

Assessment 1: Literature Review

Due Date: **11:59pm on Friday 30 April 2021 (week 8)**
Weighting: 40%
Word Limit: 2,000 words +/- 10% (excluding in-text referencing, reference list, academic database search table / terms and PRISMA flow diagram, appendices).

Overview

This assessment item requires you to undertake a mini / abridged systematic review (a special type of literature review) on an intervention related to **COVID-19 / SARS-CoV-2**. As you are required to select your own topic, significant assistance is available during workshops one and two.

When completing this task, you are required to apply the core principles of evidence-based clinical practice:

1. **ASK** answerable question using the strategies outlined and practiced during the online packages / workshops (PICO).
2. **ACCESS** appropriate evidence by conducting a comprehensive academic database search for relevant published studies. You should appraise total of four (4) studies. You can chose Randomised Controlled Trials (RCTs) and / or non-randomised controlled trials. You can also select studies which are not RCTs / experimental studies, but you must talk with your tutor prior to writing your assignment. All studies must be in English. Importantly, the purpose of this assessment item is not to exclude poor quality papers from your review, but to demonstrate your ability to appropriately appraise the studies based on their quality within your review.
3. **APPRAISE** the studies selected for their internal validity, impact and applicability (external validity) using the strategies outlined and practiced during the online packages / workshops.
4. **APPLY** the information to your clinical context.
5. **AUDIT** (evaluate) the effectiveness and efficiency with which steps 1 – 4 were carried out and think about ways to improve your performance of them next time.

Outline of your literature review

To assist with the layout / structure, a template is provided, and must be used. Your assignment must include the following sections and where noted, individual word limits must be adhered to. Detailed explanations of each section will be provided during the first four workshops.

A **BACKGROUND** of 400 words demonstrating your understanding the topic, nature of the question being explored and rationale for why the topic is important to review. The background section must be supported (and referenced) by high-quality evidence. There are no restrictions on the type of evidence used to support this section. This section must include (use subheadings as per the template):

- Description of the condition: the review should begin with a brief description, epidemiology of the condition being addressed and its significance.
- Description of the intervention: A description of the intervention should place it in the context of any standard or alternative interventions. The role of the comparator intervention in standard practice should be made clear.
- How the intervention might work: This section should include the theoretical reasoning why the intervention under review may have an impact on potential recipients. For example, by relating the drug intervention to the biology of the condition. You should refer to a body of evidence such as similar interventions having an impact or identical interventions having an impact on other populations. You must also refer to a body of literature that justifies the possibility of effectiveness.
- PICO question being explored: In a single sentence, state your PICO question.

REMEMBER, use the highest quality evidence available in this section.

A **METHODS** section of 100 words describing your search strategy must include:

- Types of studies included: For this assessment most students will use **Randomised controlled trials or non-randomised experimental studies**. An experimental study is one where the researchers intervene in the study / controls the exposure (i.e. Drug, treatment, intervention, etc.). **In addition to the studies above, you may use Cohort or case control studies. If this occurs, you must have this approved by your tutor. This approval step will help ensure you appropriately appraise the studies.**
- Types of participants: The disease or condition of interest should be described here, including any restrictions such as diagnosis, age groups and settings.
- Type of intervention: The intervention and comparison should be defined here.
- Type of outcome measure: Outcome measure of interest should be listed here.
 - Primary outcome: This is the primary outcome of interest you will be exploring in the paper (i.e. pain using a visual analogue scale).
- Search methods for identification of studies: This section will describe the methods used to search appropriate academic databases:
 - Inclusion / Exclusion criteria: This section will list all relevant inclusion / exclusion criteria used when identifying relevant studies. Use dot points for the inclusion / exclusion criteria.
 - Academic database search terms table (NOT included in word count): a table describing which databases were searched, the detailed search strategy used and the number of search results obtained. NOTE: the table must outline all searches used for each database.
 - PRISMA Flow diagram (NOT included in word count): Within this section you are also required to include a PRISMA 2009 Flow Diagram. See page six of this document and the online learning package from week three for more information.

