



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_44985
Title of the Manuscript:	Determination of reverberation time and sound pressure level of selected lecture halls in University of Agriculture, Makurdi-Benue State, Nigeria.
Type of Article:	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
<p>Unfortunately, the Authors did not comply with all my comments.</p> <p>There is a lack of understanding of acoustics.</p> <p>Some important errors:</p> <p>1. The equations are incorrect! Eg No. 1!</p> <p>It should be like this: Sound pressure level, denoted L_p and measured in dB, is defined by:</p> $L_p = 20 \log_{10} \left(\frac{p}{p_0} \right) \text{ dB},$ <p>p is the root mean square sound pressure p_0 is the reference sound pressure; The commonly used reference sound pressure in air is: $p_0 = 20 \mu\text{Pa}$,</p> <p>2. Equation number 2: It should be:</p> $L_{eq} = 10 \log \left[\frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p_A^2}{p_0^2} dt \right]$ <ul style="list-style-type: none"> ▪ L_{eq} = equivalent continuous sound pressure level in dB ▪ p_0 = reference pressure level (typically 20 μPa) ▪ p_A = acquired sound pressure ▪ t_1 = start time for measurement ▪ t_2 = end time for measurement <p>3. Equation 3: It should be like this:</p> $T_{60} = \frac{0,161 \cdot V}{A}$ <p>where: V – is room volume [m^3], A – is acoustic absorption of the room.</p> <p>4. The meaning of the elements of the equation of their transformation can not be described. It should be like this:</p> $\alpha = I_a / I_i$ <p>where:</p>	<p>Is not really so pls. We are all aware of these equations pls. However, noted pls.</p> <p>Please editor, we are not comfortable with changing the equation 2. The equation 2 used in the work have been used in many international journals for calculating equivalent sound pressure levels and no literature disapproved this equation pls. Kindly refer to: [16] Silva L.B., Santos RLS.(2013). Acoustical Comfort in Primary School Classrooms in the City of Joao Pessoa, Paraiba, Brazil. J Ergonomics 2013, S.1. Retrieved 6th June, 2017: http://dx.doi.org/10.4172/2165-7556.S1-001 But if you insist we will change to the one given by you and of course need more time to re – evaluate our results as regard the equivalent sound pressure levels since the two equations will give different results as we all know pls.</p> <p>Corrected pls.</p> <p>Noted pls.</p> <p>Fig 1: Combining the results makes it easier to compare the reverberation time of each room at a glance. Many journals have figures presented this way too pls.</p>



SDI FINAL EVALUATION FORM 1.1

<p> α = <i>sound absorption coefficient</i> I_a = <i>sound intensity absorbed</i> (W/m^2) I_i = <i>incident sound intensity</i> (W/m^2) </p> <p>5. You can not combine the results obtained for different rooms (Figure 1) In Fig. 2. Are the levels equivalent or sound pressure levels? You can not combine results for different rooms!</p> <p>6. Do not average the value in decibels! This is a big mistake! You can not evaluate logarithmic values with Gauss statistics (average and standard deviation!)</p>	<p>This problem was taken care of pls.</p>
---	--