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Compassion Fatigue, Health Locus of Control, and Psychological Well-Being Among Mental-Health Practitioners

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Abstract

Background: Mental-health practitioners supporting people in distress may experience compassion fatigue, especially where staffing and supervision are limited. **Objective:** This study examined associations among compassion fatigue, health locus of control and psychological well-being among mental-health practitioners in Makurdi, Benue State, Nigeria. **Method:** A cross-sectional survey recruited 780 practitioners by convenience sampling from public, private and mission-based facilities. Participants completed measures of compassion fatigue, the internal, chance and powerful-others dimensions of health locus of control, and mental well-being. Analyses comprised multiple regression and a structural equation model with a bootstrapped indirect-effect estimate. **Results:** Internal health locus of control was associated with lower compassion fatigue and higher well-being; chance and powerful-others orientations showed opposite associations. Compassion fatigue was negatively associated with well-being ($\beta = -.62$, $p < .001$). The structural model showed an indirect association through an overall health-locus-of-control factor but did not identify dimension-specific indirect effects. **Conclusion:** Findings highlight practitioner well-being and workplace support. The cross-sectional design establishes neither temporal order nor causation.

Keywords: compassion fatigue; health locus of control; psychological well-being; mental-health practitioners; Nigeria

Abstrak

Latar belakang: Praktisi kesehatan mental yang mendampingi orang dalam tekanan dapat mengalami kelelahan belas kasih, terutama ketika staf dan supervisi terbatas. **Tujuan:** Penelitian ini menguji hubungan antara kelelahan belas kasih, lokus kendali kesehatan, dan kesejahteraan psikologis pada praktisi kesehatan mental di Makurdi, Benue, Nigeria. **Metode:** Survei potong lintang melibatkan 780 praktisi yang direkrut melalui convenience sampling dari fasilitas pemerintah, swasta, dan misi. Partisipan mengisi instrumen kelelahan belas kasih, tiga dimensi lokus kendali kesehatan, dan kesejahteraan mental. Analisis meliputi regresi berganda dan model persamaan struktural dengan estimasi efek tidak langsung berbasis bootstrap. **Hasil:** Lokus kendali internal berhubungan dengan kelelahan belas kasih yang lebih rendah dan kesejahteraan lebih tinggi; orientasi peluang dan orang lain yang berpengaruh menunjukkan hubungan sebaliknya. Kelelahan belas kasih berhubungan negatif dengan kesejahteraan ($\beta = -,62$; $p < ,001$). Model menunjukkan hubungan tidak langsung melalui faktor ringkasan lokus kendali kesehatan, tetapi tidak mengidentifikasi efek khusus setiap dimensi. **Simpulan:** Temuan menekankan kesejahteraan praktisi dan dukungan tempat kerja. Desain potong lintang tidak membuktikan urutan waktu atau sebab-akibat.

Kata kunci: kelelahan belas kasih; lokus kendali kesehatan; kesejahteraan psikologis; praktisi kesehatan mental; Nigeria

Introduction

Mental-health practitioners spend much of their working lives alongside people in distress. In places where specialist services are thinly spread, that work can be especially demanding. In Benue State, practitioners may support people affected by displacement, communal violence, poverty, bereavement and gender-based violence, often while working with limited staff and resources (Fadele et al., 2024; Adiukwu et al., 2024). Repeated exposure to clients' trauma can carry an emotional cost. Compassion fatigue is commonly used to describe the strain associated with caring for people who have experienced trauma or severe suffering; it overlaps with secondary traumatic stress and burnout, but the terms should not be treated as interchangeable (Figley, 1995; Stamm, 2009). When distress continues without sufficient recovery or professional support, practitioners may experience intrusive thoughts, emotional exhaustion, irritability, reduced empathy or difficulty maintaining therapeutic boundaries (Donatus, 2024; Johari, 2019). These outcomes matter for practitioners themselves and for the services that depend on them.

The evidence base is growing, but the Nigerian literature still offers limited detail on mental-health practitioners working in conflict-affected and resource-constrained settings (Onah & Otumala, 2026). Studies of health workers and other helping professionals point to links among emotional labour, secondary traumatic stress, burnout and poorer well-being (Kwaghgbah et al., 2024; Saeed et al., 2024; Vancampfort & Mugisha, 2022). Work involving counsellors in Nigeria has also connected emotional demands with psychological strain (Ayinde & Olanrewaju, 2023). Such findings are useful, but they do not answer every question about practitioners in Benue State, where staff may be working with clients affected by the same community-level adversity that shapes their own lives. Psychological well-being is more than the absence of symptoms. It includes how people feel and function in everyday life, including positive affect, a sense of purpose and the ability to manage ordinary demands. For practitioners, sustained distress may affect work, relationships and the ability to recover between difficult sessions. Individual beliefs about health may also matter. Health locus of control concerns the extent to which people believe health outcomes depend on their own actions, on chance, or on the influence of other people such as health professionals (Wallston et al., 1978). These are distinct orientations, not simply points on one scale from 'good' to 'bad'. An internal orientation may be associated with personal agency, while chance and powerful-others beliefs may reflect different expectations about control (Ogwuche & Onah, 2023; Okoro & Nwankwo, 2025). The meaning of these beliefs depends on the person and the circumstances; relying on other people can be reasonable, especially when services and resources are outside an individual's control.

The relationship between compassion fatigue and health-control beliefs has not been examined in enough detail among Nigerian mental-health practitioners (Garnett et al., 2023; Kabunga et al., 2024; Noor et al., 2025). Health beliefs are formed within social and institutional settings, and the options available to a practitioner are not determined by belief alone. Workload, supervision, job security and access to support can all shape how much control a person can realistically exercise (Nwobodo et al., 2023; Nwosu et al., 2021). In Makurdi, practitioners may manage heavy caseloads while responding to trauma within their own communities (Ogwuche & Onah, 2023). This makes it important to examine personal beliefs alongside the occupational strain they report, without assuming that individual coping can replace organisational support. The present study therefore examines compassion fatigue, the three dimensions of health locus of control, and psychological well-being in a sample of mental-health practitioners working in Makurdi. The study addresses a practical and empirical gap: how are compassion fatigue, health locus of control and psychological well-being related among mental-health practitioners in Makurdi, Benue State? It examines the association between compassion fatigue and well-being, the separate associations of internal, chance and powerful-others health locus of control with the study outcomes, and the indirect association represented in the specified structural model. The contribution is local rather than nationally representative. Evidence from this setting may help guide future research and encourage health facilities to treat staff well-being as part of service quality, while recognising that a cross-sectional study cannot establish causal pathways (Federal Ministry of Health, 2024; Akanni & Edozien, 2023).

