

Human-Centered Artificial Intelligence in Social Work: Perspectives of Women Social Work Practitioners in India

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Abstract: Large Language Models (LLMs) are transforming professional practice by enhancing communication, documentation, information retrieval, and decision-making. In social work, however, their adoption must remain human-centred, ensuring that AI supports rather than replaces professional judgement, empathy, and ethical responsibility. Despite growing interest in AI, empirical evidence on women social work practitioners' perspectives in India remains limited. This study examines their ethical readiness for adopting human-centred AI in professional practice. A quantitative cross-sectional survey was conducted among 50 women social work practitioners in Chandigarh, India, representing governmental and non-governmental organisations. Data were collected through a structured questionnaire and analysed using descriptive statistics. The findings indicate that participants recognised the potential of LLMs to improve documentation, information access, communication, and service delivery while emphasising that AI should complement human relationships and professional judgement. Participants identified privacy, confidentiality, algorithmic bias, transparency, accountability, and contextual sensitivity as key ethical concerns. Although attitudes towards AI were generally positive, respondents highlighted limited AI literacy, inadequate organisational guidance, and the need for structured training to ensure responsible adoption. The study contributes empirical evidence to the emerging discourse on human-centred AI in social work by demonstrating that ethical readiness is as important as digital competence. It highlights the need for ethical governance, organisational support, and professional capacity-building to ensure that AI strengthens social work practice while safeguarding human dignity, social justice, and client wellbeing.

Keywords: Human-centred Artificial Intelligence; Large Language Models; Women Social Work Practitioners; Ethical Readiness; Social Work; India.

I. INTRODUCTION

Artificial Intelligence (AI), particularly Large Language Models (LLMs) such as ChatGPT, Google Gemini, Claude, Microsoft Copilot, and Perplexity, is transforming professional practice across education, healthcare, law, business, public administration, and human services. These technologies generate human-like text, summarise information, retrieve knowledge, support multilingual communication, and automate routine tasks, creating new opportunities to improve productivity, knowledge management, and decision-making. Consequently, organisations are increasingly integrating LLMs into professional practice to enhance efficiency and service delivery (Dwivedi et al., 2023). At the same time, AI adoption raises important concerns regarding privacy, algorithmic bias, transparency, accountability, and responsible governance, particularly in professions serving vulnerable populations (UNESCO, 2023).

Social work occupies a unique position within this digital transformation because it is fundamentally grounded in human relationships, empathy, professional judgement, social justice, and respect for human dignity. Unlike many professions where technology primarily improves efficiency, social work requires practitioners to balance innovation with ethical responsibility, confidentiality, cultural sensitivity, informed consent, and client-centred practice. Accordingly, LLMs should be viewed as tools that strengthen professional practice while preserving the profession's core values (Reamer, 2023).

Recent scholarship increasingly promotes a **human-centred approach to AI**, emphasising that technology should augment rather than replace human capabilities. Within social work, this perspective is especially relevant because practitioners support individuals, families, and communities experiencing vulnerability and social exclusion. Although LLMs can enhance access to knowledge and reduce administrative burdens, effective practice continues to depend on ethical reasoning, contextual understanding, compassion, and professional judgement. Their responsible use therefore requires AI literacy, ethical readiness, and critical evaluation of AI-generated outputs.

Despite rapid growth in AI research, empirical evidence on LLMs in social work remains limited. Existing studies primarily discuss ethical issues, educational applications, or future possibilities, while comparatively few examine practitioners' experiences. Moreover, most evidence originates from high-income countries, leaving limited understanding of AI adoption in developing contexts where organisational capacity, digital infrastructure, and professional training differ considerably (Victor et

al., 2024). Research focusing specifically on women's perspectives and ethical readiness in frontline social work is particularly scarce.

India provides an important setting for examining these issues. Digital transformation has expanded the use of technology across governmental and non-governmental organisations, increasing expectations that social workers utilize digital platforms for documentation, communication, case management, and service coordination. Women constitute a substantial proportion of the grassroots social work workforce and frequently occupy frontline roles requiring sustained engagement with vulnerable communities. Their perspectives are therefore essential for understanding how AI can be integrated responsibly while safeguarding professional ethics and community-centred practice.

