



Springer



Mindful Publishing in the AI Era: Navigating Trends and Fostering Environmental Awareness

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Co-Editors in Chief

Springer **Nature** *Mindfulness*

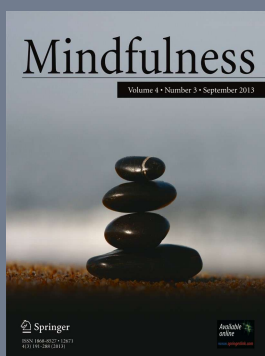
Handbook of Assessment in Mindfulness Research

International Handbook of Behavioral Health Assessment

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The Journal

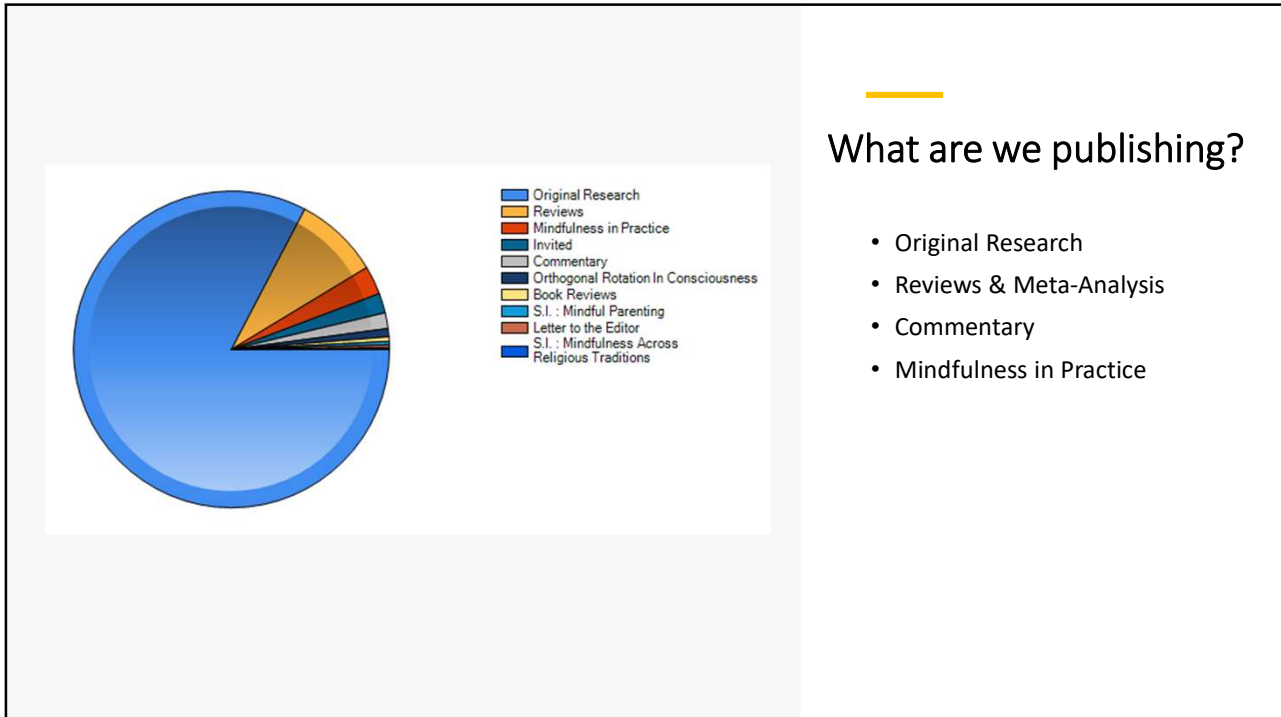
2010-2023



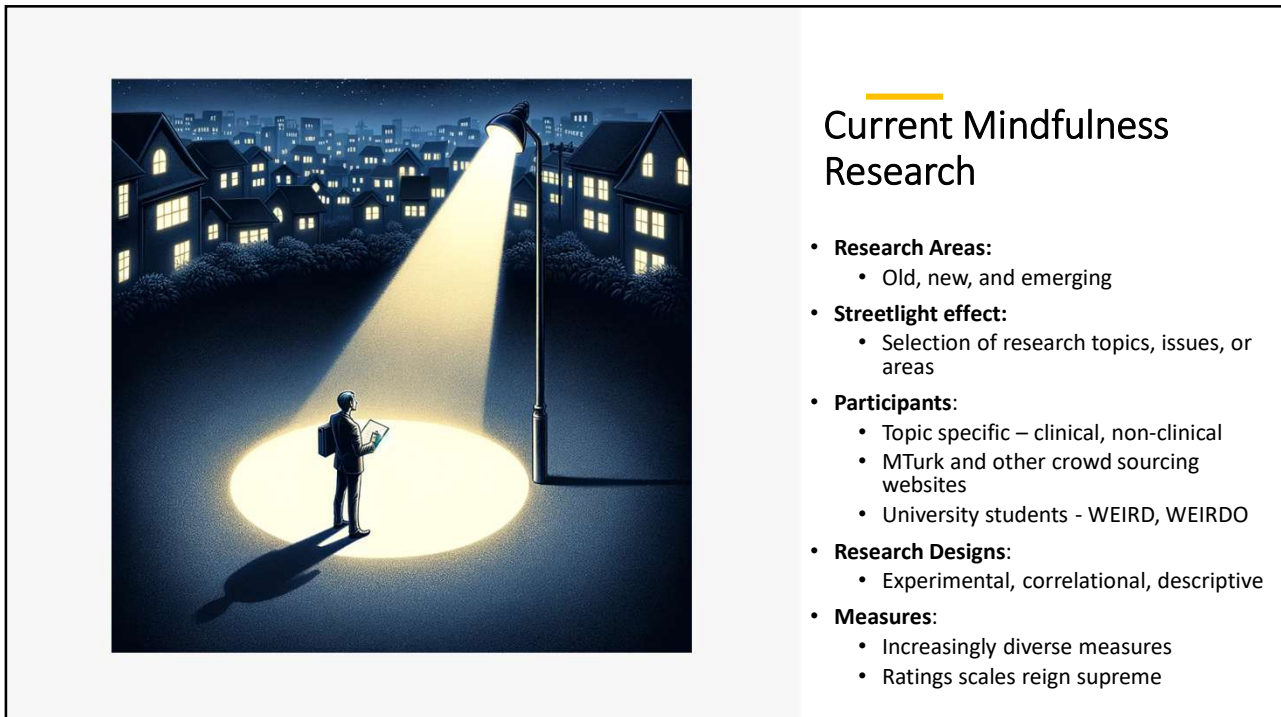
• Mindfulness

- 800+ submissions per year (827 in 2022)
- Acceptance rate 25 - 30%
- 5 days from submission to first editorial decision
- Impact Factor = 3.6 (2022)
- Five-year Impact Factor 4.7 (2022)
- Article downloads = 1,284,632 downloads
- 90% author satisfaction

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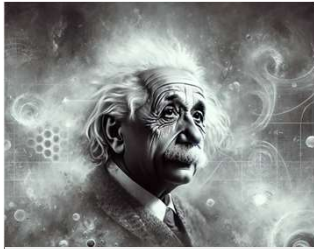


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Current Mindfulness Research



Not everything that can be counted counts, and not everything that counts can be counted.

Albert Einstein

- **Data analyses:**
 - Statistical sophistication, qualitative, mixed methods
- **Interpretation of findings:**
 - Appropriate
 - Overly positive (self-congratulating language)
- **Implications:**
 - Cautious optimism
 - Fragility of confidence
 - Explanatory fictions
- **Conclusion:**
 - Where and how we look affects what we “know” in mindfulness research

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Exploring Critical Issues through Mindfulness and Research: Examples



