



Conclusions

Part A: Writing the Conclusion

The main purpose of the conclusion is to bring together the different sections of the report and to provide appropriate closure. In this section, you stand back from your study and evaluate your work on the basis of your findings or results and indicate whether the objective of the study has been met.

In terms of organisation of information, the conclusion is the reverse of the pattern used in the Introduction of the report, progressing from specific to general.

Information Components in the Conclusion

The following are the information components typically found in the Conclusion section or chapter:

Component 1: Restatement of objective and methodological approach of study

Component 2: Review and explanation of key findings

Component 3: Implications of research findings (point out practical applications of study)

Component 4: Limitations of study

Component 5: Recommendations for future research

Component 1: Restatement of Objective and Methodological Approach

At the beginning of the conclusion, briefly restate your research objective and methodological approach. When restating your objective, avoid reproducing it exactly as written in the introduction. You could start with these expressions: *As mentioned earlier* or to *reiterate, etc.*

Component 2: Review and Explanations of Key Findings

Summarise and review your most important findings in relation to your research question. State whether your objective was met or whether your findings support the original hypothesis. You can also give possible explanations for your findings. If your results are unexpected, give reasons to explain them. You could compare your results with previous research, especially if you are replicating an experiment that has been conducted before.

Component 3: Implications of Research Findings

Evaluate the significance of your findings. This would answer the 'so what' question for your readers. You can point out the significance of your findings for theory and research development as well as the practical applications of your study.

Component 4: Limitations of Research Study

In this part of the conclusion, any limitations of the study which restrict the extent to which the findings can be generalised should be stated. For example, if unforeseeable and inevitable problems were encountered during your experiment, these could be mentioned in the conclusion. The limitations are not about the weakness in the research, but what cannot be concluded from your study.

Component 5: Recommendations for Future Research

Arising from the limitations of your study, you may see a need for further research. In addition, while working on your project, you may have realized that there are certain aspects of the project that would be interesting to research on though they lie outside the scope of your present project. You may wish to include this information here for other researchers who wish to work in these related areas of research.

The sequence above is the usual sequence for presenting the information components in the conclusion. However, not have all the elements have to be present. Recommendations for future research and applications of your research are optional and only one may be included to provide closure.

Activity 6.1

Analysing a Conclusion

The following is the Conclusion section from a research report. The problem studied was how to reduce damage to fruits when these are transported in ship containers. Read the section carefully and then determine the information component each sentence represents. (The sentences are numbered for easy referencing.)

1To reiterate, this experiment was conducted with the objective of finding a suitable material which can be used as lining for the interior walls of the container thus resulting in a significant reduction from mechanical damage through impact absorption. 2A ball was released from a fixed height and a meter ruler positioned beside it to measure the rebound height of the ball.

3From the results generated, it was found that the Coefficient of Restitution (CoR) values for all materials when placed on top of controls were lower when compared to just the controls itself. 4In addition, the outcome also showed that silicone offers the best impact absorbing capability out of the four selected materials. 5This finding supports secondary sources which commented on the cross linking molecular structure of silicone dispersing impact three dimensionally, making it an exceptionally good impact absorber.

6Limitations in the design of the experiment however, led to discrepancies. 7Physical construction of containers and cargoes and temperature variation were not possible to replicate in the project as well as a multitude of other sea-going conditions.

8Due to these limitations, it is recommended that future experiments be carried out on a vessel itself or a simulation of the actual seagoing ship. 9Also, other than the impact absorbency ability of materials, the present investigation can be extended to cover the cost-effectiveness of the materials.

10By improving the quality of cargo transported via the sea, shipping of fragile products can now be encouraged and this would certainly bring in generous commercial benefits to the industry. This would bring in greater trade variety and volume handled by sea transportation which in turn, serves as an incentive for industry players to invest in further improvements of quality management procedures to reap the benefits of scaled economics.

Activity 6.2

Analysing and Comparing Conclusions

Read the *Implications* and *Conclusion* sections of the article ‘Gold nanoparticles for cancer detection and treatment: The role of adhesion’ and answer the following questions:

Can you identify the 5 components in the *Conclusion* section in this article? Do you notice any difference in the way information components in the *Conclusion* are presented in this article and in the research report you analysed in [Activity 6.1](#)?

Why do you think the author has a separate section for Component 3 entitled *Implications* in this article?

Language Focus

In this section of the unit, we examine the language features typically used to present the information in the different components of the Conclusion. The language features discussed here are verb tenses and modal verbs.

Verb Tenses

Verb tenses in the conclusion vary depending on the type of information being presented. Guidelines on using verb tenses in the different components of the conclusion are given in the following table.

Table 6.1: Verb Tenses Used in the of the Conclusion

Function	Verb tense	Example
Restating aim (Component 1)	Simple past/present perfect	This research <i>attempted</i> to assess two methods for air purification. Or: This research <i>has attempted</i> to ...
Restating hypothesis (Component 1)	Simple past	It was originally <i>assumed</i> that ...
Review findings (Component 2)	Simple past	It was found that ... The experiment <i>showed</i> that ...
Explain/compare findings (Component 2)	Simple present	The results <i>are</i> consistent with ... The findings <i>differ</i> from those of ...
Implications of findings (Component 3)	Simple present	This research <i>adds</i> to the body of knowledge ... These findings <i>provide</i> evidence/lend support to the assumption that ...
Limitations of study (Component 4)	Simple present	The small sample size <i>is</i> a limitation of the research.
Recommendation for future research (Component 5)	Simple present	The small sample size <i>is</i> an opportunity for future research.

Activity 6.4

Identifying Language Features in a Conclusion

Read the experimental report in [Activity 6.1](#). Identify the tenses and modal verbs in the report and underline them. Can you identify the typical expressions used to express the different components? Make a list of these expressions. Be prepared to share your list with the class.

Table 6.2: List of Typical Expressions in Conclusion Section

Component	Typical expression
1: Restatement of objective	
2: Review of findings	
3: Implications of findings	
4: Practical or theoretical applications	
5: Limitations of study	
6: Recommendation for future research	

Assignment 3

Writing a Conclusion

In groups of 4 or 5, use the notes below from a research report on distracted driving[4] to write the Conclusion section (300–350 words).

Notes

Objective:

To identify the main cause of distracted driving in Singapore through a survey (100 drivers).

Summary of findings:

Distracted driving – many forms; main type – smartphone usage

Survey findings: 83% of drivers admitted to using mobile phones without hands-free kits in past 12 months; drivers are aware of danger but believe they can multi-task; findings similar to earlier studies conducted - Tong (2011); Samsung (2013); Oh (2013)

Implications of findings:

Stronger prevention measures needed – tougher legislation; education and publicity campaigns

Limitations of study:

Findings not backed by Singapore police traffic data for distracted driving offences during period covered by survey

Recommendation for future research

Larger number of drivers, broken down by age groups

Adapted from [4]