance use. Therefore, it is essential, moving forward, that employers implement support services, clearer communications

pathways and minimise isolation to help improve the quality of working life and wellbeing for HSC employees and optimise their use of positive coping strategies. This has been highlighted by Billings et al. [53] who also stated that the demands, transitions and tensions in the workplace amplified the need for clear communication and organisational support while making support services accessible.

Strengths and Limitations

This representative survey offers a comprehensive picture of perceived wellbeing, quality of working life and coping in HSC workers across the UK. To our knowledge, this is one of the first studies exploring the differences in health and social care occupations across two different time points in a year in the COVID-19 pandemic in the UK. As such, this present analysis along with the wider study, can serve as a stepping stone for future HSC research. The strengths of this study include examining the outcomes in 2020 and 2021 in the pandemic using valid and reliable outcome measures of mental wellbeing, work-related quality of life and coping. The inclusion of five different professions within the HSC workforce with a wide range of experience was a strength as it provides evidence from different settings and workplaces to enable a wider picture to be viewed when interpreting the results.

There are limitations that should be considered when viewing the results. Firstly, the data was not representative of the general UK population, just a section of the HSC sector. Two-thirds of respondents were from the social care or social work profession (68.5%) which is not representative of the whole health and social care sector, however the research team diminished this limitation by weighting the data during the statistical analysis which lessens the effect of bias and a provides a more accurate representation of the population being investigated [54]. Another limitation is the cross-sectional nature of the included data as this is only reflective of these data collection time points and therefore we cannot make causal inferences [55]. As the data was collected cross-sectionally and anonymous it is not possible to determine if any respondents in Phase 1 also repeated the study in Phase 2. Nevertheless, whilst a cross-sectional study can be a limitation, the strength of the study is that the data reflect different levels of pressures within the HSC workforce and therefore the timeliness of data collection in relation to the pandemic is important. Additionally in this sample a majority of respondents were female (87.7%) and of reported White ethnicity (95.2%). While this does not allow a full comparison to the male workforce, it is similar to those figures reported by the NHS. The NHS reports that 77.9% of its staff [56] and 84.5 % of those in social care and social work professions are White [57] while noting that women make up over 70 per cent of the workforce [58,59]. This study focused on time differences in wellbeing, WRQOL and coping across two time periods for specific professions within the UK HSC workforce. This paper does not focus regional variations except to state the results were weighted by region which can be a limitation as experiences regionally may be different over this period due to local health policy variations (e.g., localised lockdowns, etc.) therefore subsequent research should focus on this, particularly with a qualitative approach.

5. Conclusions

The COVID-19 pandemic continues to have a profound impact on the health and social care workforce, significantly impacting psychological wellbeing and work-related quality of life. As noted within the present study, an increase in avoidant coping strategies is evident within this workforce demonstrating that as the situation is constantly changing it brings different types of problems and stressors to these staff. The results suggest that more support is needed within the workplace to help minimize the impact of isolation and for efforts to maintain and increase wellbeing and communication. Future studies should examine the HSC workforce through qualitative studies to get a more in-depth understanding of the changes being encountered in this sector as its workforce responds to the changes after the lockdown years. Research evidence is needed to inform employers,

regulators, professional bodies, policy makers (including government) in strategic planning for future crises to ensure a sustainable health and social care workforce strategy, which is preventative and proactive rather than reactive, and designed to aid recovery from exogenous shocks, such as pandemics.

Author Contributions: Conceptualization, P.M., P.G. and J.M. (John Mallett); methodology, P.M., P.G. and J.M. (John Mallett); formal analysis, R.D.N.; writing—original draft preparation, writing—review and editing, R.D.N., P.G., J.M. (John Mallett), H.S., P.N., J.M. (Jill Manthorpe), J.M. (John Moriarty), J.R., D.C., S.M. and P.M. All authors have read and agreed to the published version of the manuscript.

Funding: This study is funded by the HSC R&D Division of the Public Health Agency, Northern Ireland (COVID Rapid Response Funding Scheme COM/5603/20), the Northern Ireland Social Care Council (NISCC), and the Southern Health and Social Care Trust, and funding from England's National Institute for Health and Care Research (NIHR) Policy Research Unit in Health and Social Care Workforce-PR-PRU-1217-21002.

