

### Review Form 3

Journal Name:	<a href="#">Asian Journal of Research and Reviews in Physics</a>
Manuscript Number:	Ms_AJR2P_123793
Title of the Manuscript:	Conceptual coherence and dominant misconceptions in the concept of force among higher education students: The administration of Force Concept Inventory
Type of the Article	Original research article

#### **General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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**PART 1: Review Comments**

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	It is actually not easy to teach science concepts especially in the field of force physics. The inventory used in this study can be used easily to detect students' problems in conceptual coherence and dominant misconceptions in the Newtonian force concept. The findings in this study are very meaningful in helping students master the concept of force by instructors.	
Is the title of the article suitable? (If not please suggest an alternative title)	Suggestion: Conceptual coherence and dominant misconceptions in the concept of force among higher education students through the administration of the Force Concept Inventory	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The objective of the research was to determine the <b>extent to which student scores demonstrated</b> conceptual coherence, <b>Newtonian thinking</b> , and identify dominant misconceptions (Suggestion: please align the objective with the research question). <b>Implications for practice is discussed.</b> (Suggestion: briefly state your implications)	
Are subsections and structure of the manuscript appropriate?	Need to rearrange Suggestion: 1. Introduction 1.1 Purpose of the study 1.2 Research Objective (suggestion) 1.3 Research question 1.4 Theoretical Framework 1.5 Literature review (Science Education Research, Research on the concept of force) 2. Methodology 2.1 Research design, population and sample 2.2 Instrument 2.3 Data collection 2.4 Data analysis 3. Results and discussion 3.1 Average FCI Score 3.2 Conceptual coherence 3.3 Dominant misconceptions 4. Conclusions (suggestion) 5. Implications for practice 6. References	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The article has strength in the aspect of scientific research methods. Research findings have high reliability Findings are discussed in depth and scientifically	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Suggestion: consider using recent references, preferably within the last 5 years	

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<p>Minor REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p><b>Suitable</b></p>	
<p><b>Optional/General</b> comments</p>	<p><b>Excellent research work. However, here are some suggestions that can further improve this research report.</b></p> <ol style="list-style-type: none"> <li><b>1. Discuss the problem statement</b></li> <li><b>2. Revise the purpose to align with the objectives and research questions</b></li> <li><b>3. Research objectives, research questions and hypotheses (if necessary) must be consistent as in the abstract especially the use of consistent terms</b></li> <li><b>4. In literature review: add more information about the findings of educational studies related to the concept of force/Newtonian mechanic up to the latest and discussions about the problems of teaching and learning the concept of force by higher education students and pre-service teachers</b></li> <li><b>5. The instrument: explain in methodology</b></li> <li><b>6. Explain the research design and sampling method</b></li> <li><b>7. Explain the validity and reliability of the inventory/instrument</b></li> <li><b>8. Results and discussion need to be organized in line with the research questions or research objectives</b></li> <li><b>9. The findings of this study need to be compared and discussed with the findings of previous researchers in depth</b></li> </ol>	

**PART 2:**

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

**Reviewer Details:**

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