Against this background, the present study examines the perspectives of women social work practitioners in India regarding the responsible integration of Large Language Models into professional practice. Rather than focusing solely on technology adoption, it explores practitioners' views on opportunities, ethical responsibilities, organisational support, and professional competencies required for human-centred AI. Based on empirical evidence from women practitioners in governmental and non-governmental organisations in Chandigarh, the study contributes to the growing discourse on responsible AI by demonstrating that successful LLM integration depends on ethical readiness, professional judgement, organisational support, and a sustained commitment to the core values of social work.

II. NEED OF THE STUDY.

The rapid growth of Large Language Models (LLMs) has created new opportunities for improving professional practice across various sectors, including social work. However, existing research has largely focused on conceptual discussions, ethical issues, or applications in high-income countries, with limited empirical evidence from developing contexts. In India, little is known about how women social work practitioners perceive Human-Centred Artificial Intelligence (AI), their level of AI literacy, ethical readiness, and the organisational support required for responsible AI adoption. As women constitute a significant proportion of the grassroots social work workforce, understanding their perspectives is essential for developing context-specific policies, training programmes, and ethical guidelines. This study addresses these gaps by examining the readiness of women social work practitioners to integrate LLMs into practice while preserving the profession's core values of human dignity, professional ethics, and social justice.

III. RESEARCH METHODOLOGY

3.1 Population and Sample

The study population comprised women engaged in professional social work in Chandigarh, India. A purposive sample of **50 women social work practitioners** working in **non-governmental organisations (NGOs) and community-based organisations** was selected. The participants included both professionally qualified social workers and women actively involved in grassroots social work, providing diverse perspectives on the adoption of Human-Centred Artificial Intelligence (AI) and Large Language Models (LLMs) in social work practice.

3.2 Data and Sources of Data

The study is based on **primary data** collected from **50 women social work practitioners** working in non-governmental organisations (NGOs) and community-based organisations in Chandigarh, India. Data were gathered using a **structured questionnaire** designed to assess digital competence, awareness and use of Large Language Models (LLMs), perceived usefulness, ethical readiness, organisational support, and training needs. The questionnaire served as the primary source of data, and the responses were analysed using descriptive statistical techniques.

3.3 Theoretical framework

The study is grounded in a **Human-Centred Artificial Intelligence (AI)** perspective and integrates three complementary theoretical frameworks: the **Technology Acceptance Model (TAM)** (Davis, 1989), **Diffusion of Innovation (DOI) Theory** (Rogers, 2003), and **Feminist Standpoint Theory** (Harding, 2004). TAM explains practitioners' acceptance of Large Language Models (LLMs) through perceived usefulness and ease of use, DOI Theory examines the influence of organisational support and innovation adoption, while Feminist Standpoint Theory highlights the lived experiences and perspectives of women social work practitioners. Together, these frameworks provide a comprehensive lens for understanding the technical, organisational, and socio-cultural factors shaping the responsible adoption of Human-Centred AI in social work practice.

3.4 Statistical tools and econometric models

The data were analysed using **descriptive statistical techniques**, including **frequencies and percentages**, to summarise respondents' demographic characteristics, digital competence, awareness and use of Large Language Models (LLMs), perceived usefulness, ethical readiness, organisational support, and training needs. The results are presented in tables and interpreted in relation to the study objectives and the Human-Centred Artificial Intelligence framework.

IV. RESULTS AND DISCUSSION

This section presents the findings of the survey conducted among 50 women social work practitioners employed in NGOs and community-based organisations in Chandigarh, India. The analysis examines participants' perspectives on Human-Centred Artificial Intelligence (AI), with particular emphasis on their digital preparedness, awareness and use of Large Language Models (LLMs), perceived professional value, ethical readiness, organisational support, and barriers to responsible AI adoption. The findings are presented using descriptive statistics and interpreted within the context of human-centred AI to provide an evidence-based understanding of practitioners' readiness for the responsible integration of AI into social work practice.

