



Uni-Edit 写作技巧 014

如何进行论证（2017）：可信度、论据及引用

难度等级：中级

突破性的研究通过发现文献之间的差距、利用新的假设调和相矛盾的研究结果，为研究开拓了新的方向。

如果不了解文献，便无法实现这个目标。作者必须准确地报告前辈和同事的研究来进行认同或驳斥。另外，作者都是希望读者能把重点集中在与其研究假设至关重要的论据以及作者对自己分析的解释上。

在这篇写作技巧中，我们将结合一些例句来回顾报告研究结果的常见方法。类似的结构你可能已经看过数百次并在自己的论文中也使用过，但是，读完这篇写作技巧后，或许在你使用这些常用词组和结构时，你能更好的了解读者的想法。

方法#1 - 使用报告式动词

学术写作中都会使用“report”，“demonstrate”及“show”等报告式动词，这些动词表明了以往研究的结果或论据。报告式动词在论文中是很常见并且是应该要使用的。

Neurogenesis has been shown to be essential to the hippocampus's ability to tolerate stress (Lehmann, 2013).

已经有研究显示神经发生对海马体的耐受力是至关重要的（Lehmann, 2013）

Transcription factor Spi-B has been demonstrated to be specifically expressed by M cells in gut epithelium (4).

已经有研究证实转录因子 Spi-B 由在肠上皮中的肠微皱褶细胞 M 细胞特别表达（4）

It has been reported that texture weakening can be achieved by alloying Mg with yttrium and rare earth elements such as cerium or neodymium [1-3].

据报道，通过将镁与钇、铈或钕等稀土元素进行合金化可以实现织构弱化[1-3]。

要注意的是上面的句子都使用了被动语态：不会告诉读者谁“显示”了什么，在 Uni-edit，我们注意到非英语母语人士在学术英语中似乎更喜欢使用被动语态。喜欢使用被动语态的常常认为客观性是被动语态的优点之一，例如，被动语态不会指明谁是动作执行者，无论是动作执行者，其研究结果和研究方法等都应该真实的。

但是，实际上你可以使用主动语态向读者提供论据之类的更多信息。例如，如下所示，主动语态中的“many studies”及“several authors”这样的表达具有更高的可信度。

Many studies have reported that texture weakening can be achieved by alloying Mg with yttrium (Y) and rare earth (RE) elements such as cerium (Ce) or neodymium (Nd) [1-3].

很多研究表明，通过将镁与钇、铈或钕等稀土元素进行合金化可以实现织构弱化[1-3]。

另一方面，对于开创性的、独特的、有争议的或未经证实的研究结果，明确指出某一研究的作者是很有效的。这告诉读者某研究结果是针对于某个或多个研究，读者应该进行参考以更多地了解实验方法、条件及局限性等。

使用主动语态与被动语态表达出的可信度是一样的，但用了更少的词、以直观的方式展示了论据。

Terahara et al. found that transcription factor Spi-B is specifically expressed by M cells (2008).

Transcription factor Spi-B has been found to be specifically expressed by M cells (Terahara et al., 2008).

方法#2 - 将研究结果作为事实（但添加引文）

让我们再看看这些句子：是不是还有其他的方法可以来表达论据呢？答案是肯定的，那就是引用。

引用让你用自信、自然的英文报告某研究发现：只要像描述事实一样报告即可。

Transcription factor Spi-B is specifically expressed by M cells (4).

转录因子 Spi-B 由在肠上皮中的肠微皱褶细胞 M 细胞特别表达（4）

Process innovation is critical in influencing service industry dynamics (Klepper, 1996).

流程创新对于影响服务行业的动态至关重要(Klepper, 1996).

Texture weakening can be achieved by alloying Mg with yttrium and rare earth elements such as cerium or neodymium [1-3].

通过将镁与钇、铈或钕等稀土元素进行合金化可以实现织构弱化[1-3]。

读类似这样的句子时，读者会想：“这个研究已经得到了几项研究的证实：我可以认为这个研究结果是真实的。”对于某领域的常识或者许多相关论文已做了假设的情况，将研究结果作为事实是不错的方法。在这样的句子中，像“show”这样的报告式动词是没有必要的：引用很明显的表明作者是在参考文献。

在某些情况下，不可能列出支持某研究的所有论文：在这一情况下，您可以使用“many studies”、“e.g.”、“see”。

Many studies have shown that process innovation is critical in influencing service industry dynamics (e.g., Klepper 1996).

很多研究显示流程创新对于影响服务行业的动态至关重要(eg: Klepper, 1996).