Institutional Review Board Statement: Ethical approval was attained from the Research Ethics Filter Committee of the School of Nursing Ulster University (Ref No: 2020/5/3.1, 23 April 2020, Ulster University, IRAS Ref No. 20/0073) for the study and Trust Governance approval (for Northern Ireland only) was gained from the Health and Social Care Trusts for Phase 2. Permission for the use of the scales used in the questionnaire was provided by the original authors, and consent and confidentiality were addressed in Participant Information Sheets provided at the start of the survey.

Informed Consent Statement: Informed consent has been obtained from all participants.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results. The views expressed are those of the authors and not necessarily those of the funders, or the NIHR or Department of Health and Social Care.

References

1. Panneer, S.; Kantamaneni, K.; Palaniswamy, U.; Bhat, L.; Pushparaj, R.R.B.; Nayar, K.R.; Soundari Manuel, H.; Flower, F.X.L.L.; Rice, L. Health, economic and social development challenges of the COVID-19 pandemic: Strategies for multiple and interconnected issues. *Healthcare* **2022**, *10*, 770. [CrossRef] [PubMed]
2. Shang, Y.; Li, H.; Zhang, R. Effects of pandemic outbreak on economies: Evidence from business history context. *Front. Public Health* **2021**, *9*, 632043. [CrossRef] [PubMed]
3. Wellcome. Global Poverty—How COVID-19 Is Affecting Societies and Economies. Available online: https://wellcome.org/news/equality-global-poverty-how-covid-19-affecting-societies-and-economies (accessed on 18 February 2022).
4. World Health Organization. WHO Coronavirus (COVID-19) Dashboard. Available online: https://covid19.who.int/table (accessed on 4 January 2022).
5. Søvold, L.E.; Naslund, J.A.; Kousoulis, A.A.; Saxena, S.; Qoronfleh, M.W.; Grobler, C.; Münter, L. Prioritizing the mental health and well-being of healthcare workers: An urgent global public health priority. *Front. Public Health* **2021**, *9*, 679397. [CrossRef]
6. Liao, M.; Liu, H.; Wang, X.; Hu, X.; Huang, Y.; Liu, X.; Brenan, K.; Mecha, J.; Nirmalan, M.; Lu, J.R. A technical review of face mask wearing in preventing respiratory COVID-19 transmission. *Curr. Opin. Colloid Interface Sci.* **2021**, *52*, 101417. [CrossRef] [PubMed]
7. Morse, G.A.; Dell, N.A. The well-being and perspectives of community-based behavioral health staff during the COVID-19 pandemic. *Soc. Work Health Care* **2021**, *60*, 117–130. [CrossRef] [PubMed]
8. Cook, L.L.; Zschomler, D.; Biggart, L.; Carder, S. The team as a secure base revisited: Remote working and resilience among child and family social workers during COVID-19. *J. Child. Serv.* **2020**, *15*, 259–266. [CrossRef]
9. Cetrulo, A.; Guarascio, D.; Virgillito, M.E. Working from home and the explosion of enduring divides: Income, employment and safety risks. *Econ. Politica* **2022**, *39*, 345–402. [CrossRef] [PubMed]
10. Jenkins, F.; Smith, J. Work-from-home during COVID-19: Accounting for the care economy to build back better. *Econ. Labour Relat. Review* **2021**, *32*, 1035304620983608. [CrossRef]
11. Jones, C.; Philippon, T.; Venkateswaran, V. Optimal mitigation policies in a pandemic: Social distancing and working from home. *Rev. Financ. Stud.* **2021**, *34*, 5188–5223. [CrossRef]
12. World Health Organization. Getting Your Workplace Ready for COVID-19. Available online: https://www.who.int/docs/default-source/coronaviruse/getting-workplace-ready-for-covid-19.pdf (accessed on 10 November 2021).
13. Denning, M.; Goh, E.T.; Tan, B.; Kanneganti, A.; Almonte, M.; Scott, A.; Martin, G.; Clarke, J.; Sounderajah, V.; Markar, S.; et al. Determinants of burnout and other aspects of psychological well-being in healthcare workers during the COVID-19 pandemic: A multinational cross-sectional study. *PLoS ONE* **2021**, *16*, e0238666. [CrossRef]