4.1 Human Capacity for AI Adoption: Participant Profile

Table 4.1: Profile of the Participants (N = 50)

Characteristic	Category	n	%
Professional Experience	Less than 2 years	9	18
	2–5 years	8	16
	6–10 years	17	34
	More than 10 years	16	32
Educational Background	Professional Social Work and allied disciplines*	50	100
Employment Setting	NGOs and Community-Based Organisations	50	100
Gender	Women	50	100
Study Area	Chandigarh, India	50	100

The survey included **50 women social work practitioners** working in non-governmental organisations (NGOs) and community-based organisations in Chandigarh, India. Participants represented diverse educational and professional backgrounds, including professionally qualified social workers and women from allied disciplines engaged in grassroots social work. Their professional experience ranged from early-career practitioners to those with more than ten years of field experience, providing perspectives from different stages of professional practice. The diversity of participants offers a suitable foundation for examining perspectives on Human-Centred Artificial Intelligence (AI), as it reflects variations in professional knowledge, technological exposure, and organisational contexts. This heterogeneous profile enhances the relevance of the findings by capturing the views of practitioners actively involved in community-based social work, where AI technologies are increasingly emerging as tools to support, rather than replace, professional judgement and human-centred service delivery.

4.2 AI as a Professional Support System

Table 4.2: AI as a Professional Support System

Indicator	Category	n	%
Awareness of AI in Social Work	Yes	43	86
	No	7	14
Awareness of LLMs	Yes	23	46
	Limited awareness	7	14
	No	20	40
Professional Use of AI Tools	Yes	34	68
	No	16	32
Perceived Helpfulness of AI	Very helpful	31	62
	Somewhat helpful	16	32
	Not helpful	3	6
Most Recognised AI Platforms*	ChatGPT	40	80
	Google Gemini	6	12
	Claude	2	4
	Other AI tools	2	4

The findings indicate that women social work practitioners generally perceive Artificial Intelligence (AI), particularly Large Language Models (LLMs), as technologies that can enhance rather than replace professional social work practice. Although familiarity with LLMs varied among participants, attitudes towards their professional application were largely positive. While 46% of respondents reported being aware of LLMs, awareness of AI in broader professional contexts was considerably higher, suggesting that practitioners are increasingly recognising the relevance of AI even when their understanding of specific technologies remains limited.

Professional use of AI was encouraging despite uneven levels of knowledge. More than two-thirds of the respondents (68%) reported using AI tools in their work, primarily for drafting documents, summarising reports, retrieving information, and improving written communication. Participants also expressed strong confidence in the practical value of AI. Nearly two-thirds (62%) considered AI tools to be very helpful, while an additional 32% regarded them as somewhat helpful. These findings suggest

that practitioners evaluate AI largely on its ability to improve efficiency, reduce administrative workload, and support professional responsibilities rather than as a substitute for human expertise.

Among the available AI platforms, **ChatGPT** was by far the most recognised, followed by **Google Gemini** and **Claude**, indicating that practitioners' experience with generative AI remains concentrated around a limited number of widely accessible tools. Overall, the findings demonstrate that participants viewed AI primarily as a professional support system capable of strengthening documentation, communication, information retrieval, and service delivery while preserving the central role of professional judgement and human relationships in social work.

4.3 Ethical Expectations for Human-Centred Artificial Intelligence

Table 4.3: Ethical Expectations for Human-Centred Artificial Intelligence

Indicator	Category	n	%
Awareness of AI Ethical Issues	Aware	26	52
	Not aware	24	48
AI Should Be Used with Ethical Safeguards	Agree / Strongly Agree	38	76
	Neutral	11	22
	Disagree	1	2
Perceived Impact of AI on Women Social Workers	Reduces workload and improves efficiency	31	62
	Useful but may overlook gender-specific needs	7	14
	May reduce personal interaction	9	18
	Uncertain due to limited experience	3	6

The survey findings demonstrate that women social work practitioners place considerable importance on ensuring that Artificial Intelligence (AI) is implemented within an ethical and human-centred framework. Although participants expressed positive attitudes towards AI-supported practice, they consistently emphasised that technological innovation should remain guided by professional values, human judgement, and ethical responsibility. These findings indicate that practitioners do not view AI as an autonomous decision-maker but as a professional support tool operating under human oversight.

