
Your Submission - [EMID:b45398bcbef33076]

2 messages

EASR <em@editorialmanager.com>
Reply-To: EASR <kku.enjournal@gmail.com>
To: Agung Kristanto <agung.kristanto@je.uad.ac.id>

Thu, Jan 6, 2022 at 9:38 AM

Ref.: Ms. No. EASR-D-21-00471

Article Title: **"The effects of the muddy surface environment on heart rate and pain perception in the lower extremity during the paddy planting activity"**

Engineering and Applied Science Research

Dear *Kristanto*,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript.

Your revision is due by **2022-01-19 23:59:59**.

Our decision is to: Major Revisions Required

If your paper is revised, please kindly send 1. Full revised manuscript with highlight 2. Blind revised manuscript with highlight 3. Paper revising form.

**** NOTE **** The revision of the article, **please highlight the text has changed (Use different colors for each reviewer)**.

To submit a revision, go to <https://www.editorialmanager.com/easr/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Sujin Bureerat
Editor
Engineering and Applied Science Research

Comments from the Editor and Reviewers :

Reviewer 1:

This paper is focused on musculoskeletal discomfort when farmers operating on different terrain. The paper is generally properly written. However, it need some revisions as specified below:

1. The farm work (especially manual farm work) depends upon several factors such as type of posture (squatting vs. kneeling), body part utilized (single or multiple body part), type of operation (manual or mechanical), education background of farmers, complexity of the operation, etc.? I think these factors need to be reflected in literature and discussion section of the paper appropriately.
2. Sampling strategy needs some more description. Also, I feel a pictorial view including the numbers (total, inclusion and exclusion) must give a better overview to the reader.
3. Please show the graphs of ANOVA assumptions (box plots) and statistical description of various measures.
4. What about the post-hoc results?
5. IRB statement is missing in the manuscript. Is consent taken from subject?
6. The results are of some interest but the authors could elaborate further on the practical implications of their findings in the discussion section.

Your Submission - [EMID:b436a9ad35bc6c2c]

2 messages

EASR <em@editorialmanager.com>
Reply-To: EASR <kku.enjournal@gmail.com>
To: Agung Kristanto <agung.kristanto@ie.uad.ac.id>

Thu, Feb 24, 2022 at 9:11 AM

Ref.: Ms. No. EASR-D-21-00471R1

Article Title: **"The effects of the muddy surface environment on heart rate and pain perception in the lower extremity during the paddy planting activity"**

Engineering and Applied Science Research

Dear *Kristanto*,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript.

Your revision is due by **2022-03-09 23:59:59**.

Our decision is to: Revisions Required

If your paper is revised, please kindly send 1. Full revised manuscript with highlight 2. Blind revised manuscript with highlight 3. Paper revising form.

**** NOTE **** The revision of the article, **please highlight the text has changed**.

To submit a revision, go to <https://www.editorialmanager.com/easr/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Sujin Bureerat
Editor
Engineering and Applied Science Research

Comments from the Editor and Reviewers :

Editor: Please refer to comment Reviewer 1 (round 1) and response to reviewer completely.

Reviewer 1:

Thanks for making changes.

I found comments which are not addressed by the authors. It's duty of authors to address each comments. If they are disagree with some comments then mention it with proper justification.

The statistical part is not promising one. The solid justification is needed with proper references.

There is additional documentation related to this decision letter. To access the file(s), please click the link below. You may also login to the system and click the 'View Attachments' link in the Action column.

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 **PAPER REVISING FORM (Second review).doc**
40K

Agung Kristanto <agung.kristanto@ie.uad.ac.id>
To: EASR <kku.enjournal@gmail.com>

Thu, Feb 24, 2022 at 9:42 AM

Dear EASR Editorial team,

Thank you for the revised manuscript. I will do the revision by 9 March 2022.

Thank you very much.

Best regards.

