



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2013_BJAST_4698
Title of the Manuscript:	ENTROPY IN THE ANALYSIS OF GAIT COMPLEXITY: A STATE OF THE ART

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
The authors have corrected me that their paper is a review on the analysis of the stride intervals of gait, not on COP data. However, the questions raised in the first review still hold: 1. What is the added knowledge in the field? What is new in this paper? The authors claimed that “we wanted to show that the MSE is the most appropriate nonlinear tool to analyze the complexity of human walking.” Using entropy-based methods to analyze gait data have already shown in the previous papers (e.g., ref. 41 & 43 as mentioned in the paper). And there is no comparison between MSE and other stride intervals measurements, so whether the MSE is “the most appropriate..” is in doubt. 2. What is the physical meaning of entropy or MSE to the stride intervals data? Will the MSE replace many traditional stride intervals measurements? Or will it increases understanding of human balance? Although not enough, the authors have added a few references and statements. 3. What are the problems with approx. entropy? As mentioned in the paper, sample entropy is used to calculate MSE because of some problems with approx. entropy. This point needs to be further explained. From Line 156, “In our opinion, the ApEn is not the most appropriate algorithm for the analysis biological signals because of some conceptual errors....” The “conceptual errors” needs to be explained further. Nevertheless, the paper provides a brief review of using MSE on gait analysis data. It may give a good comparison base for future studies.	1. This paper is a review. It has not to add new knowledge. However, the new in this paper is the first integrated review of non linear algorithms used in the evaluation of human gait complexity. 2. The physical meaning of MSE is explained in the text. MSE, or any other algorithm of entropy, will not replace other stride intervals measurements. They will contribute with a "most appropriate" understanding of gait mechanism. 3. The problems are (as explained in the text) the inconsistencies observed when analyzing physiological signals.