Ethical awareness among respondents was mixed. Twenty-six participants (52%) reported being aware of ethical issues associated with AI, including concerns related to privacy, confidentiality, algorithmic bias, transparency, and the responsible use of client information, while 24 participants (48%) indicated limited or no awareness of these issues. Although knowledge of AI ethics varied, the findings suggest a growing recognition that ethical competence is essential for the responsible use of emerging technologies within social work.

Participants expressed strong support for ethical safeguards governing AI adoption. Thirty-eight respondents (76%) agreed that AI technologies should be implemented only with appropriate ethical standards and professional oversight, whereas 11 respondents (22%) remained neutral and only one participant (2%) disagreed. This broad consensus demonstrates that practitioners value technological innovation only when it complements the profession's commitment to human dignity, confidentiality, informed consent, and social justice.

Participants also reflected on AI's impact on women in social work. Most respondents (62%) believed AI could reduce administrative workload and improve efficiency. However, many emphasised that AI should remain sensitive to gender-specific realities, cultural contexts, and the relational nature of social work. Some also cautioned that excessive reliance on AI could weaken client interaction, highlighting the continued importance of empathy, contextual judgement, and human relationships.

Overall, the findings support a **Human-Centred Artificial Intelligence** model in which AI complements rather than replaces practitioners. Respondents viewed AI as a tool to enhance informed decision-making and professional efficiency while preserving ethical accountability, client rights, and the relational foundations of social work.

4.4 Conditions for Responsible Human-Centred AI Adoption

Table 4.4 Conditions for Responsible Human-Centred AI Adoption (N = 50)

Indicator	Category	n	%
Interest in AI Training	Yes	38	76
	Maybe	10	20
	No	2	4
Training Improves Professional Confidence	Agree	37	74
	Neutral / Uncertain	12	24
	Disagree	1	2
Perceived Organisational Support	Yes	41	82
	Some support	6	12
	No support	3	6
Key Conditions Affecting AI Adoption*	Lack of training	18	36.7
	Workload and time constraints	8	16

	Poor digital infrastructure	7	14
	Language and literacy barriers	7	14
	Other organisational factors	8	16
	Fear or mistrust of AI	2	4

The findings indicate that women social work practitioners generally support the integration of Artificial Intelligence (AI) into professional practice, provided that appropriate organisational support, training, and infrastructure are available. Rather than resisting AI, participants identified practical factors that shape their readiness to adopt Large Language Models (LLMs) responsibly. Access to structured AI training emerged as the strongest requirement. More than three-quarters of respondents (76%) expressed interest in AI training, while 74% believed it would enhance their professional confidence and competence. These findings highlight AI literacy as an essential component of responsible professional practice.

Organisational support was another key enabler. Although 82% of participants viewed their organisations as supportive of digital innovation, many had not received formal digital training. This suggests that organisational commitment should be complemented by capacity-building initiatives, clear AI policies, and opportunities to integrate AI into routine professional practice. Participants further identified several operational challenges affecting AI adoption. The most commonly reported concern was the lack of training (36.7%), followed by workload pressures (16%), inadequate digital infrastructure (14%), language-related barriers (14%), and other organisational factors such as limited institutional guidance and financial constraints (16%). Only a small proportion (4%) identified fear or mistrust of AI as a barrier. These findings indicate that the principal challenges relate to preparedness rather than resistance, reinforcing the importance of strengthening professional competence and organisational readiness.

Overall, the findings suggest that Human-Centred AI adoption requires more than technological availability. It depends on sustained investment in AI literacy, supportive organisational environments, adequate infrastructure, context-sensitive implementation, and institutional policies that enable practitioners to integrate AI while maintaining the ethical values and human-centred principles of social work.