Please note: If you search PubMed, this means that you have searched Medline (however this doesn't count as searching two databases).

More information will be provided on the methods section and search strategy during first few weeks of the unit.

An **INTERNAL VALIDITY CRITICAL APPRAISAL** of 450 words demonstrating your analysis and synthesis of the four (4) RCT / non-randomised controlled trials (or other tutor approved study) that you have selected to answer your PICO question. Critically appraise the studies in-light of your discipline and discuss the strengths and weaknesses of each study. When critically appraising your studies, it is essential to compare and contrast the quality of the papers.

You must **NOT** include any systematic reviews, case reports, case series, cross-sectional, narrative or qualitative papers in this section.

Assessment of risk of bias in included studies: This is a critical component of the assessment. Your paper must systematically appraise each of the four studies selected using the relevant CASP appraisal checklist that can be found on <https://casp-uk.net/casp-tools-checklists/>. Four (4) completed checklists, one for each study, should be included as an appendix to your assignment.

Also, you must consider the potential impact of confounding and chance, overall study design strengths and weaknesses and any other factor that may have impacted the results.

Tips:

- In this section, use the information gained while completing the CASP worksheets to compare and contrast your selected studies' quality. Is one better than another? How? Why? What is the type and level of risk of bias impacted in each study?
- When completing the CASP checklists, remember to record evidence and a BRIEF reason for your answer (ie. Yes, No, Can't tell). Evidence and a reason might include location within the article (ie. page 4 – Patient selection or page 354 – paragraph 2 or page 265 – table 1), responses to questions included in the “consider” questions (ie. While all participants who entered the study were accounted for at its conclusion (page 576 – figure 1) or the study did not use an intention to treat analysis (page 576 – paragraph 4).

A **RESULTS** section of approx. 200 words. This is a vital component of the assessment. Outline a brief written summary (including statistical results) of the main findings of the effects of the intervention relevant to your PICO question. This section should directly answer your PICO question and not discuss all of the findings of the selected studies. Remember, do not directly copy the results section of your chosen studies; this is called plagiarism. This section will typically include dichotomous, continuous or time-to-event results.

A **HOW MIGHT WE USE THIS EVIDENCE TO INFORM PRACTICE?** section of 450 words which will address areas such as external validity and limitations of the appraised evidence. In writing this section, it is essential to consider if the results can be applied to your patients / your population of interest. If they can/cannot be applied, why? When developing this section, it is vital to take into account the internal validity and results sections above.

A **CONCLUSION** of 250 words, which provides an answer to your PICO question (must be supported by your paper). You should also:

- Summarise the main agreement/disagreement of the four articles appraised
- Consider if the body of evidence identified allows for a robust conclusion to be made
- Summarise the key methodological limitations of the studies
- Comment on the consistency or otherwise of the results within the four articles appraised
- Identify any gaps or areas for further research and an overall perspective on the topic (informed by your review).

An **AUDIT** (reflection) of 150 words discussing the effectiveness and efficiency with which you completed steps 1 – 4 of the process. When completing the audit, consider your strengths and areas requiring further development. Please write this section in the first person.

A **REFERENCE** list using the QUT APA referencing style. Refer to the QUT CiteWrite resource for more information.

How do I critically appraise each study?

Your assignment must adhere to the task sheet. You must fully complete the relevant CASP critical appraisal worksheet (<https://casp-uk.net/casp-tools-checklists/>) and provide evidence supporting your risk of bias assessment (ie. Yes, No, Can't tell). Evidence and a reason might include location within the article (ie. page 4 – Patient selection or page 354 – paragraph 2 or page 265 – table 1), responses to questions included in the “consider” questions (ie. While all participants who entered the study were accounted for at its conclusion (page 576 – figure 1) or the study did not use an intention to treat analysis (page 576 – paragraph 4).

