

Compassion Fatigue, Perceived Effectiveness of Artificial Intelligence Tools, and Workload Among Counselors

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Abstract

With the growing use of artificial intelligence tools in the counseling field to improve work efficiency and possibly counteract Compassion Fatigue (CF), this study aimed to explore whether the perceived effectiveness of these tools is related to counselors' Workload (WL) and CF. Correlation and Mediation Analysis were conducted. The findings showed a statistically significant positive correlation between Workload and Compassion Fatigue ($r = 0.59$, $p < 0.001$), but no significant relationship between the perceived effectiveness of AI tools and workload or compassion fatigue. In addition, the Mediation analysis revealed that workload was not a significant mediator for the relationship between perceived effectiveness of AI tools and compassion fatigue, and the model was not supported. These findings imply that other factors might affect this relationship. In addition, the small sample size ($n = 32$) and the use of online self-reporting tools might have influenced the findings.

Keywords: Perceived Effectiveness of AI tools · Compassion Fatigue · Workload · Counselors · Correlation · Mediation Analysis

Counselors are essential as front-line mental health practitioners, walking a thin line between empathetic engagement and the increasing administrative burden. Regular engagement with traumatic experiences of clients puts counselors at risk for compassion fatigue, which has been conceptualized as the “cost of caring” (Figley & Stamm, 2010). Studies have shown that 7-40% of care providers are vulnerable to compassion fatigue, depending on the level of exposure (Stamm, 2010). Among the many predictors, workload has been identified as a consistent predictor of emotional exhaustion and compassion fatigue (Maslach & Leiter, 2016). Mental health professionals have been shown to spend 30-40% of their time on non-clinical activities such as documentation and administrative work (Shanafelt et al., 2016). Empirical evidence has reported moderate to strong correlation coefficients ($r = .50-.70$) between workload and compassion fatigue, establishing workload as a significant occupational risk factor (Figley, 1995; Stamm, 2010).

With growing professional demands, there has been an integration of artificial intelligence (AI) tools in the field of

counseling and healthcare to improve administrative efficiency (Luxton, 2016). Studies have shown that mental health professionals have experienced a 20-50% reduction in documentation time using AI tools (Topol, 2019; APA, 2023). Theoretically, administrative efficiency should lead to a reduction in perceived workload, thus reducing occupational strain. However, the results regarding the reduction in emotional burden are inconsistent, indicating that administrative efficiency gains may not necessarily lead to a reduction in compassion fatigue.

The Compassion Fatigue Theory (Figley, 1995) describes emotional exhaustion as a consequence of prolonged empathic engagement with client suffering. Related theories of emotional regulation propose that suboptimal resource restoration can result in personal distress and depletion. On the other hand, technostress theories propose that computer-based systems could impose cognitive burdens if they are perceived as complex or taxing. Consequently, AI systems could either be seen as job resources, which can indirectly reduce compassion fatigue, or as stressors.

Based on the Job Demands-Resources (JD-R) model (Demerouti et al., 2001), workload is a job demand that is a precursor to burnout outcomes such as compassion fatigue. Perceived effectiveness of AI systems in reducing workload can be seen as a job resource that can help mitigate workload and, consequently, compassion fatigue. Therefore, it is theoretically expected that perceived effectiveness of AI tools would be negatively associated with workload and, in turn, negatively associated with compassion fatigue.

However, empirical studies investigating the perceptions of counselors on the effectiveness of AI in relation to workload

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and compassion fatigue are still limited (Blease et al., 2022). Specifically, the mediating effect of workload between the relationship of perceived effectiveness of AI and compassion fatigue has not been adequately investigated. Hence, the purpose of the current study was to explore the relationships between perceived effectiveness of AI tools, workload, and compassion fatigue, and to examine the mediating effect of workload on the relationship between perceived effectiveness of AI and compassion fatigue.

Review of Literature

There is emerging literature suggesting the use of AI-based documentation and workflow assistance may have the potential to mitigate administrative burden and burnout among healthcare staff. Reviews of the literature have shown that ambient scribes, natural language processing transcription software, large language models, and clinical decision support systems are linked with less time spent documenting, better workflow, and lower burnout among healthcare staff (Ko et al., 2025; Sarraf & Ghasempour, 2025). However, the evidence base for these studies is small, short-term, and heterogeneous.