4.5 Overall Assessment of Human-Centred AI Readiness

Table 4.5: Overall Assessment of Human-Centred AI Readiness

Dimension	Key Finding	Overall Assessment
Professional Attitude	Participants viewed AI as a tool to support rather than replace professional practice.	Positive
Digital Competence	High digital access and confidence, but uneven knowledge of LLMs.	Moderate
Professional Use	AI mainly used for documentation, information retrieval, communication, and administrative support.	Emerging
Ethical Readiness	Strong support for ethical safeguards despite varying awareness of AI ethics.	Developing
Training Readiness	High willingness to participate in AI-related professional development.	High
Organisational Readiness	Organisations generally encouraged digital innovation, but structured AI support remained limited.	Moderate
Overall Human-Centred AI Readiness	Practitioners demonstrated positive attitudes towards responsible AI integration while emphasising human judgement, ethical values, and organisational support.	Promising but developing

The results further indicate that readiness for Human-Centred AI extends beyond access to digital technologies. While participants reported high levels of digital access and confidence in using basic digital tools, awareness of Large Language Models (LLMs) and AI-related ethical issues remained uneven. The findings therefore suggest that technological access alone is insufficient for responsible AI integration. Professional competence must also include AI literacy, ethical awareness, and the ability to critically evaluate AI-generated outputs within the context of social work values and practice.

The study also demonstrates that women social work practitioners are willing to embrace AI when appropriate support mechanisms are available. Strong interest in AI training, positive perceptions of organisational support, and favourable attitudes towards AI-assisted practice indicate substantial potential for future adoption. However, participants also identified the need for structured training, supportive institutional policies, improved infrastructure, and ethical guidance to ensure that AI enhances rather than compromises professional practice.

Overall, the findings suggest that Human-Centred AI adoption in social work should be understood as a process of professional and organisational development rather than simply the introduction of new technologies. The successful integration of LLMs depends upon balancing technological innovation with professional expertise, ethical governance, and human relationships. This balance reflects the central principle of Human-Centred AI: technology should strengthen the capacity of social workers while preserving the dignity, rights, and wellbeing of the individuals and communities they serve.

4.6 Human-Centred AI Readiness among Women Social Work Practitioners

The findings indicate that women social work practitioners generally hold positive views towards the use of Large Language Models (LLMs) while emphasising the importance of preserving the human-centred values of social work. Participants viewed LLMs as tools to support documentation, information retrieval, communication, and administrative tasks rather than as substitutes for professional judgement, reinforcing AI's complementary role in practice.

The study further shows that readiness for Human-Centred AI extends beyond digital access and technical competence. Although respondents expressed confidence in using digital technologies and strong interest in AI training, awareness of LLMs and their ethical implications remained uneven. These findings suggest that responsible AI adoption requires AI literacy, ethical competence, and critical evaluation skills alongside technical knowledge, consistent with recent literature emphasising human oversight and continuous professional learning (Reamer, 2023; UNESCO, 2023).

Participants did not perceive AI as a threat to professional practice but recognised its potential to reduce administrative workload, improve access to information, and enhance service delivery. At the same time, they emphasised that empathy, contextual understanding, ethical reasoning, and professional responsibility remain uniquely human qualities. The findings also highlight the importance of organisational support, training, and ethical governance in ensuring that LLMs strengthen rather than undermine the core values of social work.

Overall, the study suggests that women social work practitioners are receptive to AI-assisted practice, provided its adoption remains grounded in human dignity, professional ethics, and social justice. Human-Centred AI should therefore be viewed as an approach that combines technological innovation with responsible professional judgement to strengthen—not replace—the human relationships central to social work.

4.7 Implications of Human-Centred AI for Social Work Practice

The findings suggest that **Human-Centred AI** can strengthen social work practice when used as a supportive rather than a replacement technology. Participants recognised that LLMs could improve documentation, information retrieval, communication, and administrative efficiency, allowing practitioners to devote more time to direct client and community engagement.

