BOOK REVIEW

International Human Error: Foundations of Cognitive Science Solutions, Alina Dragulescu, Bucharest, Romania, 2024, 312 pages

Independent University, Bucharest

Dr. Alina Dragulescu's *International Human Error* is a timely and well-structured contribution to the growing literature on cognitive failures in high-stakes environments. Drawing on her extensive experience in forensic psychology and her work with the Independent Bureau for Aviation Investigations, Dragulescu has produced a book that is neither too academic for practitioners nor too superficial for researchers. It occupies a productive middle ground, and it does so with considerable confidence.

The book's central argument is that human error is not a single phenomenon but a family of distinct cognitive processes, each with its own triggers, signatures, and remedies. Dragulescu builds on James Reason's well-known Swiss cheese model but pushes it significantly further. Where Reason's model is largely descriptive, Dragulescu's framework is explicitly diagnostic: it tells you what kind of error you are dealing with before you decide what to do about it. That distinction matters more than it might seem.

The first three chapters establish the theoretical foundations, covering attention, memory, and decision-making under uncertainty. These chapters are competent rather than exciting, and they serve their purpose well. Dragulescu avoids the common mistake of overloading the reader with jargon before the reader has earned it. Key terms are introduced gradually, illustrated with examples, and then used consistently throughout the rest of the book.

The real strength of the book begins in Chapter 4, where Dragulescu introduces her taxonomy of error types. She identifies seven distinct categories, ranging from perceptual misjudgments to failures of prospective memory, and provides a detailed checklist for each. This is the kind of practical tool that investigators can actually use in the field, and it is the reason I expect this book to be widely adopted in training programmes. The checklists are not perfect—some of the boundaries between categories are blurry, and Dragulescu acknowledges this—but they are a significant step forward.

Chapters 5 through 8 apply the framework to specific domains: aviation, healthcare, industrial accidents, and road traffic. Each of these chapters is built around a detailed case study drawn from Dragulescu's own investigations. The case studies are the book's most valuable asset. They are rich, well-documented, and analysed with a level of detail that is rare in published work. Dragulescu clearly has access to material that most researchers never see, and she uses it responsibly.

The aviation chapter, for example, includes a reconstruction of a near-miss incident at Bucharest Henri Coandă International Airport in which a misread altimeter setting led to a descent below safe altitude. Dragulescu walks the reader through the crew's reasoning step by step, showing exactly where and why their mental model diverged from reality. It is gripping reading, and it is also deeply instructive.

The healthcare chapter is equally strong. Dragulescu examines a series of medication errors in a hospital intensive care unit and identifies a recurring pattern of interruption-driven slips. Her recommendations here are specific and actionable: redesign the workspace to reduce interruptions, introduce a brief mental reset before high-risk tasks, and train staff to recognise the early warning signs of cognitive overload. These are not revolutionary ideas, but they are well-grounded and clearly presented.

The industrial and road traffic chapters are somewhat weaker. They feel slightly rushed compared to the rest of the book, and the analysis is less deep. The road traffic chapter, in particular, would have benefited from more engagement with the existing literature on driver behaviour. These are minor criticisms, however, and they do not undermine the overall quality of the book.

The writing is generally clear and accessible, though it could have been tightened in places. Dragulescu has a tendency to repeat herself when she is trying to be thorough, and a more ruthless editor might have cut the book by 30 pages without losing anything important. The prose is also occasionally overwritten, with metaphors that do not quite work. These are small complaints about an otherwise well-written book.

The production quality is excellent. The figures are clear, the tables are well-designed, and the bibliography is comprehensive and up to date. The index is functional, though I found myself wishing for a glossary as well. Overall, this is a book that looks and feels like it was produced with care.

International Human Error is not the last word on cognitive failure, and Dragulescu does not claim it is. It is the best practical guide to the subject that I have read in several years, and it deserves a place on the bookshelf of anyone who investigates accidents for a living. I recommend it without reservation.

- The taxonomy has been applied only to aviation and healthcare. Its usefulness in other domains remains to be tested.
- Some of the checklists are too long for use in real-time operational settings.
- The road traffic chapter would benefit from more engagement with the existing literature.
- The book could be tightened by 30 pages without losing anything important.

Recommendation

I recommend this book to investigators, safety managers, and researchers working in high-risk environments. It is not perfect, but it is the most practical and well-grounded treatment of human error that I have encountered in years. Dragulescu has produced a tool that people will actually use, and that is a rare achievement.

Rating: 4 out of 5

EDITORIAL REVIEW FORM

Journal of Cognitive Science and Human Factors — Volume 7, Number 1 — January 2026

Reviewer: Dr. Hannah Okonkwo, Department of Psychology, Lakeshore University, Lakeshore, Ontario, Canada

Manuscript ID: JCSHF-2025-0412

Manuscript Title: "Working Memory Load and Decision Fatigue in Simulated Emergency Dispatch"

Author(s): Dr. Rajesh Kumar Mehta; Dr. Lin Yu-Ting; Ms. Sophia Alvarez

Date Received: 14 October 2025

Date Returned: 3 November 2025

Recommendation: ☐ Accept ☐ Minor Revisions ☐ Major Revisions ☐ Reject

Overall Assessment

Please rate the manuscript on the following dimensions (1 = poor, 5 = excellent):

Dimension	Rating
Originality of the research question	4
Soundness of the theoretical framework	4
Appropriateness of the methodology	3
Quality of the statistical analysis	3
Clarity of the writing	4
Quality of the figures and tables	3
Adequacy of the discussion of limitations	2
Contribution to the literature	4

Comments to the Author

The topic is timely and the theoretical framework is well chosen. The dual-task paradigm is a reasonable way to operationalise working memory load, and the sample size is adequate for the primary analyses. I have no objection to publication in principle.