This study draws on Job Demands–Resources (JD–R) theory, which explains work-related well-being in terms of the balance between job demands and the resources people can draw on to meet them (Bakker et al., 2014, 2023). Job demands include aspects of work that require continuing physical, cognitive or emotional effort. Resources may include supportive colleagues, supervision, adequate staffing and opportunities to recover (Alaydi et al., 2022). Although JD–R theory has been applied across occupations, the specific demands and resources vary by job and setting. For this study, psychiatric nurses, counsellors, clinical psychologists and social workers are grouped as mental-health practitioners because they were recruited on the basis of

reported direct involvement in mental-health-related care. This operational grouping does not imply identical professional titles, credentials, training pathways or duties.

Repeated exposure to trauma narratives, crisis presentations and clients' severe distress can place sustained demands on emotion regulation and attention. Compassion fatigue is treated here as a possible strain outcome of that work, rather than as a direct measure of workload itself (Noor et al., 2025; Shindi et al., 2019). JD–R theory would also direct attention to organisational resources that may reduce strain, including effective supervision, peer support and manageable caseloads. Those factors were discussed in the study rationale but were not directly measured in the survey. The current analysis therefore examines associations among the measured psychological variables; it does not test the full JD–R process or demonstrate that workplace demands caused compassion fatigue. Health locus of control is considered as a set of personal beliefs that may shape how practitioners understand health and respond to stress. An internal orientation concerns perceived influence over one's own health, while chance and powerful-others orientations describe different kinds of external attribution (Wallston et al., 1978; Wilski et al., 2015). The three dimensions can coexist and should be examined separately when their effects may differ. The regression analyses do this (Dogonchi et al., 2022). The structural model additionally reports an overall health-locus-of-control pathway, which should be interpreted as a summary model rather than evidence that the three orientations have identical meanings or effects. This distinction is important in a context where access to professional care, institutional power and socioeconomic constraints may shape the control people can exercise in practice.

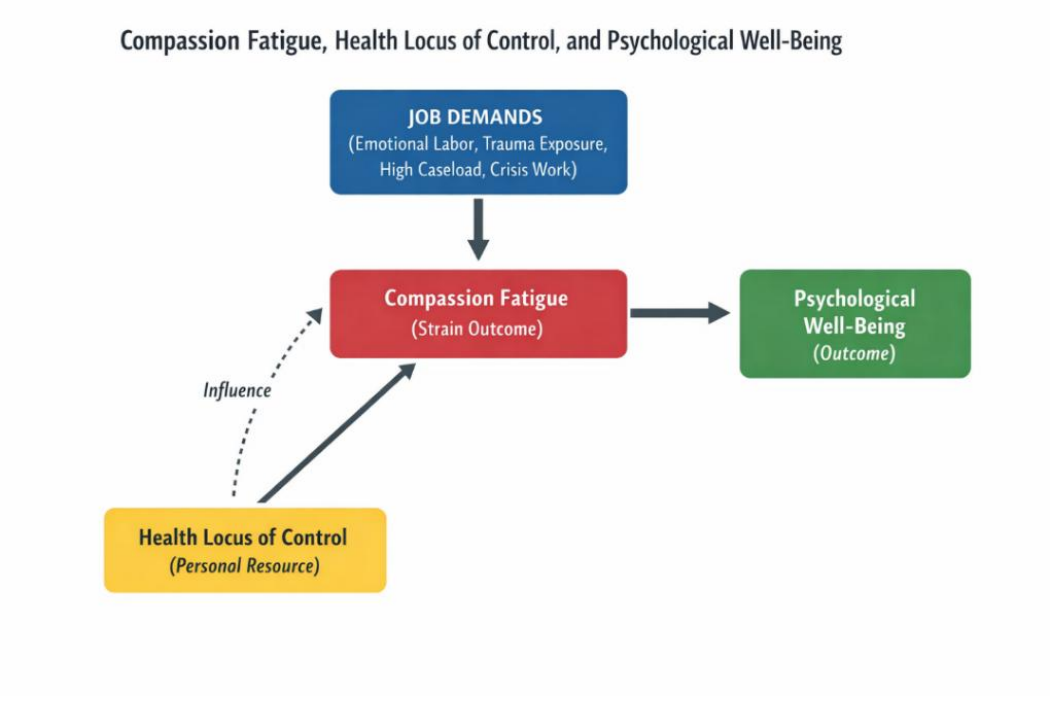


Figure 1. Job Demands–Resources theory (adapted from Bakker et al., 2023)

The JD–R framework describes a health-impairment process, in which sustained demands can contribute to strain, and a motivational process, in which resources support engagement and well-being (Bakker et al., 2014, 2023). In the present study, compassion fatigue is linked conceptually to strain, while psychological well-being is the outcome of interest. Health locus of control may help explain how practitioners interpret health-related challenges, although it is not a substitute for material and organisational resources. This is a theory-informed model: the survey did not measure workload, supervision, staffing or other job resources directly, so those pathways remain explanatory context rather than tested variables. The setting also matters. A practitioner may have strong personal agency and still face understaffing, limited supervision or poor access to professional support. Conversely, help from colleagues and health professionals may be an important resource rather than a sign of low agency. For this reason, the analysis treats internal, chance and powerful-others orientations as separate dimensions in the regression models. The study's convenience sample from facilities in Makurdi does not support claims about all Nigerian practitioners, but it offers a view of an under-described group working in a region affected by substantial social and humanitarian pressures.

Against this background, the study examines whether compassion fatigue is associated with lower psychological well-being, whether the three health-locus-of-control dimensions are associated with the outcomes, and whether the overall structural model is consistent with an indirect association through health

locus of control. The findings are interpreted as cross-sectional associations. They may inform questions for future longitudinal research and practical discussion about staff support, but they cannot by themselves establish temporal order or prove that changing control beliefs will improve well-being.

Research Questions

1. Is compassion fatigue associated with psychological well-being among mental-health practitioners in Makurdi, Benue State?
2. How are internal, chance and powerful-others health locus of control associated with compassion fatigue and psychological well-being?
3. Does the specified structural model show an indirect statistical association between compassion fatigue and psychological well-being through the overall HLC summary factor?

Hypotheses

1. Higher compassion fatigue will be associated with lower psychological well-being among mental-health practitioners in Makurdi, Benue State.
2. Internal health locus of control will be associated with lower compassion fatigue and higher psychological well-being, whereas chance and powerful-others health locus of control will be associated with higher compassion fatigue and lower psychological well-being.
3. The specified structural model will show a non-zero indirect statistical association between compassion fatigue and psychological well-being through the overall HLC summary factor.