14. Ghaleb, Y.; Lami, F.; Al Nsour, M.; Rashak, H.A.; Samy, S.; Khader, Y.S.; Al Serouri, A.; BahaaEldin, H.; Afifi, S.; Elfadul, M.; et al. Mental health impacts of COVID-19 on healthcare workers in the Eastern Mediterranean Region: A multi-country study. *J. Public Health* **2021**, *43* (Suppl. S3), iii34–iii42. [CrossRef] [PubMed]
15. Lamb, D.; Gnanapragasam, S.; Greenberg, N.; Bhundia, R.; Carr, E.; Hotopf, M.; Razavi, R.; Raine, R.; Cross, S.; Dewar, A.; et al. Psychosocial impact of the COVID-19 pandemic on 4378 UK healthcare workers and ancillary staff: Initial baseline data from a cohort study collected during the first wave of the pandemic. *Occup. Environ. Med.* **2021**, *78*, 801–808. [CrossRef]
16. Muller, A.E.; Hafstad, E.V.; Himmels, J.P.; Smedslund, G.; Flottorp, S.; Stensland, S.Ø.; Stroobants, S.; van de Velde, S.; Vist, G.E. The mental health impact of the COVID-19 pandemic on healthcare workers, and interventions to help them: A rapid systematic review. *Psychiatry Res.* **2020**, *293*, 113441. [CrossRef]
17. Warner, M.; Zaranko, B. Pressures on the NHS. Available online: https://ifs.org.uk/uploads/6-Pressures-on-the-NHS-.pdf (accessed on 10 November 2021).
18. Charlesworth, A.; Johnson, P.; Firth, Z.; Gershlick, B.; Watt, T.; Kelly, E.; Lee, T.; Stoye, G.; Zaranko, B. *Securing the Future: Funding Health and Social Care to the 2030s*; The Institute for Fiscal Studies: London, UK, 2018; Available online: https://ifs.org.uk/uploads/R143.pdf (accessed on 10 November 2021).
19. Roldán, G.M.; Salazar, I.C.; Garrido, L.; Ramos, J.M. Violence at work and its relationship with burnout, depression and anxiety in healthcare professionals of the emergency services. *Health* **2013**, *5*, 193. [CrossRef]
20. Acker, G.M. Burnout among mental health care providers. *J. Soc. Work* **2012**, *12*, 475–490. [CrossRef]
21. Mercado, M.; Wachter, K.; Schuster, R.C.; Mathis, C.M.; Johnson, E.; Davis., O.I.; Johnson-Agbakwu, C.E. A cross-sectional analysis of factors associated with stress, burnout and turnover intention among healthcare workers during the COVID-19 pandemic in the United States. *Health Soc. Care Community* **2022**, *30*, e2690–e2701. [CrossRef] [PubMed]
22. The King's Fund. NHS Workforce: Our Position. Available online: https://www.kingsfund.org.uk/projects/positions/nhs-workforce (accessed on 19 May 2021).
23. Lavoie-Tremblay, M.; Gélinas, C.; Aubé, T.; Tchouaket, E.; Tremblay, D.; Gagnon, M.P.; Côté, J. Influence of caring for COVID-19 patients on nurse's turnover, work satisfaction and quality of care. *J. Nurs. Manag.* **2022**, *30*, 33–43. [CrossRef]
24. Kelly, L.A.; Gee, P.M.; Butler, R.J. Impact of nurse burnout on organizational and position turnover. *Nurs. Outlook* **2021**, *69*, 96–102. [CrossRef]
25. Barach, P.; Fisher, S.D.; Adams, M.J.; Burstein, G.R.; Brophy, P.D.; Kuo, D.Z.; Lipshultz, S.E. Disruption of healthcare: Will the COVID pandemic worsen non-COVID outcomes and disease outbreaks? *Prog. Pediatr. Cardiol.* **2020**, *59*, 101254. [CrossRef]
26. Gillen, P.; Neill, R.D.; Manthorpe, J.; Mallett, J.; Schröder, H.; Nicholl, P.; Currie, D.; Moriarty, J.; Ravalier, J.; Mc Grory, S.; et al. Decreasing Wellbeing and Increasing Use of Negative Coping Strategies: The Effect of the COVID-19 Pandemic on the UK Health and Social Care Workforce. *Epidemiologia* **2022**, *3*, 26–39. [CrossRef]