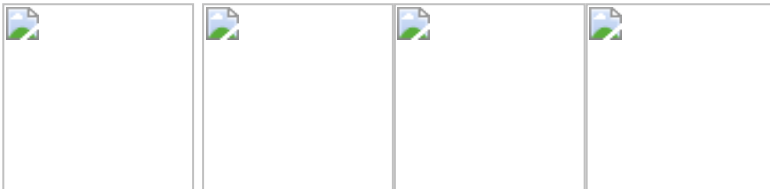
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Agung Kristanto, ST., MT., Ph.D.
Assistant Professor
Certified SolidWorks

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Department of Industrial Engineering
Faculty of Industrial Technology
Universitas Ahmad Dahlan
Yogyakarta, Indonesia

External Quality Audit and Recognition
Quality Assurance Office
Universitas Ahmad Dahlan
Yogyakarta, Indonesia



7. Some papers related to manual farm working should also be cited and reviewed, such as: <https://doi.org/10.1504/IJISE.2019.099776>, <https://doi.org/10.1080/19338244.2017.1289890>, <https://doi.org/10.1080/10773525.2018.1547507>

8. Also, there are some run-on, incomplete sentences, which need to be checked before revision submission.

Reviewer 2:

1. The manuscript provides no identification of novel contributions as compared to prior studies. The choice of the physiological response (i.e., heart rate) used in this study is not clearly explained and, although the authors attempted to establish a link, it is questionable if such a direct connection to the loads on the muscular systems and functions exists. Additional details on experimental design and conditions still need to be included. In addition, a thorough revision of the grammar and elimination of repetitive information should be advised.

2. Abstract -

* Line 17 - The questionnaire used in this study is incorrectly stated as the SNQ (please also see details regarding this issue in the comment #4).

* Line 19 - flat rigid terrain still provides reaction force between participants' feet and ground. The word "no force" is inappropriate.

* The authors should indicate the problems associated with an increase of HR. Why are such increases not preferable?

* The results of the study might provide other advantages besides being useful as a basis of assistive device development.

3. Introduction -

* Major problem - What are differences between the current study and prior studies, specifically study [22]? The authors should explicitly identify any novel contributions achieved from this study.

* Major problem - In the last paragraph, the authors discuss that forces generated by mud induce higher muscle use, while, in fact, heart rate responses were investigated instead. However, loads on cardiac (work physiology) vs. muscular systems (biomechanics) might not be directly linked and positively correlated. More literature should be added and discussed before making such inferences.

* Line 38 - an increase of 0.08% in rice production is very small and would therefore seem to have a rather insignificant impact on farmers' health problems. Is it a mistake on the number unit? Please carefully check.

* Lines 39-40 - The sentence is hard to make sense of and should be rephrased for clarity.

* Lines 41-46 - Most of the references and incident numbers are based on data from Thailand. As the study was conducted with Indonesian farmers, it would be beneficial to include at least some information on the prevalence/pain reports from Indonesia as well. In addition, research providing similar information should be grouped together to avoid repetition and render the provided data easier to understanding.

* Line 58 - It is not farmers' body weight and tool weight that produces viscosity in mud.

* Line 59 - The authors state that high viscosity leads to higher muscular strength. Isn't it better for farmers to have higher muscular strength?

4. Material and methods -

* Major problem - HR cannot be compared among individuals without any normalization process, as each individual may differ substantially in terms of physiology. The authors should clearly state whether they included and compared the normalized values, and explain the normalization process they have used in the study.

* Description of the activity - While the participants perform the simulated planting activity, the weight of loads on the left hand should steadily reduce over time (i.e., less and less rice sprouts are being held the longer the activity lasts). This would mean that the hand load was not constant throughout the experimental trials, and therefore, might lead to reduced physiological workload by the end of the test trials.

* Additional details on experimental steps and conditions are still needed to be included. When did the participants wear the HR monitor and when was the HR data collected? Were mud viscosity (directly related to force) and temperature (directly induced HR) controlled throughout the experiment and, if so, how?

* Lines 105-111 - Beside wearing position, HR readings based on optical sensors are also known to be affected by other factors, e.g., different skin colors. The authors should indicate whether these factors were controlled.

* Lines 116-126 - Pain perception - The questionnaire used in this study is incorrectly referred to as the (modified) SNQ. While the SNQ can be reliably used for detecting symptoms in body parts induced during the past week and month, it is rather unsuited for the assessment of instant pain as done in this study.