Method

Design and Participants

A cross-sectional survey was conducted in Makurdi, the capital of Benue State, Nigeria. A non-probability convenience sampling approach was used to recruit participants from six participating facilities: Emory Specialist Hospital, Benue State University Teaching Hospital, Federal Medical Centre, Bishop Murray Medical Centre, Rahama Specialist Hospital and the General Hospital. Participants included psychiatric nurses, clinical psychologists, counsellors, social workers and other practitioners involved in mental-health-related care. The operational study population was practitioners directly involved in therapeutic or mental-health services; the inclusive term "mental-health practitioners" does not imply that all participants held the same professional title or licensure.

Eligible participants had worked in their current facility for at least six months and agreed to participate voluntarily. Staff holding exclusively administrative roles and individuals receiving treatment for severe psychiatric conditions were excluded. Recruitment occurred at the six participating sites after institutional approvals. The study record does not document a probability-based procedure for selecting the facilities or facility-specific recruitment denominators. The findings should therefore be understood as describing this convenience sample, not as representative estimates for all practitioners in Benue State or Nigeria. The study was reported with reference to STROBE guidance for cross-sectional research. The available study record does not document an independent credential-verification procedure or the frequency with which each participant delivered psychotherapy. Accordingly, the operational label reflects reported direct involvement in mental-health-related care rather than a verified common professional title or uniform psychotherapy role.

Table 1. Demographic characteristics of participants

Variables	Category	Frequency (n)	Percentage (%)
Age (years)	< 30	210	26.9
	30–39	290	37.2
	40–49	180	23.1
	≥ 50	100	12.8
Sex	Male	340	43.6
	Female	440	56.4
Marital Status	Single	310	39.7
	Married	420	53.8
	Divorced/Widowed	50	6.5
Education Level	Diploma	120	15.4
	Bachelor's Degree	420	53.8
	Master's Degree	200	25.6

	Doctorate	40	5.1
Professional Role	Psychiatric Nurse	350	44.9
	Clinical Psychologist	120	15.4
	Counselor	150	19.2
	Social Worker	110	14.1
	Other Mental-Health Practitioners	50	6.4
Years of Experience	< 5 years	260	33.3
	5–9 years	230	29.5
	10–14 years	180	23.1
	≥ 15 years	110	14.1
Type of Facility	Public Hospital	390	50.0
	Private Hospital	300	38.5
	Mission/NGO Facility	90	11.5

Sample Size

The achieved sample comprised 780 complete questionnaires. The reported regression-planning calculation used $\alpha = .05$, power = .80, effect size $f^2 = .15$ and a conservative upper bound of 23 candidate predictors; these assumptions yield a minimum total sample of approximately 166. A corresponding calculation for the five predictors listed in each final regression model yields a minimum of approximately 92 under the same assumptions. The final sample exceeded both regression-based estimates. These calculations support the regression analyses but do not constitute an SEM-specific power analysis; no model-specific SEM power simulation is documented in the study record. Accordingly, 780 is reported as the achieved sample, not as a demonstrated minimum required for the structural model. A large sample does not remove selection bias or make convenience sampling representative.

Procedure for Data Collection

Data were collected between January and June 2025 after approvals were obtained from the Rev. Fr. Moses Orshio Adasu University Research Ethics Committee, the Benue State Ministry of Health and Human Services, and the management of participating facilities. The researcher and two trained assistants distributed paper and electronic questionnaires during scheduled working hours. Participants received an explanation of the study and provided written informed consent. They were told that participation was voluntary and that they could decline or withdraw without penalty. Completion took about 15–20 minutes. Questionnaires were retrieved after completion. No identifying information was collected, and data were stored securely. Of 800 questionnaires distributed, 780 were returned complete (97.5%). Only complete questionnaires were retained for analysis; no imputation procedure was reported. The response rate does not rule out selection or social-desirability bias.

Measures

A brief sociodemographic questionnaire recorded age, sex, marital status, educational attainment, professional role, years of experience and type of facility. These variables were used to describe the sample and, where specified, as regression covariates.

Compassion fatigue was assessed with a study-specific 30-item questionnaire adapted from the Professional Quality of Life (ProQOL) framework (Stamm, 2009), rather than the standard ProQOL-5. Items were scored from 0 (never) to 5 (very often). In the reported scoring scheme, items CF01–CF15 were assigned to a job-burnout domain and CF16–CF30 to a secondary-traumatic-stress domain. Each 15-item domain has a possible range of 0–75, and the two domain sums form the study-specific total index (0–150). These domain labels and totals should not be interpreted as standard ProQOL-5 scores or compared with ProQOL-5 normative categories. Internal consistency was $\alpha = .82$ in the pilot sample and $\alpha = .91$ in the main sample. The item allocation and scoring key still require confirmation against the questionnaire administered in the field.

Health locus of control was assessed using an 18-item adapted version of the Multidimensional Health Locus of Control scale (Wallston et al., 1978), with six items for each of three dimensions: internal, chance and powerful others. Responses used a five-point agreement format and were coded so that higher subscale totals represented stronger endorsement of the corresponding orientation. Each subscale had a possible score range of 6–30. Main-sample internal-consistency estimates were $\alpha = .70$ for internal HLC, .80 for chance HLC and .72 for powerful-others HLC.

Psychological well-being was measured with the 14-item Warwick–Edinburgh Mental Well-being Scale (WEMWBS; Tennant et al., 2007). Each item is rated from 1 (none of the time) to 5 (all of the time), giving a total score of 14–70 when all items are answered. Higher scores indicate greater reported mental well-being. The pilot-sample Cronbach's alpha was .70. The measurement model specifies the 14 items as indicators of a single psychological well-being factor.

A pilot study was conducted with 30 practitioners at General Hospital, Gboko, Benue State, outside the main recruitment sites. The pilot was used to review the questionnaire and estimate internal consistency. Cronbach's alpha was .82 for the study-specific compassion-fatigue index, .71 for the health-locus-of-control questionnaire, and .70 for WEMWBS. These pilot estimates provide preliminary evidence of consistency, although the HLC and WEMWBS estimates are modest and come from a small sample. The pilot item analysis examined item–total relationships, using .30 as a practical screening point; the study record reports that retained items met this criterion. Main-sample HLC subscale reliabilities are reported separately above. A reliability coefficient alone does not establish construct validity.

Data Analysis

Analyses were conducted in R version 4.2.2. Frequencies and percentages described categorical variables; means and standard deviations described total scores and continuous variables. Item-level distributions were summarised using medians and interquartile ranges where appropriate. Two multiple linear regression models were reported: one examined compassion fatigue using the HLC dimensions, age and years of professional experience as predictors; the other examined psychological well-being using the HLC dimensions, compassion fatigue and years of professional experience. Statistical significance was set at .05. Regression tables report unstandardised B coefficients in the original score units alongside standardised β coefficients.