Significantly more information, discussion, activities and guidance are provided weeks 1 – 7 of the unit to assist.

Submit draft version of your paper to check the similarity index

You have the opportunity to submit one (1) version of your paper to check your similarity report before the actual submission deadline. Submit the draft via the draft check Turnitin link in Blackboard.

Assignment submission

Your assignment must be submitted via the Literature Review Turnitin link by the due date/time (located in the submission of your FINAL assignment section). This is the only method through which assessments can be submitted. Only one (1) file can be submitted.

Your submission must be a Word document (docx or doc).

Please note: you **MUST** submit the final version of your paper via the "Literature Review" Turnitin link in Blackboard. If your paper is not submitted via the "Literature Review" Turnitin link by the due date/time, it will be deemed to be a non-submission, and a result of zero (0) will automatically be recorded. Any submission uploaded using the "Draft Submission" link will not be considered.

Ensure that you understand QUT's policies on academic misconduct and assessment submission.

If your application for extension is denied or not approved by the due date, submit the work that you have completed. The unit coordinator is **NOT** able to approve extension or deferment. Failure to submit the assessment item by the due date and time will result in a score of zero (0).

Style, language and formatting

Your paper **must** conform to the following standards (marks are deducted for non-compliance):

1. Line spacing 2.0 (excluding tables and reference list).
2. Standard page margins.
3. Left justified text.
4. All sections of your paper, EXCEPT the audit section, must be written in third person.
5. You are encouraged to write the AUDIT section in first person.
6. English (UK or Australian) language.

How will your paper be marked?

Markers use the task, marking and criteria sheet (this document) to evaluate your paper.

Your papers will be marked electronically via Turnitin. Once all papers have been marked, results and written feedback will be available via Turnitin. It is anticipated that you will receive your results in week 12.

Seeking assistance

Each of you will enter this unit with differing levels of experience. To assist in developing your capabilities, we will provide you with the following:

1. Review assessment requirements during online packages and workshops.
2. Online packages 1-5 and workshops 1-4 focus on the knowledge and skills required to successfully complete this assessment.
3. Opportunity to answer individual questions during set workshops.
4. Dedicated Blackboard discussion board.
5. Opportunity to attend an assessment 1 drop-in session in week 6.