These studies also show that the use of ambient AI scribes is associated with decreases in cognitive task load and work exhaustion, as well as improved ratings of note quality and usability (Shah et al., 2025). Another study on the use of AI-based behavioral health platforms has also shown associations with improved engagement and symptoms as well as considerable decreases in documentation time (Sadeh-Sharvit et al., 2023). These studies suggest that AI can help improve administrative efficiency as well as engagement.

Besides documentation, digital interventions like AI chatbots and mobile apps have demonstrated inconsistent, yet promising, results in terms of their impact on anxiety, depression, burnout, and professional fulfillment of healthcare staff (Han et al., 2024; Deriglazov et al., 2025). While there have been positive effects noted for personal fulfillment and self-efficacy, results for compassion fatigue have been inconsistent. Most digital interventions have demonstrated good acceptability, but inconsistent adherence and long-term outcome data.

However, it is important to note that, despite these promising results, concerns about safety, over-reliance, misinformation, usability, and ethical concerns remain dominant. The analysis of editorials indicates that, while there may be gains in terms of efficiency, there is a paradoxical effect of increasing caseload demands, which may cause burnout through what is described as the “efficiency paradox” (VanHara & Hage, 2025). Other reviews also point out concerns about privacy, bias, regulatory fragmentation, and unequal access (Laymouna et al., 2023).

Most importantly, although previous research has centered on physicians and healthcare systems, there has been a lack of empirical investigation into counselors’ perceptions of the effectiveness of AI or the mediating role of workload in the AI and compassion fatigue relationship. Previous research tends to measure time saving or burnout outcomes in isolation, rather than examining the structural link between AI and

compassion fatigue via workload. There is a need for research to establish if counselors’ perceptions of AI effectiveness actually translate to a decrease in compassion fatigue via a change in workload.

Hypotheses

H1: There will be a significant negative relationship between perceived effectiveness of AI tools and workload among counselors.

H2: There will be a significant negative relationship between perceived effectiveness of AI tools and compassion fatigue among counselors.

H3: There will be a significant positive relationship between workload and compassion fatigue among counselors.

H4: Workload will significantly mediate the relationship between perceived effectiveness of AI tools and compassion fatigue.

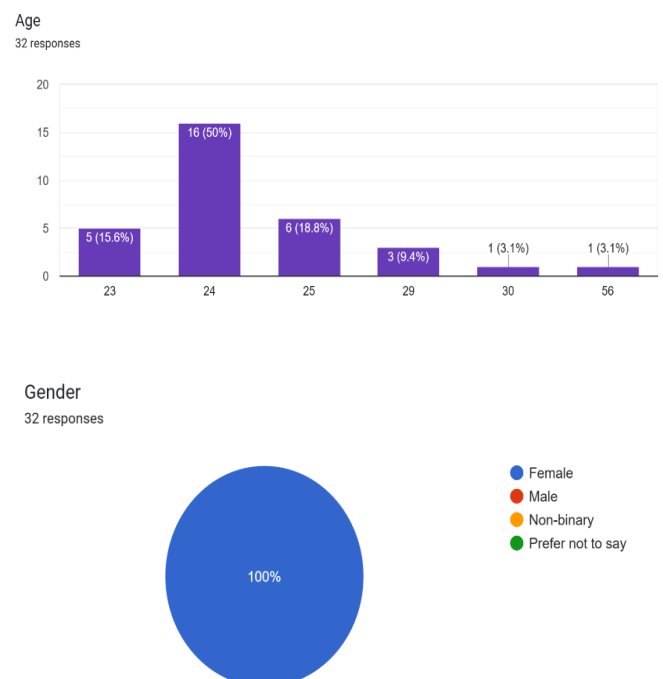
Methodology

Design

The research design of the study was a cross-sectional correlational design, which aimed to determine the correlations between perceived AI tool effectiveness, workload, and compassion fatigue. In addition, mediation analysis was performed to determine if workload mediated the link between perceived AI tool effectiveness and compassion fatigue.

Sample

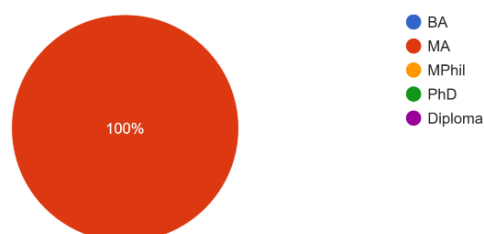
The participants were 32 female counselors aged 23-56 years. As illustrated in Figure 1a, the majority of the participants were 24 years old ($n = 16$), followed by 25 ($n = 6$) and 23 ($n = 5$). Three participants were 29 years old, and one participant each was 30 and 56 years old. The gender representation of the participants is illustrated in Figure 1b. All the participants were female.