The study also reported a bootstrapped indirect-effect analysis and a structural equation model estimated with the lavaan package. In the regression models, internal, chance and powerful-others HLC were treated as separate predictors. The measurement model contains two first-order compassion-fatigue domains (job burnout and secondary traumatic stress) loading on a second-order compassion-fatigue construct; three distinct first-order HLC dimensions; and a 14-item psychological well-being factor. For the exploratory structural pathway, the three HLC dimensions define an internal-versus-external control-orientation factor, with internal HLC loading positively and chance and powerful-others HLC loading negatively. The structural paths are specified as compassion fatigue to HLC orientation (β = −.48), HLC orientation to well-being (β = .55), and a direct compassion-fatigue-to-well-being path (β = −.62).

Model fit was assessed using the chi-square statistic and degrees of freedom, Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA) and Standardised Root Mean Square Residual (SRMR). The structural model fit was $\chi^2(1800) = 4698.00$, $\chi^2/df = 2.61$, CFI = .93, TLI = .91, RMSEA = .046 and SRMR = .041 (N = 780). The chi-square ratio and RMSEA are arithmetically aligned under the conventional RMSEA approximation. Given the cross-sectional design, structural paths are interpreted as modelled associations rather than causal effects. Regression diagnostics were summarised using variance inflation factors (VIFs), Breusch–Pagan tests and Cook's distance. VIFs ranged from 1.12 to 1.83; Breusch–Pagan tests were $\chi^2(5) = 7.10$, $p = .213$ for Model 1 and $\chi^2(5) = 7.63$, $p = .177$ for Model 2; and maximum Cook's distances were .041 and .047, respectively.

Results

The study included 780 participants. The largest age group was 30–39 years (37.2%), followed by participants younger than 30 (26.9%), those aged 40–49 (23.1%) and those aged 50 or older (12.8%). Women represented 56.4% of the sample and men 43.6%. More than half were married (53.8%); 39.7% were single and 6.5% were divorced or widowed. A bachelor's degree was the most common qualification (53.8%), followed by a master's degree (25.6%), diploma (15.4%) and doctorate (5.1%). These figures describe the recruited sample rather than the whole mental-health workforce in Makurdi. Psychiatric nurses made up the largest professional group (44.9%), followed by counsellors (19.2%), clinical psychologists (15.4%), social workers (14.1%) and other practitioners (6.4%). One-third reported fewer than five years of professional experience (33.3%), while 29.5% had five to nine years, 23.1% had 10–14 years and 14.1% had at least 15 years. Half worked in public hospitals (50.0%), 38.5% in private hospitals and 11.5% in mission or NGO facilities. The sample therefore includes several professional roles, with psychiatric nurses and public-sector staff particularly well represented.

For the compassion-fatigue measure, the reported mean job-burnout score was 62.7 (SD = 21.4) and the mean secondary-traumatic-stress score was 54.2 (SD = 18.9). The reported overall compassion-fatigue score was 116.9 (SD = 38.6). The reported total mean equals the sum of the two reported domain means (62.7 + 54.2 = 116.9), although the item-to-domain scoring key is not available here for independent item-level verification. These are the score summaries supplied in the study record. The previous percentage conversion and the label 'moderately high' are not retained because the conversion and cut-off basis are not documented clearly enough to interpret them as standardised categories. For health locus of control, the reported means were 26.4 (SD = 6.8) for internal HLC, 21.2 (SD = 7.5) for chance HLC and 24.6 (SD = 6.3) for powerful-others HLC. The mean WEMWBS score was 41.8 (SD = 9.7). These descriptive results show the distribution of scores in this sample; they should not be interpreted as clinical classifications without an appropriate reference basis.

Table 2. Descriptive statistics for study-specific compassion-fatigue scores, health locus of control and psychological well-being

Variables	Mean ± SD
Study-specific compassion-fatigue index	
Job Burnout	62.7 ± 21.4
Secondary Traumatic Stress	54.2 ± 18.9
Total Compassion Fatigue Score	116.9 ± 38.6
Multidimensional Health Locus of Control (MHLC)	
Internal Health Locus of Control	26.4 ± 6.8
Chance Health Locus of Control	21.2 ± 7.5
Powerful Others Health Locus of Control	24.6 ± 6.3
Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)	
Psychological Well-Being	41.8 ± 9.7

The structural model fit is $\chi^2(1800) = 4698.00$, $\chi^2/df = 2.61$, CFI = .93, TLI = .91, RMSEA = .046 and SRMR = .041. The specified structural paths indicate a negative direct association between compassion fatigue and psychological well-being ($\beta = -.62$, $p < .001$), an association between compassion fatigue and the overall HLC-orientation factor ($\beta = -.48$, $p < .001$), and a positive association between HLC orientation and well-being ($\beta = .55$, $p < .001$). The indirect association is $\beta = -.26$, 95% CI [−.34, −.18], $p < .001$.

Table 3. Multiple regression predicting compassion fatigue

Predictor Variables	B	SE	β	t	p
Internal Health Locus of Control	−0.58	0.11	−0.34	−5.27	< .001
Chance Health Locus of Control	0.46	0.09	0.29	5.11	< .001
Powerful Others Health Locus of Control	0.39	0.10	0.22	3.90	< .001
Age	−0.21	0.08	−0.13	−2.63	0.009
Years of Professional Experience	−0.27	0.09	−0.17	−3.00	0.003

Model 1: $R = .61$, $R^2 = .37$, $F(5, 774) = 91.10$, $p < .001$. Note. B denotes the unstandardised regression coefficient; β denotes the standardised coefficient. The five listed predictors agree with the reported model degrees of freedom.

Table 4. Multiple regression predicting psychological well-being

Predictor Variables	B	SE	β	t	p
Internal Health Locus of Control	0.64	0.10	0.41	6.40	< .001
Chance Health Locus of Control	−0.44	0.08	−0.28	−5.50	< .001
Powerful Others Health Locus of Control	−0.31	0.09	−0.18	−3.44	0.001
Compassion Fatigue	−0.59	0.07	−0.49	−8.43	< .001
Years of Professional Experience	0.25	0.08	0.16	3.13	0.002

Model 2: $R = .72$, $R^2 = .52$, $F(5, 774) = 168.42$, $p < .001$. Note. B denotes the unstandardised regression coefficient; β denotes the standardised coefficient. The five listed predictors agree with the reported model degrees of freedom.