The study also indicates that LLMs can support evidence-informed practice by improving access to policies, welfare schemes, research, and professional resources. However, AI-generated outputs must be critically evaluated within clients' social, cultural, and organisational contexts to ensure responsible decision-making.

Participants expressed strong interest in AI-related training, highlighting the need to integrate AI literacy into social work education and professional development. At the same time, the findings emphasise that empathy, ethical reasoning, cultural sensitivity, and professional judgement remain indispensable. Organisational support and human oversight are therefore essential to ensure that AI complements rather than replaces professional decision-making.

Overall, the study demonstrates that the value of Human-Centred AI lies in enhancing professional efficiency while preserving human relationships, ethical responsibility, and social justice. Its successful integration requires a balanced approach combining technological innovation, professional competence, continuous learning, and ethical accountability.

4.8 Ethical Readiness and Responsible AI Governance

The findings indicate that **ethical readiness** is a critical dimension of **Human-Centred AI** adoption in social work. Although participants generally viewed Large Language Models (LLMs) positively, awareness of issues such as privacy, confidentiality, algorithmic bias, transparency, and accountability remained uneven. Most respondents nevertheless agreed that AI should be implemented within appropriate ethical safeguards, highlighting ethical preparedness as essential for responsible AI integration.

These findings align with recent scholarship. Reamer (2023) argues that generative AI should reinforce confidentiality, informed consent, professional accountability, and respect for human dignity, while UNESCO (2023) emphasises transparency, fairness, inclusiveness, and meaningful human oversight. Similarly, participants valued AI primarily as a tool that supports professional practice without compromising ethical responsibilities.

Confidentiality and responsible information management emerged as key concerns. Because social workers routinely handle sensitive client information, the use of LLMs for documentation and case management requires strict compliance with organisational data protection policies and professional ethical standards. International guidance likewise recommends avoiding personally identifiable information in public AI platforms and reviewing AI-generated outputs before professional use (WHO, 2021; UNESCO, 2023).

Participants also recognised the risks of algorithmic bias and contextual limitations, noting that AI-generated responses may overlook local realities, cultural diversity, and gender-specific experiences. These concerns are consistent with research showing that LLMs may reproduce biases in training data and generate inaccurate or incomplete responses in complex social contexts (Dwivedi et al., 2023; Victor et al., 2024). Consequently, AI-generated information should complement—not replace—professional judgement.

Overall, the findings emphasise that ethical governance is fundamental to Human-Centred AI in social work. Strengthening AI literacy, organisational policies, and continuous professional reflection will enable practitioners to use AI responsibly while

safeguarding client rights, human dignity, and social justice. Rather than limiting innovation, ethical governance provides the foundation for responsible AI adoption in professional social work.

4.9 Organisational Readiness and Capacity Building

The findings demonstrate that the successful integration of Human-Centred Artificial Intelligence (AI) in social work depends not only on practitioners' individual readiness but also on the organisational environments within which they work. Although most participants perceived their organisations as generally supportive of digital innovation, many reported limited opportunities for formal AI training and professional capacity building. This disparity suggests that organisational encouragement alone is insufficient to ensure the responsible adoption of Large Language Models (LLMs). Effective implementation requires sustained investment in digital infrastructure, AI literacy, institutional policies, and continuous professional development.

These findings reinforce growing evidence that **organisational readiness** is essential for successful AI adoption. Venkatesh et al. (2003) identify facilitating conditions—including technical support, organisational resources, and institutional commitment—as key determinants of technology acceptance. Similarly, recent studies show that successful generative AI implementation depends on combining technological investment with structured training, leadership support, and clear governance (Dwivedi et al., 2023; Al-Emran, 2023). The present study extends these findings by demonstrating that women social work practitioners are receptive to AI but require stronger institutional support to translate positive attitudes into confident professional practice.

Capacity building emerged as a major priority. Participants expressed strong interest in formal AI training, viewing LLMs as professional resources rather than threats. Consistent with UNESCO (2023), these findings suggest that AI literacy should become a core professional competency. In social work, training should integrate technical skills with ethical decision-making, prompt development, information verification, and protection of confidential client information.