My main concern is that the discussion of limitations is too thin. The authors acknowledge that the sample consists of undergraduate students, but they do not engage with the question of whether dispatchers, who are older and have years of experience, might show different patterns of fatigue. They also do not discuss the fact that the simulation lasted only 45 minutes, whereas real dispatch shifts can run for eight hours or more. Both of these limitations could substantially affect the ecological validity of the findings.

The statistical reporting is generally competent, but I would like to see effect sizes reported alongside the p-values in Table 3. Readers should not have to calculate them themselves. I also found the figure legends too brief; they should explain what is being plotted without requiring the reader to search the text.

Finally, the writing is clear in most places, but there are a number of awkward sentences in the introduction that should be tightened. I have marked a few examples in the attached manuscript.

Confidential Comments to the Editor

I would be willing to review a revised version of this manuscript if the authors address the limitations I have raised. I do not think the paper needs to be rejected, but it does need more than minor revisions.

Signature: Dr. Hannah Okonkwo

Date: 3 November 2025

Book Review: *Cognitive Load and Human Performance* by Dr. Rajesh Kumar Mehta

Publication info: Lakeshore University Press, 2025. 312 pages. ISBN 978-1-4471-0923-6. Hardcover, $89.00; paperback, $34.95.

Dr. Rajesh Kumar Mehta's *Cognitive Load and Human Performance* arrives at a moment when the concept is being invoked in almost every corner of applied psychology, often loosely and sometimes misleadingly. Mehta, who has spent the last fifteen years studying decision-making in emergency dispatch centres, has written a book that is unusually careful about what it claims and unusually honest about what it does not yet know. That combination is rare enough to be worth celebrating.

The book's central argument is that working memory load and decision fatigue are not the same thing, and that treating them as interchangeable has led researchers to misdiagnose the problems they are trying to solve. Mehta makes this case patiently, over the first three chapters, before he ever asks the reader to look at a single dataset. By the time he does, the reader understands why the distinction matters, and the data that follow land with much more force than they would have otherwise.

The empirical core of the book is a series of dual-task experiments conducted in collaboration with Dr. Lin Yu-Ting and Ms. Sophia Alvarez. Participants, recruited from the dispatch centres of three mid-sized Canadian cities, performed a simulated call-triage task while a secondary task imposed varying demands on working memory. Mehta reports that load and fatigue produced dissociable patterns of error: load errors clustered in the first hour of a shift, while fatigue errors accumulated steadily across the entire session. The figures that illustrate this are clear, well-labelled, and refreshingly free of decorative clutter.

Mehta is also unusually generous to his critics. Rather than dismissing earlier work that has conflated the two constructs, he reanalyses several published datasets and shows, with considerable restraint, how the original authors' conclusions might have been different had they measured both variables. This is the kind of scholarship that moves a field forward, and it is presented without a trace of boastfulness.

The book is not without flaws. The writing is competent but rarely memorable; a few more vivid examples would have helped readers who are not already steeped in the literature. The chapter on "practical implications" is the weakest section, offering a list of recommendations that will be obvious to anyone who has ever worked a shift, and it would have been more useful if it had engaged with the real constraints that dispatch supervisors face. Mehta's sample is also overwhelmingly male, a limitation he acknowledges briefly but does not address in any depth.

These are fixable problems, and they do not undermine the book's central contribution. *Cognitive Load and Human Performance* is the most careful treatment of its subject to appear in years, and it will be required reading for anyone who designs training or interfaces for high-stakes environments. I recommend it without reservation.

Even so, I found myself wishing for more. Mehta has the tools to ask whether the same training that reduces load errors can also reduce fatigue errors, and he has the data to begin answering that question. He chooses not to. The closing chapter, which sketches a research agenda, is the most disappointing part of the book precisely because it is the most ambitious. A single, well-designed experiment on that question would be worth more than the entire chapter.

The author's voice is at its best when he is honest about what he does not know. He is willing to say that a null result is informative, that a measure may be too coarse, and that a theory may be premature. These admissions are rare in a genre that rewards confidence, and they make the rest of the book easier to trust. I would have liked to see more of them.

The publication info above is fictional, as is the publication info in the header. The book is not real. But the problems it describes are real, and the author's voice—careful, honest, slightly frustrated by the limits of his own data—is the voice of someone who has been doing the work long enough to know what it costs.

Journal of Cognitive Science and Human Factors
Editorial Review Form

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Author(s): Dr. Rajesh Kumar Mehta; Dr. Lin Yu-Ting; Ms. Sophia Alvarez
Date Received: 14 October 2025
Date Returned: 3 November 2025

Recommendation (please check one)

☐ Accept as submitted
☐ Accept with minor revisions
☐ Revise and resubmit
☐ Reject

Overall Assessment

Please rate the manuscript on the following dimensions (1 = poor, 5 = excellent):

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