In the first regression model, internal HLC was negatively associated with compassion fatigue (β = −.34, p < .001), while chance HLC (β = .29, p < .001) and powerful-others HLC (β = .22, p < .001) were positively associated with it. Age and years of professional experience also showed negative associations with compassion fatigue. In the second model, internal HLC was positively associated with well-being (β = .41, p < .001), while chance HLC (β = −.28, p < .001) and powerful-others HLC (β = −.18, p = .001) were negatively associated with well-being. Compassion fatigue was also negatively associated with well-being (β = −.49, p < .001), whereas years of experience showed a positive association (β = .16, p = .002). These coefficients are model-based associations; they do not establish cause and effect.

Table 5. Reported indirect association through the overall health-locus-of-control factor

Pathway	Standardised Effect (β)	95% CI	p-value
Compassion Fatigue → Psychological Well-Being (Direct)	−0.62	[−0.70, −0.54]	< .001
Compassion Fatigue → Overall HLC factor	−0.48	[−0.55, −0.40]	< .001
Overall HLC factor → Psychological Well-Being	0.55	[0.47, 0.63]	< .001
Indirect association (CF → HLC → PWB)	−0.26	[−0.34, −0.18]	< .001
Total association	−0.88	—	< .001

The overall structural model reported a negative direct association between compassion fatigue and psychological well-being (β = −.62, p < .001). Compassion fatigue was associated with the summary HLC factor (β = −.48, p < .001), which was positively associated with well-being (β = .55, p < .001). The estimated indirect association was −.26, with a 95% confidence interval from −.34 to −.18. This result is consistent with a statistically significant indirect association under the specified model. It should not be described as causal mediation because all variables were measured at the same time, and it does not identify which HLC dimension carries the indirect association.

The regression models offer a more differentiated view of the HLC dimensions. Internal HLC was associated with lower compassion fatigue and higher well-being, while chance and powerful-others orientations showed the opposite pattern. Those results justify treating the dimensions separately in future analyses. The current overall indirect estimate does not tell us whether one of the dimensions accounts for most of the association, whether the pathways offset one another, or whether each has a statistically significant indirect effect. A parallel mediation model with separate indirect effects would need to be estimated and reported if dimension-specific mediation is central to the paper's claim.

Note. The indirect-effect estimate is for the overall HLC factor as specified in the reported structural model; it is not a set of three dimension-specific mediation estimates.

Table 6. Regression diagnostics

Model	Diagnostic / predictor	Value	Assessment
Model 1 (CF)	Internal HLC	1.42	VIF
Model 1 (CF)	Chance HLC	1.35	VIF
Model 1 (CF)	Powerful-others HLC	1.27	VIF
Model 1 (CF)	Age	1.12	VIF

Model 1 (CF)	Years of experience	1.51	VIF
Model 2 (PWB)	Internal HLC	1.83	VIF
Model 2 (PWB)	Chance HLC	1.56	VIF
Model 2 (PWB)	Powerful-others HLC	1.37	VIF
Model 2 (PWB)	Compassion fatigue	1.75	VIF
Model 2 (PWB)	Years of experience	1.22	VIF
Model 1 (CF)	Breusch–Pagan test	$\chi^2(5) = 7.10$, $p = .213$	$p > .05$; no evidence of heteroscedasticity detected
Model 2 (PWB)	Breusch–Pagan test	$\chi^2(5) = 7.63$, $p = .177$	$p > .05$; no evidence of heteroscedasticity detected
Model 1 (CF)	Maximum Cook's distance	.041	Below 1.0 screening threshold
Model 2 (PWB)	Maximum Cook's distance	.047	Below 1.0 screening threshold

Figure 2. Measurement and structural model linking compassion fatigue, health locus of control and psychological well-being. Standardised item loadings range from .57 to .86 in the measurement model; the second-order domain loadings are shown separately in Table 7. The model represents burnout and secondary traumatic stress as first-order indicators of compassion fatigue; the three HLC subscales as indicators of an exploratory internal-versus-external control-orientation factor; and WEMWBS items 1–14 as indicators of psychological well-being.

Conceptual measurement and structural diagram
Measurement Model

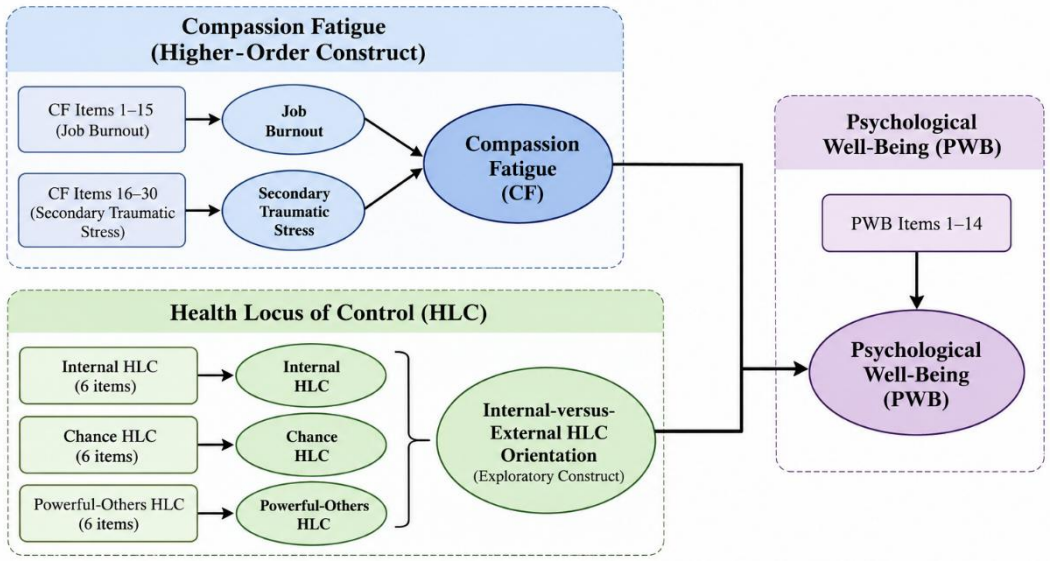


Figure 2. Measurement Model

Structural Model

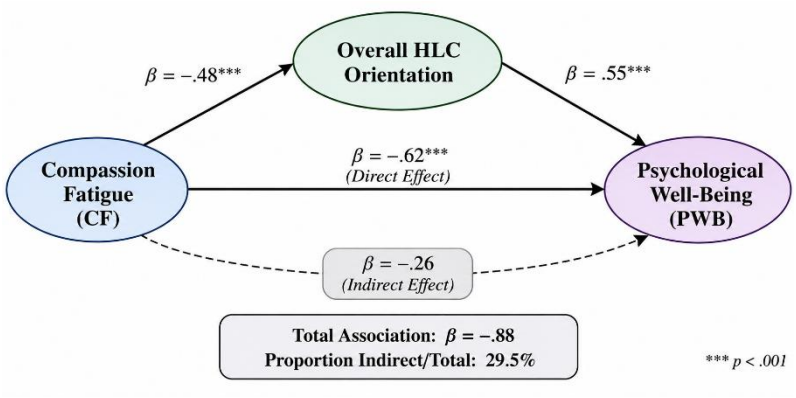


Figure 3. Structural Model

In the structural model, the direct association between compassion fatigue and well-being was β = −.62, and the indirect association through the overall HLC factor was approximately −.26. Together these imply a total association of about −.88, with the absolute indirect component representing 29.5% of the absolute total association (|−.26| / |−.88| × 100). These paths describe a modelled pattern of association, not a demonstrated sequence of effects.