As illustrated in Figure 1c, all the participants possessed a Master's degree in Psychology or related fields ($n = 32$). The primary work environments of the participants are illustrated in Figure 1d. The work environments included schools ($n=10$), private practice ($n = 6$), NGOs ($n = 5$), tele-counseling platforms ($n = 3$), colleges and universities ($n = 3$), and one participant each from hospitals, corporate offices, and mental health organizations.

Highest Qualification

32 responses



Primary Work Setting

32 responses

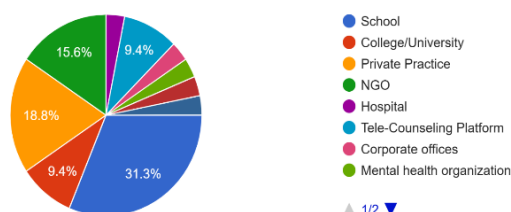
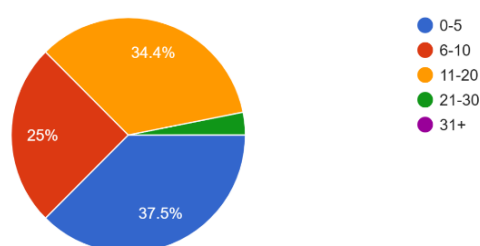


Figure 1e depicts the number of clients seen by the participants on a weekly basis. Of the total number of participants, 12 participants reported seeing 0-5 clients per week, eight reported seeing 6-10 clients, 11 reported seeing 11-20 clients, and one reported seeing 21-30 clients per week. None of the participants reported seeing more than 30 clients per week.

Approx. clients per week

32 responses



The recruitment of participants took place using the snowball sampling technique. The criteria for selecting the participants included being counselors aged 21 years and above and being actively involved in the provision of counseling services and being aware of the use of AI-based tools for professional purposes.

Measures

Perceived Effectiveness of AI Tools: Perceived Effectiveness of AI Tools was assessed using a 9-item self-report questionnaire with a 5-point Likert scale ranging from 1 (Never) to 5 (Very Often), which evaluated the perceived

effectiveness of AI-based tools in work-related activities. The items were designed after a literature review of AI implementation in mental health and healthcare environments to ensure relevance. In the current study, the scale had low internal consistency (Cronbach's $\alpha = .44$), suggesting a lack of item homogeneity.

Workload: Workload was evaluated using a 5-item self-report questionnaire with a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), which evaluated the perceived mental, emotional, and administrative workload. The items were designed after established theoretical frameworks of occupational stress and job demands. The scale had acceptable internal consistency in the current study (Cronbach's $\alpha = .75$).

Compassion Fatigue: Compassion Fatigue was assessed using a 9-item scale that was rated on a 5-point Likert scale, ranging from 1 (Never) to 5 (Very Often). The scale was designed with reference to theoretical frameworks on compassion fatigue and secondary traumatic stress. The scale had good internal consistency (Cronbach's $\alpha = .83$).

Procedure

The study utilized an online survey platform, and the sampling method was snowball sampling. Once the link to the survey was accessed, the participants were required to read an informed consent form that highlighted the purpose of the study, the nature of participation, and the estimated time required for completion. Only those who electronically signed the consent form were able to proceed with the questionnaire. The questionnaire consisted of demographic information followed by the study measures.

Ethical Considerations

The survey was voluntary, and the participants gave their informed consent electronically before the start of the survey. The participants were informed about the purpose of the survey, the nature of their participation, and the approximate time required to complete the survey. They were also informed that their participation was entirely voluntary and that they could withdraw at any time before submission without penalty.

No personal information was gathered, and the answers were anonymous to maintain confidentiality. The participants were also made aware that they could stop the survey at any point by closing the survey form. Since the research was of minimal risk and did not involve sensitive clinical procedures, there were no potential psychological harms. The contact information of the researcher was also included in case the participants had any questions about the study.

The research followed all the necessary guidelines for ethical studies involving human subjects.