- Climate Change and Sustainability
- Promoting Pro-Environmental Behaviors
- Political Dynamics and Refugee Crises
- Community Violence and Wars
- Understanding Diversity: Race, Sexual Orientation, Indigenous Cultures
- Mindfulness and Mental Health
- Viewing Mental Health as Systems, Not Just Syndromes (Oman, 2023)
- Impact of Meditation on Family Dynamics
- Mindfulness Training in Western, Educated, Industrialized, Rich, and Democratic (WEIRD) Societies
- Research Focus and Methodology
- Emphasis on Holistic Outcomes: Extending Rating Scales to Measuring Suffering and Quality of Life
- Advanced Research: Nondual Awareness and Consciousness Studies
- Practical Applications: Mindfulness Interventions for Real-World Issues (e.g., Youth in Turmoil, Immunity)

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Mindful Publishing: AI Models Examples



- **ChatGPT - OpenAI**
 - Natural language text generation for various tasks.
 - Useful for content creation, editing, and reviewing.
 - Includes data analytic and image creation modes with variety of plugins.
- **Claude 2 - Anthropic**
 - Advanced AI chatbot for text generation and interaction.
 - Noted for safety, performance, and improved coding skills.
 - Scores highly in language and coding tests and uses safety techniques for output.
- **Llama 2 - Meta**
 - Large-scale knowledge graph for scientific data.
 - Can assist in literature review and synthesis of knowledge.