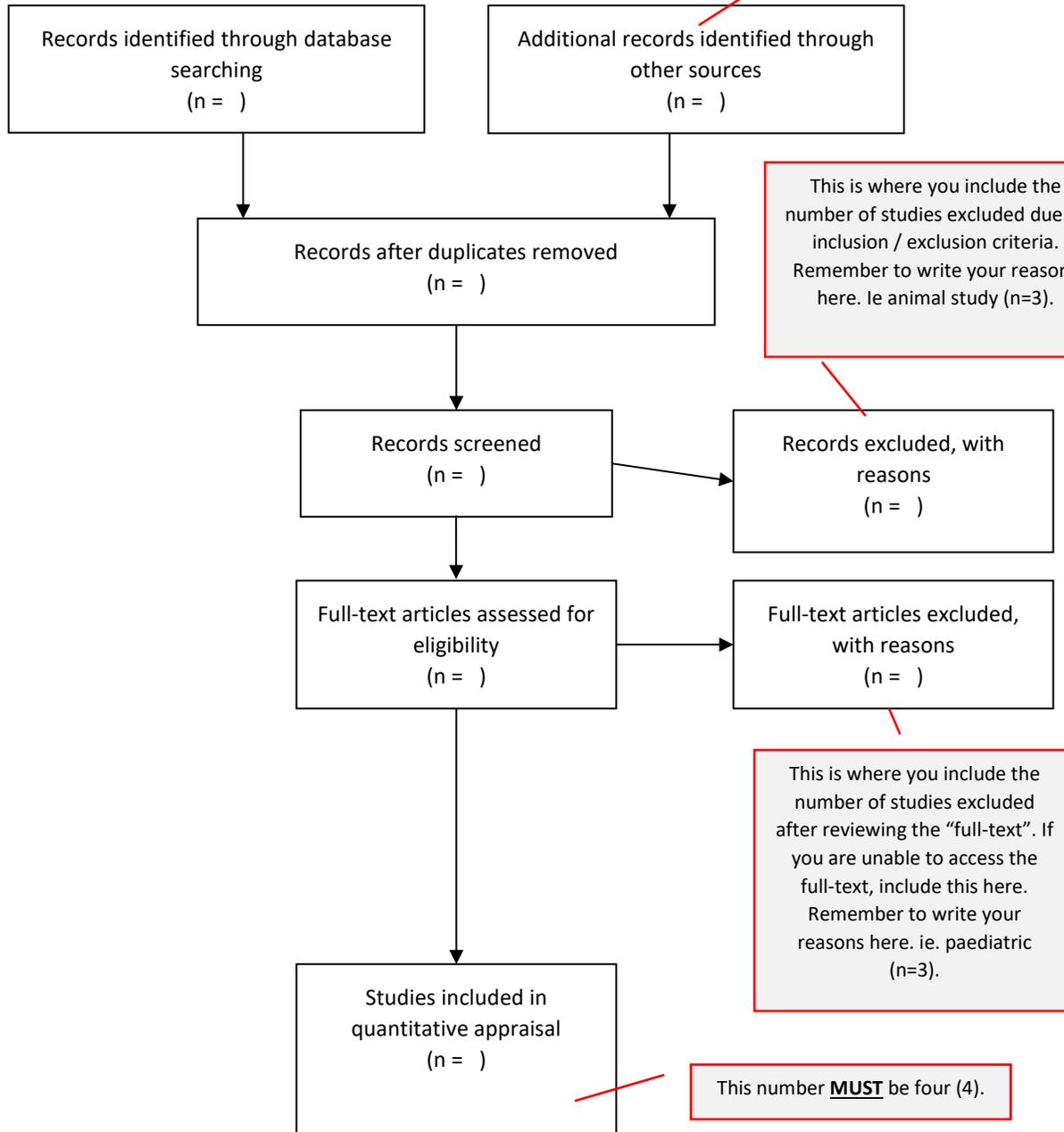
PRISMA 2009 Flow Diagram (EDITED VERSION)

Identification

Screening

Eligibility

Included



See the week 3 online learning package for further details on how to complete the flow diagram.

Adapted From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

For more information and the flowchart template, visit www.prisma-statement.org.

Frequently asked questions

Is the assessment item a "standard" literature review (ie. As outlined in the QUT CiteWrite document)?

No, while it is a literature review, and quite a number of components of the task are similar to a "standard" literature review, it is not exactly the same. This assessment task should be viewed as a mini or abridged systematic review.

It is also important to remember that a key component of the task (40% of the marks) relates to the:

- Critical evaluation of the methodological quality and level of evidence; AND
- Synthesis and analysis of the study findings.

During the first few weeks of the semester, significantly more information will be provided to assist you in understanding the requirements. Opportunities will also be provided to discuss any questions that may arise.

Do you need to include a written section in the methods component, or do you just include the search table?

No, use the template. Ensure all components within the methods section is completed.

Do I include my search table and PRISMA flow diagram in my assignment or as an appendix?

Include everything in your assignment. Do not use an appendix.

Do I complete a PRISMA flow diagram for each database searched, or just a single one with the combined results?

Just a single one with the combined results.

Are the tables / diagrams required to have double line spacing?

No. Single line spacing for diagrams and tables is acceptable. The remainder of your assignment must use double line spacing.

If I use the EBP unit textbook, should reference it?

Yes. Remember to use the QUT APA citation style. If you need assistance, please review the QUT CiteWrite resource.