The findings also emphasize the role of organisational leadership in promoting **Human-Centred AI**. Supportive leadership, clear AI guidelines, peer learning, and opportunities to experiment responsibly with emerging technologies can strengthen organisational readiness while ensuring innovation remains aligned with professional values (Brynjolfsson et al., 2023). A significant contribution of this study is its focus on women social work practitioners in grassroots organisations in India, where AI research remains limited. The findings suggest that organisational readiness should be viewed as an ongoing process supported by context-sensitive training, institutional policies, and continuous professional development that enable the responsible integration of AI into social work practice.

4.10 Policy and Professional Implications

The findings of this study demonstrate that the responsible integration of Human-Centred Artificial Intelligence (AI) into social work requires coordinated action beyond individual practitioners and organisations. Although participants expressed positive attitudes towards Large Language Models (LLMs) and recognised their value for documentation, communication, and information retrieval, the findings reveal important gaps in AI literacy, ethical preparedness, and institutional support. These challenges suggest that effective AI adoption should be addressed through professional education, organisational policy, and national digital strategies rather than relying solely on individual initiative.

One important implication concerns **social work education**. The limited formal exposure to AI reported by participants suggests that professional preparation has not kept pace with technological change. Consistent with Reamer (2023) and Victor et al. (2024), AI literacy should become a core component of social work education, integrating practical training, ethical decision-making, and supervised learning to prepare practitioners for the responsible use of emerging technologies.

The findings also have important implications for **non-governmental organisations (NGOs)**. Although participants perceived organisational support positively, they identified limited structured training and operational guidance. International research likewise shows that successful AI adoption depends on leadership, clear governance, and continuous professional learning rather than technological investment alone (Dwivedi et al., 2023; Brynjolfsson et al., 2023). NGOs should therefore establish AI policies addressing confidentiality, informed consent, human oversight, and responsible information management while creating opportunities for safe AI use in practice.

At the **policy level**, the findings reinforce international calls for **Human-Centred AI** governance. UNESCO (2023), the World Health Organization (2021), and the OECD AI Principles emphasise human dignity, transparency, accountability, fairness, and social inclusion. These principles are equally relevant in Indian social work, where practitioners work closely with vulnerable communities. Policies should therefore strengthen ethical AI standards, digital infrastructure, and collaboration among governments, universities, NGOs, and technology developers.

A key contribution of this study is its focus on **women social work practitioners**, whose perspectives remain underrepresented in AI research. The findings highlight the need for context-sensitive policies that recognise differences in digital competence, organisational resources, and community realities while actively involving practitioners in the design and evaluation of AI applications.

Overall, the study suggests that the responsible future of **Human-Centred AI** in social work depends on collaboration among educational institutions, NGOs, policymakers, professional associations, and technology developers. Combining AI literacy,

ethical governance, organisational readiness, and participatory implementation will enable LLMs to enhance professional practice while safeguarding client rights, human dignity, and social justice.

4.11 Limitations and Directions for Future Research

Table 4.11: Limitations and Directions for Future Research

Study Limitation	Implication	Future Research Direction
Sample limited to 50 women practitioners in Chandigarh	Limited generalisability	Conduct multi-state and nationally representative studies across diverse practice settings
Cross-sectional research design	Captures perceptions at one point in time	Undertake longitudinal studies examining changes in AI readiness and adoption over time
Self-reported survey responses	Possible perception and social desirability bias	Use mixed-methods research combining surveys, interviews, focus groups, and observations
Focus on NGOs and community organisations	Limited understanding of other sectors	Compare government, healthcare, educational, and NGO settings
Early stage of Human-Centred AI adoption	Limited evidence on implementation outcomes	Evaluate AI literacy programmes, ethical governance models, and organisational AI strategies
Limited context-specific AI governance evidence	Need for practical implementation frameworks	Develop and validate Human-Centred AI governance frameworks tailored to social work practice

The present study provides one of the earliest empirical examinations of **Human-Centred Artificial Intelligence (AI)** from the perspective of women social work practitioners in India. While it offers valuable insights into the adoption of Large Language Models (LLMs), several limitations should be acknowledged.