Data Analysis

Pearson's product moment correlation was used to determine the relationship between the variables. Mediation analysis was used to determine if workload would act as a mediator between the perceived effectiveness of AI and compassion fatigue.

Results and Discussion

Results

The mean values for Work Load, Compassion Fatigue, and AI Use were 2.73, 3.23, and 2.19, respectively, with standard deviations of 0.87, 0.70, and 0.69, as shown in Table 1. The ranges were 3.71 for Work Load (1.29-5.00), 2.40 for Compassion Fatigue (2.00-4.40), and 2.60 for AI Use (1.10-3.70). The kurtosis of all variables' values lay within ± 2 (Work Load = 0.04; Compassion Fatigue = -1.17; AI Use = -0.85), showing normality.

Table 1

Descriptive Statistics for Work Load, Compassion Fatigue and AI Use

Descriptive Statistics			
	AI USE	WORKLOAD	COMPASSION FATIGUE
Valid	32	32	32
Missing	0	0	0
Mean	2.73	3.23	2.19
Std. Deviation	0.87	0.70	0.69
Skewness	0.55	-0.11	0.28
Std. Error of Skewness	0.41	0.41	0.41
Kurtosis	0.04	-1.17	-0.85
Std. Error of Kurtosis	0.81	0.81	0.81
Range	3.71	2.40	2.60
Minimum	1.29	2.00	1.10
Maximum	5.00	4.40	3.70

From Table 2, there were no significant relationships between AI Use and Work Load ($r = -0.07$, $p = 0.70$) or Compassion Fatigue ($r = 0.24$, $p = 0.19$). However, there was a significant positive relationship between Work Load and Compassion Fatigue ($r = 0.59$, $p < 0.001$).

Table 2

Pearson's Correlation between AI Use and Work Load, AI Use and Compassion Fatigue and Work Load and Compassion Fatigue

Pearson's Correlations				
Variable		AI USE	WORKLOAD	COMPASSION FATIGUE
1. AI USE	Pearson's r	—		
	p-value	—		
2. WORKLOAD	Pearson's r	−0.07	—	
	p-value	0.70	—	
3. COMPASSION FATIGUE	Pearson's r	0.24	0.59	—
	p-value	0.19	< .001	—

Based on Table 3 (refer page 5), the result of mediation analysis showed that there was a significant direct effect of AI Use on Compassion Fatigue (Estimate = 0.22, $p = 0.04$). Nevertheless, the indirect effect of AI Use on Compassion Fatigue via Work Load was not significant (Estimate = -0.03, $p = 0.69$). In addition, the total effect of AI Use on Compassion Fatigue was also not significant (Estimate = 0.19, $p = 0.17$). This means that Work Load did not mediate the relationship between AI Use and Compassion Fatigue, and the proposed model of mediation was not supported.

Discussion

This study investigated the relationship between the perceived effectiveness of AI tools, workload, and compassion fatigue among counselors, and further explored the mediation effect of workload between the perceived effectiveness of AI tools and compassion fatigue among counselors. This study contributes to the new streams of literature on the topic of

counselor well-being within the backdrop of the increasing use of technology within the mental health field.

The correlation analysis did not show any significant association between the use of AI tools and workload. This indicates that the use of AI tools might have little to no effect on the observed workload of counselors. As found in previous studies, digital tools might enhance efficiency in the field of documentation or planning, but they may not reduce the job demands in the field of helping services (Bickmore et al., 2018). As found in the Technology Acceptance Model (TAM), the efficiency or usability of the technology does not lead to reduced effort until the technology acts as a substitute for the demands of the tasks (Davis, 1989). In the field of counseling, AI tools work as supplements to the helping services, which might be the reason for the absence of significant association.

Conversely, the findings of the study showed no significant correlation between the usage of AI tools and compassion fatigue. Compassion fatigue has long been established to be connected to the system of empathic responding to trauma in clients rather than task or technology-related factors (Figley, 1995; Stamm, 2010). Previous studies have established that the impact of secondary traumatic stress and emotional exhaustion in counselors is greater in relation to the client contact rather than the administrative task (Craig & Sprang, 2010). The insignificance of AI tools in addressing emotional exposure may be attributed to the findings that the usage of AI tools does not affect compassion fatigue.