Can I submit more than one document via Turnitin?

No,

What study types and / or evidence can I use in my "background" section?

You can use any type of evidence in the background section. As this is an academic paper, you should use the highest quality (appropriate) sources of evidence to support your discussion.

When I include my PICO question in the background section, do I use a table or write it as a single question?

Write it as a single question only.

Is the audit section included in the word count?

Yes.

Do I have to use the assessment template provided?

Yes. If you are unable to open the template, it is your responsibility to email the unit coordinator before the due date/time.

How do I select the four (4) papers I would like to appraise in the discussion section of my assessment?

As this is an abridged / mini systematic review, you are allowed to select any papers that both answer your PICO question AND meet the inclusion/exclusion criteria.

Hint: What potential risk of bias does this introduce to your paper? This should be included in the limitations section of your paper.

How should I present my critical appraisal (discussion)?

Your critical appraisal must follow the submission template provided. It is also important that you critically appraise all four articles together. For example: appraise the randomisation for all four papers, then concealment for all four papers, etc.

Do we need to calculate statistical results that are not included in the paper?

No. If you have concerns about the statistical results that are/are not included in your paper, please talk with your tutor early and we will provide individual feedback.

Remember, you do need to calculate the loss to follow-up percentage as this is a secondary school level calculation.

Criteria	Standards				
	15 – 12.75	12.7 – 11.25	11.2 – 9.75	9.7 – 7.5	7.4 – 0
Contextualisation of research task and Ask (15 Marks)	<p>Using only the highest calibre of evidence, the research topic is contextualised through the provision of clear and comprehensive detail of:</p> <ul style="list-style-type: none"> relevant background a rationale that justifies its importance as a worthy topic of study <p>The purpose and scope of the research are clearly and logically delineated. In addition, a fresh and individual view of the topic is provided based on the literature and personal research.</p> <p>Correctly, comprehensively and clearly develops & states a research question using the PICO framework.</p>	<p>Using high-quality evidence, the research topic is clearly contextualised through the provision of:</p> <ul style="list-style-type: none"> relevant background a rationale that explains its importance as a worthy topic of study <p>The purpose and scope of the research are clearly and logically delineated.</p> <p>Correctly and clearly develops & states a research question using the PICO framework.</p>	<p>Using high-quality evidence, the research topic is adequately contextualised through the provision of:</p> <ul style="list-style-type: none"> mostly relevant background a rationale that states its importance as a worthy topic of study <p>The purpose and scope of the research are outlined in a general way.</p> <p>Identifies and describes (with few and minor omissions) develops & states a research question using the PICO framework.</p>	<p>Using reasonable quality evidence, contextualisation of the research topic is attempted through the provision of:</p> <ul style="list-style-type: none"> an indication of background a statement of its importance as a worthy topic of study. <p>The purpose and scope of the research are outlined in brief with some evident gaps in logic.