27. Manthorpe, J.; Iliffe, S.; Gillen, P.; Moriarty, J.; Mallett, J.; Schroder, H.; Currie, D.; Ravalier, J.; McFadden, P. Clapping for carers in the Covid-19 crisis: Carers' reflections in a UK survey. *Health Soc. Care Community* **2022**, *30*, 1442–1449.
28. McFadden, P.; Ross, J.; Moriarty, J.; Mallett, J.; Schroder, H.; Ravalier, J.; Manthorpe, J.; Currie, D.; Harron, J.; Gillen, P. The role of coping in the wellbeing and work-related quality of life of UK health and social care workers during COVID-19. *Int. J. Environ. Res. Public Health* **2021**, *18*, 815. [CrossRef] [PubMed]
29. HSC Workforce Study Reports. Available online: https://www.hscworkforcestudy.co.uk/reports-publications (accessed on 27 October 2022).
30. Easton, S.; van Laar, D. *User Manual for the Work-Related Quality of Life (WRQoL) Scale: A Measure of Quality of Working Life*; University of Portsmouth: Portsmouth, UK, 2018.
31. Stewart-Brown, S.L.; Platt, S.; Tennant, A.; Maheswaran, H.; Parkinson, J.; Weich, S.; Tennant, R.; Taggart, F.; Clarke, A. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): A valid and reliable tool for measuring mental well-being in diverse populations and projects. *J. Epidemiol. Community Health* **2011**, *65* (Suppl. S2), A38–A39. [CrossRef]
32. Clark, M.A.; Michel, J.S.; Early, R.J.; Baltes, B.B. Strategies for coping with work stressors and family stressors: Scale development and validation. *J. Bus. Psychol.* **2014**, *29*, 617–638. [CrossRef]
33. Carver, C.S. You want to measure coping but your protocol'too long: Consider the brief cope. *Int. J. Behav. Med.* **1997**, *4*, 92–100. [CrossRef] [PubMed]
34. Farhadi, A.; Bagherzadeh, R.; Moradi, A.; Nemati, R.; Sadeghmoghadam, L. The relationship between professional self-concept and work-related quality of life of nurses working in the wards of patients with COVID-19. *BMC Nurs.* **2021**, *20*, 75. [CrossRef]
35. Duracinsky, M.; Marcellin, F.; Cousin, L.; Beo, V.D.; Mahé, V.; Rousset-Torrente, O.; Carrieri, P.; Chassany, O. Social and professional recognition are key determinants of quality of life at work among night-shift healthcare workers in Paris public hospitals (AP-HP ALADDIN COVID-19 survey). *PLoS ONE* **2022**, *17*, e0265724. [CrossRef]
36. Aughterson, H.; McKinlay, A.R.; Fancourt, D.; Burton, A. Psychosocial impact on frontline health and social care professionals in the UK during the COVID-19 pandemic: A qualitative interview study. *BMJ Open* **2021**, *11*, e047353. [CrossRef]
37. Labrague, L.J. Psychological resilience, coping behaviours and social support among health care workers during the COVID-19 pandemic: A systematic review of quantitative studies. *J. Nurs. Manag.* **2021**, *29*, 1893–1905. [CrossRef]
38. Reddington, M.; Ahmadiyankooshkghazi, M.; Bakhshalian, E.; Kennedy, O.; Elmi, F. The Standards for Employers of Social Workers: Social Work Health Check Report, UK Report. Available online: https://www.local.gov.uk/sites/default/files/documents/Standards%20for%20Employers%20FINAL%20REPORT.pdf (accessed on 22 April 2021).

