



SDI Review Form 1.6

Journal Name:	Asian Journal of Probability and Statistics
Manuscript Number:	Ms_AJPAS_41267
Title of the Manuscript:	COMPARISING OF GOODNESS OF FIT TESTS FOR NORMAL DISTRIBUTION.
Type of the Article	Review Paper

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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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)
<u>Compulsory</u> REVISION comments	In this paper, the author(s) reviewed the two classical Kolmogorov-Simirnov (K-S) statistic and the Pearson's Chi-square statistic for the purpose of general goodness-of-fit under a given underlying distribution function. The paper is focused on the case of normal distribution as the underlying distribution. Several Monte Carlo experiments were carried out to illustrate the K-S test has better performance than does the chi-square test. Because both the K-S and the chi-square statistics are not location-scale invariance, the Monte Carlo results based on specific normal distribution are not sufficient to conclude that the K-S test can always do a better job than does the chi-square test. A more extensive comparison can be done by illustrating their power performance through choosing a class of skewed distributions and a class of distributions with different kurtosis than that of the normal, for example, the double exponential distribution family. The author(s) should also discuss the effect from estimating the normal mean and the normal standard deviation in the case of general normal distributions.	
<u>Minor</u> REVISION comments	1) The paper contains considerable typos or grammatical errors, for example, "Goodness of fit test is a test that have attracted researchers interest over the decades." (the first sentence in ABSTRACT). It should be corrected as "Goodness of fit test is a test that <u>has</u> attracted <u>researchers'</u> interest over the decades." There are quite a few similar errors in the paper. The author(s) should double check the writing of the paper. 2) The C1, C2, C3, etc. in the figures and tables are not defined. 3) The simulation may be designed as increasing sample sizes, for example, 50, 100, 200, to see the effect from small and large sample sizes.	
<u>Optional/General</u> comments	In comparing two statistics, two points are usually needed to be evaluated: 1) the control of type I error rates under the null hypothesis: the given underlying distribution; and 2) power performance under a class of alternative distributions. In the case of normal as the null distribution, a class of skewed distributions as the alternative distributions may be chosen to illustrate the power performance against skewness. Another class of alternative distributions may be chosen to illustrate the power performance against kurtosis. Because skewness and kurtosis are two important indices for the normal distribution, simulation should be focused on these two important indices.	

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