# ESJ Manuscript Evaluation Form

This form is designed to summarize the manuscript review that you have completed and to ensure that you have considered all appropriate criteria in your review. Your review should provide a clear statement, to the authors and editors, of the modifications necessary before the paper can be published or the specific reasons for rejection.

Please respond within the appointed time so that we can give the authors timely responses and feedback.

NOTE: ESJ promotes review procedure based on scientific validity and technical quality of the paper (not perceived the impact). You are also not required to do proofreading of the paper. It could be recommend as part of the revision.

ESJ editorial office would like to express its special gratitude for your time and efforts. Our editorial team is a substantial reason that stands ESJ out from the crowd!

Date Manuscript Received: 24/10/2016	Date Manuscript Review Submitted: 31/10/2016		
Manuscript Title:			
GESTION DES DONNEES MANQUANTES DANS LES BASES DE DONNEES EN SCIENCES			
SOCIALES: ALGORITHME NIPALS OU IMPUTATION MULTIPLE?			
ESJ Manuscript Number:			

#### **Evaluation Criteria:**

Please give each evaluation item a numeric rating on a 5-point scale, along with a brief explanation for each 3-less point rating.

Questions	Rating Result [Poor] 1-5 [Excellent]
1. The title is clear and it is adequate to the content of the article.	4
(a brief explanation for 3-less point rating)	
2. The abstract clearly presents objects, methods and results.	4
(a brief explanation for 3-less point rating)	
3. There are few grammatical errors and spelling mistakes in this article.	4
(a brief explanation for 3-less point rating)	,
4. The study methods are explained clearly.	2
(a brief explanation for 3-less point rating)	
Three methods are used in the paper. The imputation by mean and m	

Three methods are used in the paper. The imputation by mean and multiple imputation are well presented. However, the authors need to better present the NIPALS algorithm which is less understandable.

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#### **Overall Recommendation** (mark an X with your recommendation):

Accepted, no revision needed	
Accepted, minor revisions needed	
Return for major revision and resubmission	X
Reject	

## **Comments and Suggestions to the Author(s):**

The paper aims at assessing the robustness of the imputation methods. After reading the introduction, it remains an issue on motivations of the study. In other word, which problem leads to their research question?

Second, the authors should differentiate between jump and missing data. The difference was presented but it should be emphasized because the following sentence of the paper is problematic in the sense that a lot of data collected form survey instruments contain logical jump and not only missing at random data "Dans le cadre des recherches en Sciences Sociales, nous faisons face le plus souvent à des données qui manquent aléatoirement.". In addition, they should also review the definition of the missing at random process.

Third, the axioms of the authors should be presented in a better way so that they are linked to the empirical analysis. The concern is that after reading the axioms, one wonders where do they come from and for what purpose are they presented? These axioms are working assumptions of the study and should be presented so.

Fourth, the authors must redo the tables 2, 3, 5, 6, 8 and 9. The tables must be self-explanatory. There is a confusion between individuals and variables in these tables. For the message of the paper to be clear, we must know the parameter of interest after the imputations (average, standard error, regression parameters ...). After presenting the parameter of interest, it will be easier to choose the assessment method. The main concern is why the authors choose dispersion of the deviation between observed and imputed data. The choice is based on a working paper of Niass et al. (2010). I don't really know how far this working paper is influential in the area of missing data analysis. In the area, several articles used in and out of sample techniques or simulations (see for example Daniel and Kenward (2012), Cramer et al. (2015) and Garg (2013) and the references therein).

Finally, the analysis is based on six observations and six variables. For a robustness check of the methods in statistics, it's light to draw convincing conclusions. The authors must 1) increase the sample size for their analysis, 2) choose the appropriate indicator for their analysis and 3) check the approach based on real data (DHS data, World Bank data ...).

### **Comments and Suggestions to the Editors Only:**

The topic of the paper is interesting but the analysis is not convincing for drawing the conclusions of the paper. The authors should improve the paper in terms of 1) motivation, 2) methodology and 3) empirical analysis.





