

Review Form 3

Journal Name:	Asian Journal of Probability and Statistics
Manuscript Number:	Ms_AJPAS_130232
Title of the Manuscript:	Predictive model for depression with medical intervention
Type of the Article	

General guidelines for the Peer Review process:

This journal’s peer review policy states that **NO** manuscript should be rejected only on the basis of ‘**lack of Novelty**’, provided the manuscript is scientifically robust and technically sound.
To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	Importance of the Manuscript: <ul style="list-style-type: none">This manuscript addresses a critical public health issue: depression among high-stress professionals such as law enforcement officers. It proposes a predictive model using a Bayesian hidden Markov approach and evaluates the impact of medical interventions.The study's integration of mathematical modeling with mental health treatment represents a novel application with potential to influence both research and clinical practices.By focusing on early diagnosis and treatment, it contributes to a global need for scalable, data-driven solutions for mental health challenges.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title is appropriate and reflective of the content. However, for better clarity, consider changing to: "A Bayesian Hidden Markov Model for Predicting Depression and Evaluating Medical Interventions."	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract is comprehensive but can be improved by explicitly stating the methodological advancements and the key findings of the study. Including numerical results from the analysis would enhance its impact.	
Is the manuscript scientifically, correct? Please write here.	The manuscript is scientifically robust, but the results section could benefit from a more concise presentation. Tables and equations are clear, but a flowchart or diagram summarizing the methodology would enhance readability.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	References are mostly relevant but include some outdated works. Incorporating more recent studies (post-2020) on Markov models in mental health and Bayesian inference would strengthen the literature review.	
Is the language/English quality of the article suitable for scholarly communications?	The language is generally suitable for scholarly communication. However, there are occasional grammatical errors, e.g., "influence" is misspelled as "in uence" in several instances. A thorough proofreading is recommended.	
<u>Optional/General</u> comments	The manuscript should discuss the scalability and practical implementation challenges of the proposed model in real-world clinical settings. The manuscript demonstrates substantial merit but requires revisions to enhance clarity, update references, and address minor grammatical issues.	

PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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