</p> <p>Identifies and lists only basic or obvious aspects of a research question using the PICO framework.</p>	<p>Information provided is insufficient or unclear in providing a context for the research topic in relation to its rationale, influence on the choice of topic.</p> <p>Uses inappropriate, very limited or no evidence to support statements.</p> <p>Demonstrates limited or inaccurate knowledge and understanding of developing a research question using the PICO framework.</p> <p><u>AND / OR</u></p> <p>Does not state a research question.</p> <p><u>AND / OR</u></p> <p>Selects a clinical question not related to COVID-19 / SARS-CoV-2.</p>
	Acquire (20 Marks)	<p>The search strategy is very clearly and accurately reported, including a broad and comprehensive list of search terms and sources used.</p> <p>MeSH/EMTREE terms (or equivalent) and Boolean operators used have allowed for the development of a systematic and comprehensive search appropriate for the PICO question.</p> <p>Multiple search strategies developed and reported within each database to demonstrate the final search identifies essentially all relevant research answering the PICO question.</p> <p>The search strategy reported is reproducible.</p>	<p>The search strategy is clearly and accurately reported, including a full list of search terms and sources used.</p> <p>MeSH/EMTREE terms (or equivalent) and Boolean operators used have allowed for the development of a systematic and comprehensive search appropriate for the PICO question.</p> <p>Multiple search strategies developed and reported within each database to demonstrate the final search identifies the majority of relevant research answering the PICO question.</p> <p>The search strategy reported is reproducible.</p>	<p>The search strategy is clearly and accurately reported, with search terms and sources listed, however minor omissions are evident.</p> <p>MeSH/EMTREE terms (or equivalent) and Boolean operators have been used, however not all are appropriate or minor omissions/errors are evident.</p> <p>Multiple search strategies developed and reported within each database to demonstrate the final search is likely to identify most of the relevant research answering the PICO question; minor omissions/errors are evident.</p> <p>The search strategy reported is reproducible with minor errors.</p>	<p>The search strategy is reported, with search terms and sources listed; however, some omissions were evident or not all of a high standard.</p> <p>MeSH/EMTREE terms (or equivalent) and Boolean operators have been used, however omissions/errors are evident.</p> <p>Multiple search strategies developed and reported within each database to demonstrate the final search is likely to identify some of the relevant research answering the PICO question; some omissions/errors are evident.</p> <p>The search strategy is essentially reproducible, but some errors are present.</p>
<p>A comprehensive array of inclusion/exclusion criteria listed.</p> <p>Three or more high quality & appropriate academic databases used (ie. PubMed, EMBASE, Cochrane, etc).</p> <p>PRISMA flow diagram accounts for all records/articles, reasons provided for all exclusions and no errors.</p>		<p>A solid array of inclusion/exclusion criteria listed.</p> <p>Two high quality & appropriate academic databases used (ie. PubMed, EMBASE, Cochrane, etc).</p> <p>PRISMA flow diagram accounts for most records/articles, reasons provided for most exclusions or minimal errors.</p>			

