

Review Form 1.6

Journal Name:	Asian Journal of Probability and Statistics
Manuscript Number:	Ms_AJPAS_94135
Title of the Manuscript:	ON MIXTURE MODEL BIVARIATE PRODUCT DISTRIBUTION DEVELOPMENT AND PROPERTIES
Type of the Article	Original Research Article

General guideline for 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 guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalajpas.com/index.php/AJPAS/editorial-policy>)

Review Form 1.6

PART 1: Review Comments

	Reviewer's comment	Author's comment (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)
Compulsory REVISION comments	<ul style="list-style-type: none"> - The aim of the study is not clear. - The contribution is not clear (specified). - You have to mention which statistical program you used to hold of obtained results. - The background in Introduction not enough. You have to discuss a brief overview of the study area, problems existing and give more references. works done, problems with work done, and what you are doing. - Give some background and references about Baseline Distributions. - in section (Product Distribution), specified your contribution. - you need to explain the output getting from mathematical software. - You have to give more information about inverse cumulative distribution. - Explain Fisher's scoring method. - You have to give some reference about Multivariate Exponential-Lindley-Juchez Distribution (i.e. PDF and Properties). - specify the contribution when derivations maximum likelihood method to estimate Exponential-Lindley-Juchez distribution parameters! - In section (Conditional Bivariate Development) you just give definition without applying for studied distributions, similarly with section Mean, Covariance and Coefficient of Variation. - Eq. (57 & 71), triple integrals. - Eq. (73) Bivariate coefficient of variation (give reference). - in section (Bivariate Probability Patterns), the result is not clear and what you need to explain. - Explain the sentence (Which are the laplace transform of our bivariate distributions?) - Determine how to get the values in a table. - In the simulation section which replicate you used for each sample size generated? - Section 3.8, what do you mean random choice is also made in the selection? - Statistical Table you just give simulation results for Bivariate Juche and Bivariate Lindley-Juche Distribution, what about other distributions you have already studied? - Springer and Thompson (1966), Echebiri and Mbegbu (2022), Joe (1997), and Arnold (1999), are not in the references list. - in section (conclusion) what you mean by validity test? - You have to More explain the result in table. - You have mentioned R and Mathematica software, which should be given some reference. - Re-write citations and references inside the text and check references (Authors and years) to follow the journal formatting. 	
Minor REVISION comments	Suggested modifying the title because you used simulation and MLE methods.	
Optional/General comments		

PART 2:

	Reviewer's comment	Author's comment (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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Mohamed Amraja Mohamed
Department, University & Country	Sebha University, Libya