Table 7. Item-level and higher-order factor loadings

Latent factor	Indicator	Standardised loading	SE	95% CI
Job burnout	CF01	0.610	0.032	[0.547, 0.673]
Job burnout	CF02	0.670	0.030	[0.611, 0.729]
Job burnout	CF03	0.640	0.031	[0.579, 0.701]
Job burnout	CF04	0.720	0.029	[0.663, 0.777]
Job burnout	CF05	0.770	0.027	[0.717, 0.823]
Job burnout	CF06	0.700	0.030	[0.641, 0.759]
Job burnout	CF07	0.740	0.028	[0.685, 0.795]
Job burnout	CF08	0.630	0.032	[0.567, 0.693]
Job burnout	CF09	0.810	0.026	[0.759, 0.861]
Job burnout	CF10	0.680	0.030	[0.621, 0.739]
Job burnout	CF11	0.760	0.028	[0.705, 0.815]
Job burnout	CF12	0.710	0.029	[0.653, 0.767]
Job burnout	CF13	0.590	0.034	[0.523, 0.657]
Job burnout	CF14	0.830	0.025	[0.781, 0.879]
Job burnout	CF15	0.660	0.031	[0.599, 0.721]
Secondary traumatic stress	CF16	0.580	0.034	[0.513, 0.647]
Secondary traumatic stress	CF17	0.650	0.031	[0.589, 0.711]
Secondary traumatic stress	CF18	0.720	0.029	[0.663, 0.777]
Secondary traumatic stress	CF19	0.690	0.030	[0.631, 0.749]
Secondary traumatic stress	CF20	0.800	0.026	[0.749, 0.851]
Secondary traumatic stress	CF21	0.740	0.028	[0.685, 0.795]
Secondary traumatic stress	CF22	0.620	0.032	[0.557, 0.683]
Secondary traumatic stress	CF23	0.770	0.027	[0.717, 0.823]
Secondary traumatic stress	CF24	0.840	0.025	[0.791, 0.889]
Secondary traumatic stress	CF25	0.680	0.030	[0.621, 0.739]
Secondary traumatic stress	CF26	0.710	0.029	[0.653, 0.767]
Secondary traumatic stress	CF27	0.750	0.028	[0.695, 0.805]
Secondary traumatic stress	CF28	0.600	0.033	[0.535, 0.665]
Secondary traumatic stress	CF29	0.790	0.027	[0.737, 0.843]
Secondary traumatic stress	CF30	0.660	0.031	[0.599, 0.721]
Internal HLC	HLC-I1	0.620	0.034	[0.553, 0.687]

Internal HLC	HLC-I2	0.710	0.030	[0.651, 0.769]
Internal HLC	HLC-I3	0.670	0.032	[0.607, 0.733]
Internal HLC	HLC-I4	0.780	0.027	[0.727, 0.833]
Internal HLC	HLC-I5	0.740	0.028	[0.685, 0.795]
Internal HLC	HLC-I6	0.650	0.033	[0.585, 0.715]
Chance HLC	HLC-C1	0.570	0.035	[0.501, 0.639]
Chance HLC	HLC-C2	0.690	0.031	[0.629, 0.751]
Chance HLC	HLC-C3	0.730	0.029	[0.673, 0.787]
Chance HLC	HLC-C4	0.610	0.034	[0.543, 0.677]
Chance HLC	HLC-C5	0.770	0.027	[0.717, 0.823]
Chance HLC	HLC-C6	0.660	0.032	[0.597, 0.723]
Powerful-others HLC	HLC-PO1	0.600	0.034	[0.533, 0.667]
Powerful-others HLC	HLC-PO2	0.750	0.028	[0.695, 0.805]
Powerful-others HLC	HLC-PO3	0.700	0.030	[0.641, 0.759]
Powerful-others HLC	HLC-PO4	0.820	0.026	[0.769, 0.871]
Powerful-others HLC	HLC-PO5	0.640	0.033	[0.575, 0.705]
Powerful-others HLC	HLC-PO6	0.720	0.029	[0.663, 0.777]
Psychological well-being	PWB01	0.630	0.031	[0.569, 0.691]
Psychological well-being	PWB02	0.710	0.029	[0.653, 0.767]
Psychological well-being	PWB03	0.680	0.030	[0.621, 0.739]
Psychological well-being	PWB04	0.790	0.027	[0.737, 0.843]
Psychological well-being	PWB05	0.830	0.026	[0.779, 0.881]
Psychological well-being	PWB06	0.740	0.028	[0.685, 0.795]
Psychological well-being	PWB07	0.660	0.031	[0.599, 0.721]
Psychological well-being	PWB08	0.810	0.026	[0.759, 0.861]
Psychological well-being	PWB09	0.590	0.033	[0.525, 0.655]
Psychological well-being	PWB10	0.860	0.025	[0.811, 0.909]
Psychological well-being	PWB11	0.770	0.027	[0.717, 0.823]
Psychological well-being	PWB12	0.720	0.029	[0.663, 0.777]
Psychological well-being	PWB13	0.690	0.030	[0.631, 0.749]
Psychological well-being	PWB14	0.800	0.026	[0.749, 0.851]
Higher-order compassion fatigue	Job-burnout factor	0.820	0.035	[0.751, 0.889]
Higher-order compassion fatigue	Secondary-traumatic-stress factor	0.880	0.030	[0.821, 0.939]
HLC orientation factor	Internal HLC	0.680	0.045	[0.592, 0.768]
HLC orientation factor	Chance HLC	-0.570	0.048	[-0.664, -0.476]
HLC orientation factor	Powerful-others HLC	-0.490	0.050	[-0.588, -0.392]

Note. *SE denotes standard error; CI denotes confidence interval.*

Discussion

The present study examined the relationships between compassion fatigue, health locus of control (HLC), and psychological well-being among mental-health practitioners in Makurdi, Benue State. The clearest finding in the regression analysis was the negative association between compassion fatigue and psychological well-being. Practitioners reporting greater compassion-fatigue symptoms also tended to report poorer well-being. This finding is consistent with the view that repeated exposure to the suffering of others can carry an emotional cost for helping professionals, particularly when recovery opportunities and professional support are limited (Figley, 1995; Garnett et al., 2023; Kabunga et al., 2024). Recent reviews have continued to identify compassion fatigue as an important concern across healthcare and other helping professions, while also highlighting differences in how the construct is defined and measured (Lipsa et al., 2024; Noor et al., 2025).