QUT | CSH600 | Literature Review | Marking and Criteria Sheet

	45 – 40	39.5 – 34	33.5 – 28	27.5 – 22.5	22 – 0
Appraise and Apply (45 Marks)	<p>Exceptional critical evaluation of the methodological quality, internal validity, chance, confounding and levels & type of bias (inc. CASP checklists & summary of risk of bias table).</p> <p>Reporting, compare / contrast, synthesis and analysis of study quality and results is at an exceptional level, producing a novel understanding or perspective.</p> <p>Creative / insightful application to a clinical context (external validity / inform practice).</p>	<p>Very high level of critical evaluation of the methodological quality, internal validity, chance, confounding and levels & type of bias (inc. CASP checklists & summary of risk of bias table).</p> <p>Reporting, compare / contrast, synthesis and analysis of study quality and results is at a very high level, producing a novel understanding or perspective.</p> <p>Insightful application to a clinical context (external validity / inform practice).</p>	<p>High level of critical evaluation of the methodological quality, internal validity, chance, confounding and levels & of bias (inc. CASP checklists & summary of risk of bias table).</p> <p>Reporting, compare / contrast, synthesis and analysis of study quality and results is at a high level.</p> <p>Effective application to a clinical context (external validity / inform practice).</p>	<p>Adequate evaluation of the methodological quality, internal validity, chance, confounding and levels & type of bias (inc. CASP checklists & summary of risk of bias table).</p> <p>Reporting, compare / contrast, synthesis and analysis of study quality and results is at an acceptable level.</p> <p>Application to the clinical context is somewhat limited (external validity / inform practice).</p>	<p>Evaluation of the methodological quality, internal validity, chance confounding and / or levels type of bias is poor quality, not performed and / or documented (inc. CASP checklists & summary of risk of bias table).</p> <p>Limited reporting, compare / contrast, synthesis and analysis of study quality and results is demonstrated.</p> <p>Very limited / no application to the clinical context (external validity / inform practice).</p>
Audit (5 Marks)	5 – 4.25	4.2 – 3.75	3.7 – 3.25	3.2 – 2.5	2.4 – 0
	A thorough and well-reasoned reflection on the inquiry process used, identifying all relevant strengths and limitations.	A thorough reflection of the inquiry process used, identifying all relevant strengths and limitations.	High level of reflection on the inquiry process is demonstrated, identifying relevant strengths and limitations.	Acceptable level of reflection on the inquiry process, identifying some relevant strengths or limitations.	Relevant reflection on the strengths and/or weaknesses of the inquiry process are not identified or limited.
Communicate knowledge and the processes used to generate it. Including:	15 – 12.75	12.7 – 11.25	11.2 – 9.75	9.7 – 7.5	7.4 – 0
<ul style="list-style-type: none"> • Control of syntax and mechanics • Style • Attribution of others' work • Structure • Word limit (15 marks) 	<p>Thorough proofreading is evident: spelling, grammar and punctuation are essentially error-free throughout.</p> <p>The writing style is punchy and effective (clear and concise English, succinct sentences, professional register): terminology is appropriate and is very easy to read.</p> <p>The source of external ideas are consistently acknowledged and citations / references are always in accordance with the recommended style guide – QUT APA.</p> <p>The work consistently adheres to all conventions required of the literature review.</p> <p>Organisation is logical with a clear and coherent background, methods, discussion, limitations, conclusion and audit.</p>	<p>Adequate proofreading is evident: work is relatively free of errors in spelling, grammar and punctuation.</p> <p>The writing style is proficient with only minor lapses in expression and few errors to detract slightly from readability.</p> <p>With very minor exceptions the source of external ideas are acknowledged and citations / references are in accordance with the recommended style guide – QUT APA.</p> <p>The work adheres to the main conventions required of the literature review.</p> <p>Organisation is logical with a clear background, methods, discussion, limitations, conclusion and audit.</p>	<p>Proofreading is evident: errors in spelling, grammar and punctuation are few and minor.</p> <p>The writing style is competent and mostly easy to read though with some distracting errors or poor style choices in terms of language choices and suitability of terminology for audience.</p> <p>With minor omissions or inaccuracies in detail the source of external ideas are acknowledged and citations / references are in accordance with the recommended style guide – QUT APA.</p> <p>The work adheres in general to the conventions required of the literature review.</p> <p>Organisation incorporates a background, methods, discussion, limitations, conclusion and audit.</p>	<p>Proofreading is evident: errors in spelling, grammar and punctuation with occasional impact on meaning and readability.</p> <p>The writing style is generally adequate in conveying an intended message but readability would be enhanced through greater attention to matters such as word choice, sentence construction for audience.</p> <p>The source of external ideas are acknowledged through inconsistent use of citations / references. Recommended style guide – QUT APA has several significant omissions or inaccuracies.</p> <p>The work shows awareness of the conventions of the literature review.</p> <p>An organisation incorporates a background, methods, discussion, limitations, conclusion and audit, but with some significant issues.</p>	<p>Inadequate proofreading: work contains major / multiple errors in spelling, grammar and punctuation with significant impact on meaning and readability.</p> <p>The writing style significantly detracts from readability and appropriateness for purpose and audience.</p> <p>Significant breaches are evident in the use of paraphrasing, citations, referencing and the recommended style guide – QUT APA is either not applied or applied inaccurately.</p> <p>Academic misconduct.</p> <p>Work exhibits none / few of the conventions of the literature review.</p> <p>No / poor organisation of the material makes the work appear meandering and difficult to follow.</p> <p>Word limit outside of acceptable margins. Did not follow the assessment template.</p>
	Word limit within acceptable margins. The submission followed the assessment template exactly. The submission followed all style, language and formatting requirements.				Submission did not follow style, language and formatting requirements.