* Lines 146-147 - The statement is not a valid reason why the repeated measures ANOVA should be used for analyzing HR responses.

* Line 152 - test of normality should be done prior to subsequent statistical analyses.

5. Discussion -

* Paragraphs 1 and 2 seem to overlap and should be combined. Once again, any direct inference between the muscular and cardiac system should be made with caution.

* There is a lot of repetitive information throughout the discussion section.

* Lines 249-253 - Study [28] did not investigate the immersion depth of the farmers' feet in the muddy terrain. Therefore, the validity of the explanation for the differences in the findings between the current vs. previous studies as

being a result of different depth of feet in the mud is questionable.

* Lines 257-258 - I am not sure what "to reduce the frequently conducted workload and adjust the ergonomic principles" mean?

* Line 264 - The current study already investigated backward walking. Why is there still a need for additional backward walking investigations?

* Lines 272 -274 - Regarding to the second limitation of the study, the authors should provide a recommendation what responses should be included in future studies.

Reviewer 3:

This is a very clear and concise study comparing two soil conditions and evaluating heart rate and musculoskeletal symptoms.

I have some specific comments and suggestions:

Abstract

1. The conclusion of the abstract could be related to the main findings of the study;

Introduction

1. Lines 40-41: these data seem to refer to musculoskeletal symptoms rather than disorders, please check and, if appropriate, correct the term MSD throughout the manuscript;

Methods: well described and complete

Results:

1. Values could be removed from Figure 4 as they are already shown in the text;

Discussion:

1. Lines 258-259: posture and balance are task-related, therefore, worker awareness of these issues cannot be effective in reducing the risk of MSD;

2. Lines 274-275: I suggest deleting this sentence, as it was not related to the purpose of the study.

There is additional documentation related to this decision letter. To access the file(s), please click the link below. You may also login to the system and click the 'View Attachments' link in the Action column.

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 **PAPER REVISING FORM (First review)1-3.doc**
47K

Agung Kristanto <agung.kristanto@ie.uad.ac.id>
To: EASR <kku.enjournal@gmail.com>

Thu, Jan 6, 2022 at 10:43 PM

Dear EASR Editorial team,

Thank you for your email. I will do the revision by 19 January 2022.

Best regards.

[Quoted text hidden]

Your Submission - [EMID:ded1668997cc59c9]

3 messages

EASR <em@editorialmanager.com>
Reply-To: EASR <kku.enjournal@gmail.com>
To: Agung Kristanto <agung.kristanto@ie.uad.ac.id>

Tue, Mar 15, 2022 at 2:51 PM

Ref.: Ms. No. EASR-D-21-00471R2

Article Title: **"The effects of the muddy surface environment on heart rate and pain perception in the lower extremity during the paddy planting activity"**

Engineering and Applied Science Research

Dear *Kristanto*,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript.

Your revision is due by **2022-03-29 23:59:59**.

Our decision is to: Revisions Required

If your paper is revised, please kindly send 1. Full revised manuscript with highlight 2. Blind revised manuscript with highlight 3. Paper revising form.

**** NOTE **** The revision of the article, **please highlight the text has changed**.

To submit a revision, go to <https://www.editorialmanager.com/easr/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Sujin Bureerat
Editor
Engineering and Applied Science Research

Comments from the Editor and Reviewers :

In the previous revised manuscript (R2), you don't respond to reviewer 1.

Please see comment Reviewer 1 and response to reviewer completely. (answer all questions)

Reviewer 1:

This paper is focused on musculoskeletal discomfort when farmers operating on different terrain. The paper is generally properly written. However, it need some revisions as specified below:

1. The farm work (especially manual farm work) depends upon several factors such as type of posture (squatting vs. kneeling), body part utilized (single or multiple body part), type of operation (manual or mechanical), education background of farmers, complexity of the operation, etc.? I think these factors need to be reflected in literature and discussion section of the paper appropriately.

2. Sampling strategy needs some more description. Also, I feel a pictorial view including the numbers (total, inclusion and exclusion) must give a better overview to the reader.