First, the study involved **50 women social work practitioners** from NGOs and community-based organisations in Chandigarh. Although it provides important evidence from grassroots practice, the sample size and geographical focus limit the generalizability of the findings. Future research should include larger and more diverse samples across different states, rural and urban settings, and governmental and non-governmental organisations.

Second, the study employed a **cross-sectional survey**, capturing perceptions at a single point in time. As generative AI technologies continue to evolve, longitudinal studies are needed to examine changes in AI literacy, ethical awareness, and organisational readiness over time.

Third, the study relied on **self-reported data**, which may be influenced by participants' perceptions or familiarity with AI. Future research should adopt mixed-methods approaches by combining surveys with interviews, focus groups, or case studies to provide a deeper understanding of practitioners' experiences.

Future studies should also compare different organisational settings and evaluate AI literacy and ethics-based training programmes. Developing context-specific frameworks for ethical AI governance will be particularly important in developing countries where digital infrastructure and organisational capacity differ from high-income contexts. Greater collaboration among practitioners, educators, policymakers, community organisations, and technology developers will further support the design of culturally responsive and ethically robust AI applications.

Overall, addressing these limitations will strengthen the evidence base for **Human-Centred AI** in social work and support the responsible integration of emerging technologies while preserving the profession's commitment to human dignity, social justice, and ethical practice.

4.12 Conclusion

The rapid emergence of Large Language Models (LLMs) is reshaping professional practice across multiple disciplines, creating new opportunities while raising important ethical and governance challenges. Within social work, where professional practice is fundamentally grounded in human relationships, empathy, dignity, and social justice, the integration of Artificial Intelligence (AI) requires approaches that remain firmly centred on human values. This study contributes to this emerging discourse by examining Human-Centred AI through the perspectives of women social work practitioners in India, providing one of the earliest empirical investigations of digital and ethical readiness for AI adoption within grassroots social work.

The findings indicate that women social work practitioners recognise the considerable potential of LLMs to strengthen documentation, information retrieval, communication, programme planning, and evidence-informed practice. Participants generally viewed AI as a professional support tool capable of improving efficiency rather than replacing professional judgement. At the same time, the study identified important challenges, including limited AI literacy, insufficient formal training, uneven ethical awareness, and organisational constraints that continue to influence the responsible integration of AI into everyday practice. These findings

demonstrate that successful AI adoption depends not merely on access to technology but on the interaction of digital competence, ethical preparedness, organisational support, and continuous professional learning.

The study also advances the theoretical understanding of Human-Centred AI by integrating the Technology Acceptance Model (TAM), Diffusion of Innovation (DOI) Theory, and Feminist Standpoint Theory. Together, these perspectives demonstrate that AI adoption in social work is shaped by perceived usefulness, organisational readiness, and the lived experiences of women practitioners operating within diverse social and institutional contexts. This integrated framework extends existing scholarship by showing that digital readiness is inseparable from ethical responsibility and social inclusion.

From a practical perspective, the findings emphasize the need for sustained investment in AI literacy, organisational capacity building, ethical governance, and context-sensitive implementation strategies. Universities, NGOs, professional associations, policymakers, and technology developers each have important roles in ensuring that AI strengthens rather than undermines professional social work practice. Preparing practitioners to evaluate AI critically, protect client confidentiality, recognise algorithmic bias, and maintain meaningful human oversight will be essential for the responsible use of LLMs in community-based settings.

Ultimately, the study argues that the future of AI in social work should not be measured by technological sophistication alone but by its capacity to enhance human wellbeing, strengthen professional relationships, and promote social justice. Human-Centred AI offers a framework through which technological innovation can complement, rather than replace, the knowledge, compassion, and ethical judgement that define social work. By placing people before technology and professional values before automation, the social work profession can harness the benefits of LLMs while remaining faithful to its enduring commitment to human dignity, empowerment, and inclusive social development.

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