The finding also fits within the wider evidence from sub-Saharan Africa, where healthcare workers often operate in settings marked by high service demands and limited resources. Kabunga et al. (2024), in a systematic review and meta-analysis of 11 studies, estimated the pooled prevalence of compassion fatigue among healthcare professionals in sub-Saharan Africa at 70%, with substantial variation across studies and

regions. Their analysis reported particularly high estimates among nurses, although the considerable heterogeneity means that these figures should not be assumed to apply uniformly to every professional group or setting. Similarly, Dubale et al. (2019) identified burnout as a substantial concern among healthcare providers in sub-Saharan Africa, while Nwosu et al. (2021) documented the occupational consequences of burnout and presenteeism among Nigerian healthcare workers. Garnett et al. (2023) also identified prevalence, antecedents, consequences and possible interventions as recurring themes in the international literature on compassion fatigue.

There is, however, an important distinction between compassion fatigue, secondary traumatic stress and burnout (Figley, 1995; Stamm, 2009). Although these concepts overlap, they do not refer to exactly the same experience. Compassion fatigue is often discussed in relation to the emotional cost of caring for people who have experienced suffering or trauma, whereas burnout is generally associated with prolonged occupational stress and exhaustion (Figley, 1995; Demerouti et al., 2001; Garnett et al., 2023). A 2025 systematic review and meta-analysis by Ulaş and Seçer found a strong positive relationship between secondary traumatic stress and burnout across 61 studies involving 33,906 healthcare professionals. The authors also reported substantial between-study heterogeneity, indicating that the strength of this relationship varies across samples and measurement approaches (Ulaş & Seçer, 2025). This evidence reinforces the importance of examining related occupational stress constructs together while avoiding the assumption that they are interchangeable.

The mental-health setting gives the result additional relevance. Mental-health practitioners may repeatedly encounter accounts of violence, bereavement, displacement and other traumatic experiences (Labinjo, 2022), while being expected to remain emotionally available and clinically attentive. Evidence specific to mental-health professionals supports the importance of this exposure. Henderson et al. (2025), in a systematic review of 23 studies, found that secondary traumatic stress was reported in mental-health professionals and that 14 of the 18 studies examining its relationship with personal trauma history found a statistically significant positive association. A separate systematic review by Zacharias and Upendra (2024) examined the burden of secondary traumatic stress among healthcare providers, further highlighting the need to recognise indirect exposure to trauma as an occupational concern. These findings are relevant to practitioners working in communities affected by repeated adversity. Nevertheless, the present study did not directly measure participants' personal trauma histories, frequency of exposure to traumatic material or clinical caseloads. Such factors may help explain the observed pattern, but they remain plausible contextual explanations rather than mechanisms demonstrated by this dataset (Garnett et al., 2023; Henderson et al., 2025; Kabunga et al., 2024).

A second important finding concerns health locus of control. Internal HLC was associated with lower compassion fatigue and higher psychological well-being, whereas chance and powerful-others orientations were associated with higher compassion fatigue and lower well-being. One possible explanation is that practitioners who believe their own actions can influence their health may be more inclined to engage in health-protective behaviours, seek help when needed, or take deliberate steps to manage stress (Shindi et al., 2019). A systematic review by Mozafari et al. (2024), covering 50 papers on health locus of control and medical behavioural interventions, concluded that internal and external health-control beliefs may have different implications for health-related behaviour and that external orientations require closer examination rather than uniform interpretation. An earlier systematic review also found that stronger internal health locus of control was generally associated with greater engagement in health behaviours, although the populations and outcomes varied across the included studies. The present findings are compatible with this wider literature, but the proposed behaviours; such as self-care, supervision seeking and boundary-setting; were not measured in this study. They should therefore be considered possible explanations for the associations rather than established mediating mechanisms (Aikpitanyi et al., 2022; Mozafari et al., 2024; Wallston et al., 1978).

The distinction between the three HLC dimensions is particularly important. Internal control concerns the belief that one's own actions influence health outcomes; chance control concerns the role of luck or chance; and powerful-others control concerns the influence of other people, including health professionals (Wallston et al., 1978). These orientations should not be collapsed conceptually into a simple division between positive and negative beliefs. For example, believing that healthcare professionals can influence health may encourage appropriate help-seeking when competent and accessible services are available. It may be less helpful when practitioners perceive that their well-being depends on others but lack access to reliable support. Chance-oriented beliefs may similarly reflect a sense of limited personal agency, although their meaning is likely to vary by circumstance and individual interpretation. Mozafari et al. (2024) emphasised the need to investigate the source and context of external health-control beliefs when designing behavioural interventions. This

distinction offers a useful way to interpret the present results: the negative associations involving chance and powerful others warrant attention, but they do not establish that dependence on others is inherently harmful or that internal control alone guarantees better well-being.

The findings should also be interpreted in light of the Nigerian context without attributing observed differences to culture alone. Health beliefs can be shaped by prior healthcare experiences, family relationships, social support, faith and structural conditions. However, the MHLC dimensions used here do not directly measure religious belief or spiritual explanations of health. It would therefore be too strong to interpret a high powerful-others score as evidence of religious fatalism or to argue that spiritual beliefs explain poorer psychological well-being. Evidence on Nigeria's mental-health service environment points to broader challenges involving service availability, training and the gap between mental-health needs and available resources (Adiukwu et al., 2024; Fadele et al., 2024). Research on stress management in Nigerian healthcare organisations also underscores the value of considering institutional conditions alongside individual responses to stress (Nwobodo et al., 2023). In that context, a practitioner may believe in personal responsibility while still being constrained by staffing shortages, workload or limited access to professional support. The present findings thus support examining HLC alongside workplace conditions, rather than suggesting that changes in personal beliefs alone would be sufficient to address occupational strain (Bakker et al., 2023; Mozafari et al., 2024; Nwobodo et al., 2023).