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Advantages of Using AI for Research and Publishing



- Improve overall quality of writing through error checking and feedback
- Create level playing field for non-native English speakers
- Increase efficiency and quality of data analysis (e.g. optimizing R scripts)
- Generate ideas and provide support with literature reviews and drafting text
- Medvedev & Krägeloh (2023)

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Limitations and Cautions When Using AI



- Lack of nuanced expertise in specific domains like mindfulness
- Potential biases in training data
- Cannot conduct original research or provide new insights
- May struggle with nuance, complex ideas, contextual understanding
- Need to validate factual accuracy and edit AI-generated text
- Medvedev & Krägeloh (2023)

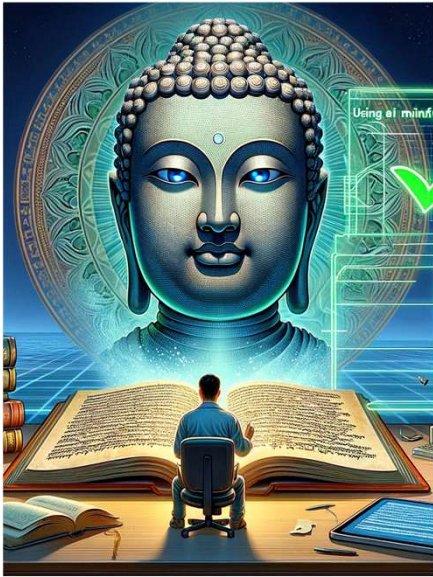
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Limitations and Cautions When Using AI



- Deliberate, cautious, and planned use of ChatGPT is necessary to minimize its impact on the environment, as the technology (in its current stage) still consumes a lot of energy.
- Medvedev & Krägeloh (2023)
- Apparently, each Google search query consumes 0.0003 kWh, compared to 0.001-0.01 kWh for a ChatGPT-4 query.

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Using AI Mindfully for Publishing

- Clearly describe role of AI tools in research process and methods
- Provide transparency - share prompts used to generate text or analyses
- Critically evaluate AI output; don't rely completely on system
- Validate factual accuracy from independent, reliable sources
- Acknowledge AI creators; cite tools appropriately
- Use AI ethically and efficiently; check AI score, avoid unnecessary computations

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AI Detection: Considerations for Academics

- GPTZero - Claims 99.9% accuracy in detecting texts from ChatGPT, GPT-3/4 and other large language models. Provides detailed analysis. Useful for verifying academic work.
- Originality AI - Detects texts from ChatGPT, GPT-3/4. Also checks for plagiarism. Provides percentage scores and highlights. Comprehensive for content creation and verification.
- No tool is fully accurate. Use multiple detectors and human evaluation for academics. Compare outputs and highlights for nuance. Cite AI sources properly.

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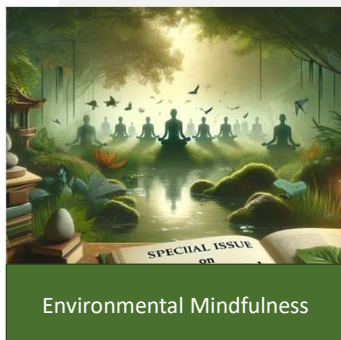


Key Takeaways:

- AI can assist with quality and efficiency, but has limitations
- Need for transparency, validation, and responsible usage
- Critical evaluation and editing of AI output remains crucial
- Follow reporting guidelines to uphold integrity of research (Medvedev & Krägeloh, 2023)

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Special Issue on Environmental Mindfulness



- The Guest Editors are:
 - Luca Simone
 - Pascal Frank
 - Antonino Raffone
 - Ute Barbara Thiermann
- Submissions may include:
 - Original research including pilot and feasibility studies
 - Reviews and meta-analysis
 - Commentaries on papers included in the Special Issue

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References

- Medvedev, O. & Krägeloh, C. (2023) Harnessing Artificial Intelligence for Mindfulness Research and Dissemination: Guidelines for Authors. *Mindfulness*, 14, 1019–1020. <https://doi.org/10.1007/s12671-023-02155-y>
- Oman, D. (2023). Mindfulness for global public health: Critical analysis and agenda. *Mindfulness*. <https://doi.org/10.1007/s12671-023-02089-5>
- Krägeloh, C.U., Alyami, M.M., Medvedev, O.N. (2023). AI in Questionnaire Creation: Guidelines Illustrated in AI Acceptability Instrument Development. In: Krägeloh, C.U., Alyami, M., Medvedev, O.N. (eds) *International Handbook of Behavioral Health Assessment*. Springer. https://doi.org/10.1007/978-3-030-89738-3_62-1

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