3. Please show the graphs of ANOVA assumptions (box plots) and statistical description of various measures.

4. What about the post-hoc results?

5. IRB statement is missing in the manuscript. Is consent taken from subject?
 6. The results are of some interest but the authors could elaborate further on the practical implications of their findings in the discussion section.
 7. Some papers related to manual farm working should also be cited and reviewed, such as: <https://doi.org/10.1504/IJISE.2019.099776>, <https://doi.org/10.1080/19338244.2017.1289890>, <https://doi.org/10.1080/10773525.2018.1547507>
 8. Also, there are some run-on, incomplete sentences, which need to be checked before revision submission.
-

There is additional documentation related to this decision letter. To access the file(s), please click the link below. You may also login to the system and click the 'View Attachments' link in the Action column.

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 **PAPER REVISING FORM (Third review).doc**
40K

Agung Kristanto <agung.kristanto@ie.uad.ac.id>
To: EASR <kku.enjournal@gmail.com>

Tue, Mar 15, 2022 at 3:29 PM

Dear EASR Editorial team,

Thank you for your email. I will do the revision by 29 March 2022.

Actually, I already responded to these reviewers' comments on the first round review, but I will re-submit the responses more completely in this third round.

On the second round review, there was only one reviewers' comment as attached on your previous email. I did not find the reviewers' comment from reviewer #2. That's why I just send one response on the second round review.

Thank you very much.

Best regards.

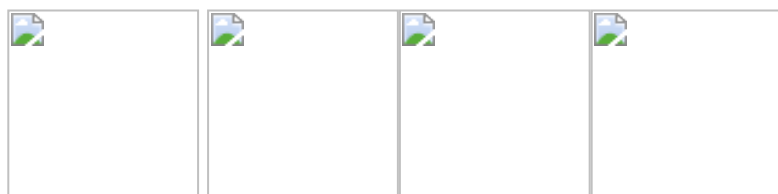
[Quoted text hidden]

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External Quality Audit and Recognition
Quality Assurance Office
Universitas Ahmad Dahlan
Yogyakarta, Indonesia



Dear author,

In the first round review, you response 3 reviewers, then we send revised manuscript to reviewer.

In the second round review, we send only comment reviewer 1 because you did not respond to reviewer 1 all questions (you response 5 questions from 8 questions). You can see in the previous email, we inform you to refer comment reviewer 1 (Round 1) not comment reviewer 2!!

Please revise manuscript and response to reviewer carefully

Best Regards,
Editorial Team
Engineering and Applied Science Research
Faculty of Engineering,
Khon Kaen University, 40002 Thailand
kku.enjournal@gmail.com

[Quoted text hidden]

[Quoted text hidden]

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Kampus 4: *Jl. Ringroad Selatan, Yogyakarta*

Kampus 5: *Jl. Ki Ageng Pemanahan 19, Yogyakarta*

Kontak

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Your Submission - [EMID:89fd63e229312d03]

1 message

EASR <em@editorialmanager.com>
Reply-To: EASR <kku.enjournal@gmail.com>
To: Agung Kristanto <agung.kristanto@ie.uad.ac.id>

Mon, Mar 28, 2022 at 2:35 PM

Ref.: Ms. No. EASR-D-21-00471R3

The effects of the muddy surface environment on heart rate and pain perception in the lower extremity during the paddy planting activity
Engineering and Applied Science Research

Dear authors,

We have reached a decision regarding your submission to Engineering and Applied Science Research, "The effects of the muddy surface environment on heart rate and pain perception in the lower extremity during the paddy planting activity".

Our decision is to: The paper can be accepted for publication in Engineering and Applied Science Research.

The acceptance date of your paper is March 28, 2022.

Thank you for submitting your work to Engineering and Applied Science Research.

Yours sincerely,
Editorial Office
Engineering and Applied Science Research
Faculty of Engineering,
Khon Kaen University, 40002 Thailand
kku.enjournal@gmail.com

In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: <https://www.editorialmanager.com/easr/login.asp?a=r>). Please contact the publication office if you have any questions.