The reported mediation analysis offers a further perspective on the relationship between compassion fatigue and psychological well-being. The summary structural model indicated an indirect statistical association through HLC, which is consistent with the specified model. However, the regression findings show that internal, chance and powerful-others HLC have different relationships with compassion fatigue and well-being. A single summary indirect effect cannot establish the extent to which each dimension contributes to the relationship or whether the separate indirect pathways differ in direction and magnitude. This distinction affects the theoretical conclusion that can be drawn from the data. Maxwell and Cole (2007) showed that cross-sectional mediation analyses can produce biased estimates of the longitudinal processes they are intended to represent. Accordingly, the current indirect association should be interpreted as a statistical pattern consistent with the specified model, rather than proof that compassion fatigue changes HLC, which subsequently changes well-being. Future analyses should model internal, chance and powerful-others HLC as separate mediators, report the specific indirect effects and confidence intervals, and ensure that the measurement model corresponds to the final structural model (Maxwell & Cole, 2007; Mozafari et al., 2024).

The Job Demands–Resources (JD–R) framework provides a useful way to organise these findings. The original model distinguishes job demands, which require sustained effort and may carry psychological costs, from job resources that help workers meet them and support their functioning (Demerouti et al., 2001). Subsequent work has expanded the framework to consider personal resources and the interaction between individual characteristics and work conditions (Bakker et al., 2014, 2023). The negative association between compassion fatigue and well-being is broadly compatible with the health-impairment perspective of JD–R theory. The association between internal HLC and better well-being may also indicate that personal beliefs are relevant to how practitioners experience demanding work. Yet the present study measured neither job demands nor organisational resources directly. It therefore does not establish whether caseload, supervision, staffing or collegial support affected the observed relationships, nor whether these factors buffered the association between compassion fatigue and well-being. The study should be presented as offering theory-informed evidence on selected personal and psychological variables, rather than as a full empirical test of the JD–R process (Bakker et al., 2014, 2023; Demerouti et al., 2001; Garnett et al., 2023; Nwosu et al., 2021).

Taken together, the findings suggest that compassion fatigue is associated with poorer psychological well-being among mental-health practitioners in Makurdi, while internal, chance and powerful-others health-control orientations show different patterns of association with the outcomes studied. The contribution of this study is its examination of these variables together in an under-researched Nigerian setting. Its findings also raise a practical question for future research: how do practitioners' beliefs about personal agency relate to the demands and resources of their work? Existing literature suggests that compassion fatigue is a multifaceted phenomenon shaped by personal and occupational factors, while the JD–R framework highlights the importance of considering workers and their environments together (Bakker et al., 2023; Garnett et al., 2023; Kabunga et al., 2024; Noor et al., 2025). The present data do not show that HLC causes changes in well-being, or that individual resilience can compensate for inadequate organisational support. Rather, they indicate the value of studying personal beliefs and working conditions together, using stronger measurement and longitudinal designs to determine which relationships are stable and which forms of support may be most useful for mental-health practitioners.

Implications for practice and policy

The results support making practitioner well-being a routine part of mental-health service planning. Facilities can begin with practical steps: regular supervision, access to peer consultation, reasonable caseload review and confidential routes to support. These measures should not be framed only as ways to make individual workers more resilient. They also address the conditions under which care is delivered. Research on healthcare workers suggests that occupational strain and worker support deserve attention as linked workforce issues (Nwosu et al., 2021; Vancampfort & Mugisha, 2022). Whether a particular support programme reduces compassion fatigue in Makurdi should be tested rather than assumed.

Training can help practitioners notice signs of secondary stress, manage boundaries and seek support early. Reflective practice, stress-management skills and mindfulness-based approaches may be useful components of continuing professional development; evidence on mindfulness-based stress reduction among nurses and reviews of interventions for compassion fatigue provide a rationale for local evaluation (Ghawadra et al., 2019; Patole et al., 2024). The present study does not test these interventions, and strengthening internal control should not become a way of placing responsibility for poor working conditions on individual staff. Training is most credible when paired with access to supervision, manageable workloads and services for practitioners who need care.

At the policy level, hospitals and professional bodies can incorporate staff well-being into occupational health and service-quality plans. That may include clear referral pathways, confidential access to mental-health care, supervisor training and periodic monitoring of workload and staff distress. Nigeria's wider mental-health policy and legal framework provides a context for strengthening mental-health services, but implementation depends on resources and institutional accountability (Akanni & Edozien, 2023; Federal Ministry of Health, 2024; Oyedijo, 2025). The findings here offer a reason to investigate such measures locally, not proof that any one policy will improve outcomes.

Strengths and Limitations

The study has several strengths. It reports data from 780 practitioners across public, private and mission-based facilities in an under-described Nigerian setting. The analysis considers both compassion fatigue and three distinct health-locus-of-control dimensions, and it uses regression alongside a structural model to examine different aspects of the relationships. The measures draw on instruments with established research histories. The compassion-fatigue form is described as a study-specific adaptation rather than the standard ProQOL-5. The higher-order HLC-orientation specification requires confirmation that the observed measurement structure supports a defensible common factor. Reporting the complete SEM syntax, factor loadings, standard errors, confidence intervals and model diagnostics would improve transparency and reproducibility.

The convenience sample limits generalisability. Participants came from six facilities in one city, and the distribution of professional roles may not reflect the wider workforce. In-person administration and immediate retrieval may also have influenced who participated or how candidly they answered, even though the study describes participation as voluntary. The response rate of 97.5% is high, but it cannot rule out selection or social-desirability bias. Also, the cross-sectional design means the direction of association cannot be established. The structural model does not show that compassion fatigue first changes health-control beliefs and that those beliefs subsequently alter well-being. Longitudinal or repeated-measures research would be needed to assess temporal ordering. An intervention study could examine whether changes in supervision, workload or peer support are followed by changes in compassion fatigue and well-being.

All major constructs were measured by self-report in the same survey, so recall effects and common-method variance may have strengthened some associations. The HLC and WEMWBS pilot alpha values were modest, and adapted response formats may limit direct comparability with published norms. The indirect-effect analysis is described as using 1,000 bootstrap resamples; a larger resampling run could be used to examine stability. The measurement model also depends on confirming item coding and matching the questionnaire versions to the indicators entered into the SEM.

The survey did not directly measure caseload, frequency of exposure to traumatic material, supervision quality, staffing, institutional support or personal trauma history. Any of these could help explain the results. Since data were collected only in Makurdi, the findings should not be generalised to all of Benue State or Nigeria. Future studies should include practitioners across more settings, report facility-level recruitment, examine clustering within facilities where appropriate, and test the three HLC dimensions as separate pathways if mediation remains a central research question.

Conclusion

The study found that higher compassion fatigue was associated with lower psychological well-being among the mental-health practitioners surveyed in Makurdi. Internal health locus of control was associated with more favourable outcomes, while chance and powerful-others orientations showed the opposite pattern in the regression models. The reported structural model also indicated an indirect association through an overall HLC factor, although it cannot establish causality or identify dimension-specific mediation. The most defensible conclusion is that occupational strain and health-control beliefs are related to practitioner well-being and deserve further study alongside workplace conditions.

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