39. NHS. NHS Staff Survey 2021 National Results Briefing. Survey Coordination Centre. Available online: https://www.nhsstaffsurveys.com/static/b3377ce95070ce69e84460fe210a55f0/ST21_National-briefing.pdf (accessed on 15 June 2022).
40. Taylor, C.; Mattick, K.; Carrieri, D.; Cox, A.; Maben, J. 'The WOW factors': Comparing workforce organization and well-being for doctors, nurses, midwives and paramedics in England. *Br. Med. Bull.* **2022**, *141*, 60–79. [CrossRef]
41. Halliwell, A. Closed cultures in health and social care services. *Nurs. Resid. Care* **2021**, *23*, 1–5. [CrossRef]
42. Quek, S.J.; Thomson, L.; Houghton, R.; Bramley, L.; Davis, S.; Cooper, J. Distributed leadership as a predictor of employee engagement, job satisfaction and turnover intention in UK nursing staff. *J. Nurs. Manag.* **2021**, *29*, 1544–1553. [CrossRef]
43. Besirli, A.; Erden, S.C.; Atilgan, M.; Varlihan, A.; Habaci, M.F.; Yeniceri, T.; Isler, A.C.; Gumus, M.; Kizileroglu, S.; Ozturk, G.; et al. The relationship between anxiety and depression levels with perceived stress and coping strategies in health care workers during the COVID-19 pandemic. *Med. Bull. Sisli Etfal Hosp.* **2021**, *55*, 1–11. [CrossRef] [PubMed]
44. Babore, A.; Lombardi, L.; Viceconti, M.L.; Pignataro, S.; Marino, V.; Crudele, M.; Candelori, C.; Bramanti, S.M.; Trumello, C. Psychological effects of the COVID-2019 pandemic: Perceived stress and coping strategies among healthcare professionals. *Psychiatry Res.* **2020**, *293*, 113366. [CrossRef] [PubMed]
45. Conti, C.; Fontanesi, L.; Lanzara, R.; Rosa, I.; Porcelli, P. Fragile heroes. The psychological impact of the COVID-19 pandemic on health-care workers in Italy. *PLoS ONE* **2020**, *15*, e0242538. [CrossRef]
46. Flesia., L.; Monaro, M.; Mazza, C.; Fietta, V.; Colicino, E.; Segatto, B.; Roma, P. Predicting perceived stress related to the COVID-19 outbreak through stable psychological traits and machine learning models. *J. Clin. Med.* **2020**, *9*, 3350. [CrossRef]
47. Cai, H.; Tu, B.; Ma, J.; Chen, L.; Fu, L.; Jiang, Y.; Zhuang, Q. Psychological impact and coping strategies of frontline medical staff in hunan between January and March 2020 during the outbreak of Coronavirus Disease 2019 (COVID19) in Hubei, China. *Med. Sci. Monit.* **2020**, *26*, e924171.
48. Folkman, S. Stress, coping, and hope. In *Psychological Aspects of Cancer*; Springer: Boston, MA, USA, 2013; pp. 119–127.
49. Steenkiste, E.V.; Schoofs, J.; Gilis, S.; Messiaen, P. Mental health impact of COVID-19 in frontline healthcare workers in a Belgian Tertiary care hospital: A prospective longitudinal study. *Acta Clin. Belg.* **2022**, *77*, 533–540. [CrossRef]
50. Vanhaecht, K.; Seys, D.; Bruyneel, L.; Cox, B.; Kaesemans, G.; Cloet, M.; Van Den Broeck, K.; Cools, O.; De Witte, A.; Lowet, K.; et al. COVID-19 is having a destructive impact on health-care workers' mental well-being. *Int. J. Qual. Health Care* **2021**, *33*, mzaa158. [CrossRef]
51. Theorell, T. COVID-19 and working conditions in health care. *Psychother. Psychosom.* **2020**, *89*, 4. [CrossRef]
52. Clair, R.; Gordon, M.; Kroon, M.; Reilly, C. The effects of social isolation on well-being and life satisfaction during pandemic. *Humanit. Soc. Sci. Commun.* **2021**, *8*, 28. [CrossRef]
53. Billings, J.; Abou Seif, N.; Hegarty, S.; Ondruskova, T.; Soulios, E.; Bloomfield, M.; Greene, T. What support do frontline workers want? A qualitative study of health and social care workers' experiences and views of psychosocial support during the COVID-19 pandemic. *PLoS ONE* **2021**, *16*, e0256454. [CrossRef] [PubMed]
54. Caughey, D.; Berinsky, A.J.; Chatfield, S.; Hartman, E.; Schickler, E.; Sekhon, J.S. *Target Estimation and Adjustment Weighting for Survey Nonresponse and Sampling Bias*; Cambridge University Press: Cambridge, UK, 2020.
55. Wang, X.; Cheng, Z. Cross-sectional studies: Strengths, weaknesses, and recommendations. *Chest* **2020**, *158*, S65–S71. [CrossRef] [PubMed]
56. Gov.uk. NHS Workforce. Available online: https://www.ethnicity-facts-figures.service.gov.uk/workforce-and-business/workforce-diversity/nhs-workforce/latest (accessed on 15 February 2022).
57. NHS. Ethnicity. Available online: https://digital.nhs.uk/data-and-information/publications/statistical/personal-social-services-staff-of-social-services-departments/england-2019/individual-worker-characteristics#ethnicity (accessed on 15 February 2022).
58. Department of Health and Social Care. Women's Health Strategy. Available online: https://www.gov.uk/government/consultations/womens-health-strategy-call-for-evidence/womens-health-strategy-call-for-evidence (accessed on 15 February 2022).
59. NHS. Role Women Played in the Pandemic. Available online: https://www.england.nhs.uk/2021/03/nhs-celebrates-the-vital-role-hundreds-of-thousands-of-women-have-played-in-the-pandemic/ (accessed on 15 February 2022).