Conversely, there was a positive relationship between workload and compassion fatigue, which was significant and positive, suggesting that counselors with higher workloads had more compassion fatigue. This resonates with existing literature, which found that large workloads, pressure for time, and administrative tasks predicted the development of burnout and compassion fatigue in mental health professionals (Maslach & Leiter, 2016; Rupert & Morgan, 2005). In addition, the JD-R model clarifies the relationship between the two concepts since it posits that employees experience burnout or emotional exhaustion, such as compassion fatigue, in situations with lack of job resources, such as workload (Demerouti et al., 2001).

Analysis of the mediation test showed that the workload did not mediate the relationship between the effectiveness of AI tools and compassion fatigue. Although the direct effect between the effectiveness of AI tools and compassion fatigue was found to be significant, the indirect effect was not significant, and the total effect was also not supported. It was concluded that the impact of AI tools on compassion fatigue was not mediated by the changes in the workload. In regard to the Conservation of Resources (COR) Theory, stress outcomes can be generated once individuals experience the loss or danger of emotional and psychological resources (Hobfoll, 1989). Although the use of AI tools may be efficient to enhance the efficiency of tasks, it may lack the potential to sustain the emotional resources depleted during empathic interaction to reduce the phenomenon of compassion fatigue.

Thus, it appears that, according to the results, a single factor such as technology may be inadequate to countercompassion

Table 3

Mediation Analysis for Work Load, Compassion Fatigue and AI Use

Parameter estimates ▼

Direct effects

						95% Confidence Interval		
			Estimate	Std. Error	z-value	p	Lower	Upper
AI USE	→	COMPASSION FATIGUE	0.22	0.11	2.09	0.04	0.01	0.43

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Indirect effects ▼

									95% Confidence Interval	
					Estimate	Std. Error	z-value	p	Lower	Upper
AI USE	→	WORKLOAD	→	COMPASSION FATIGUE	-0.03	0.09	-0.40	0.69	-0.20	0.14

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

Total effects

						95% Confidence Interval		
			Estimate	Std. Error	z-value	p	Lower	Upper
AI USE	→	COMPASSION FATIGUE	0.19	0.14	1.38	0.17	-0.08	0.46

Note. Delta method standard errors, normal theory confidence intervals, ML estimator.

fatigue. Indeed, as suggested by previous research, it appears that the issue of counselor well-being could be more effectively addressed through a combination of factors such as workload, supervision, peer support, or opportunities for cognitive recovery, which have been found to have a more critical bearing on counselor well-being (Bride, 2007; Stamm, 2010).

Conclusion

This research investigated the correlation between workload, compassion fatigue, and the perceived effectiveness of AI tools (PEAI) among 32 Indian counselors. The results of the correlation analysis showed that there was a significant positive correlation between workload and compassion fatigue, indicating that there was a relationship between high workload and compassion fatigue. However, the perceived effectiveness of AI tools did not have a significant relationship with workload and compassion fatigue.

The mediation analysis also showed that workload did not significantly mediate the relationship between PEA and compassion fatigue. Despite finding a significant direct effect of PEA on compassion fatigue, the indirect effect via workload was not supported, and the total effect was also not significant. Taken together, the results suggest that perceived AI effectiveness may not be a strong predictor of counselor well-being relative to workload.

However, there are a few limitations that need to be taken into consideration. The fact that the sample is relatively small and region-specific can limit the power of the statistical analysis. The cross-sectional nature of the study does not allow for the exploration of causality, and the use of self-report measures can be susceptible to response bias. In addition, all the measures used in the study are self-developed and have not been formally validated for content. Although the internal consistency of the workload and compassion fatigue measures

was satisfactory, the fact that the internal consistency of the AI effectiveness measure was relatively low may have affected the strength of the observed associations. Finally, the study examined perceived AI effectiveness, not actual AI use, and did not control for organizational factors such as support, supervision, and coping strategies that may affect workload and compassion fatigue.

Nonetheless, the results highlight the significance of workload management in the context of counseling. Although AI technology could improve administrative productivity, it is unclear whether perceived effectiveness alone would be adequate to alleviate emotional workload.

Future studies should include larger and more varied samples, longitudinal designs, and standardized research instruments. Studying real-world AI adoption and using qualitative research approaches could offer a richer understanding of counselors' experiences with emotional labor. Future studies could also extend the generalizability of these results to other occupations with high levels of emotional labor.

Declarations

Conflicts of interest: The authors have no conflicts of interest.

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