这和可信度有什么关系？

你可能直观地认识到，引言部分应该从广泛到狭隘：从研究领域和子领域的广泛的、高可信度的陈述开始，然后逐步介绍与研究相关的具体发现。

对于广义的陈述，将结果作为事实的表述方法是明智的（方法#2）；而对于具体的研究结果，逐一列举研究是合理的（方法#1）。列举研究的数量（“one study”，“several studies”，“only a few studies”，等等）没有点名相关研究的作者那么精确，但这细微的差别可以表明研究的重要性。

那有争议或矛盾的结果呢？

要注意的是，好的研究不仅应该展示得到充分证实或既定的研究结果，也会展示有争议的或矛盾的调查结果。有几个可能的原因来报告这种可能不完全正确的研究结果或论据：

- 1) 你研究的目的是证实低可信度的研究发现。
- 2) 你不同意另一项研究结果。
- 3) 告诉读者某研究有争议、或已发现相矛盾的研究结果、或没有达成最终共识。
- 4) 如果你认可某研究（或尤其在不认可时），都要接受在相关领域中存在备受关注的这样一份研究论文。

总结

正如我们所看到的，读者可以从稍有差异的语言中得出不同的推论，即使是学术写作中最常见的一些短语亦是如此！掌握“show”，“demonstrate”，and “report”等报告式动词的用法，并结合引文和主动语态的使用，会使读者认为你的研究是新颖、具有突破性，同时又是没有争议的。

END OF TIP

Uni-edit English Writing Tip 014

Prove It! (2017) Confidence, Evidence, and Citations

Difficulty: Intermediate

Groundbreaking research pioneers new directions by identifying gaps in the literature, and by forming new hypotheses to reconcile contradictory findings.

You can't achieve this goal without knowing the literature. You have to report the findings of your predecessors and peers accurately in order to confirm or refute them. Moreover, you want your readers to focus on evidence that is central to your study hypothesis, and your own interpretation of your own analysis.

In this tip, we'll review some common ways to report findings with many example sentences. You've probably seen these structures hundreds of times, and used them in your own papers. However, after reading this tip, hopefully you'll have a better awareness of what your readers think when you use these common phrases and structures.

Method #1 - Use a Reporting Verb

Every academic writer uses reporting verbs like “report”, “demonstrate”, and “show”, which indicate findings or evidence from previous research. Reporting verbs are common and expected in every paper.

Neurogenesis **has been shown to** be essential to the hippocampus's ability to tolerate stress (Lehmann, 2013).

Transcription factor Spi-B **has been demonstrated to** be specifically expressed by M cells in gut epithelium (4).

It has been reported that texture weakening can be achieved by alloying Mg with yttrium and rare earth elements such as cerium or neodymium [1-3].

Note that the sentences above all use the passive voice: i.e., the English does not tell you who 'showed' what. At Uni-edit, we have noticed that non-native speakers of academic English seem to prefer passive voice. Advocates of passive voice often claim objectivity as one of its advantages: i.e., because passive voice doesn't specify the agent, the finding, method, etc. should be true regardless of who does it.

However, you can actually use the active voice to provide more information to readers about the level of evidence, in as many words or fewer. For example, as below, expressions like “many studies” and “several authors” used in the active voice tell the reader that the statement has a high level of confidence.

Many studies **have reported** that texture weakening can be achieved by alloying Mg with yttrium (Y) and rare earth (RE) elements such as cerium (Ce) or neodymium (Nd) [1-3].

On the other hand, specifying the author of a study by name is an effective strategy for novel, unique, controversial, or uncorroborated findings. This tells your reader a finding is specific to a certain study or studies, and they should consult that reference to learn more about the experimental method, conditions, limitations, etc.

Using the active voice implies the same level of confidence as the passive voice, but immediately and intuitively shows the evidence, in fewer words.

Terahara et al. **found** that transcription factor Spi-B is specifically expressed by M cells (2008).
Transcription factor Spi-B **has been found to be** specifically expressed by M cells (Terahara et al., 2008).

Method #2 - State Findings as Facts (but Add a Citation)

Let's take another look at these sentences: isn't there other text that conveys the level of evidence? The answer is yes: the citations.

Citations let you report a finding in confident, natural English: just report it as a fact.

Transcription factor Spi-B is specifically expressed by M cells (4).

Process innovation is critical in influencing service industry dynamics (Klepper, 1996).

Texture weakening can be achieved by alloying Mg with yttrium and rare earth elements such as cerium or neodymium [1-3].

Upon reading a sentence like one of these, your readers will think: “This is a finding that has been corroborated by several studies: I can assume it is true.” This is good practice for common knowledge in the field, or assumptions made by many related papers. Reporting verbs like “show” aren't necessary: the presence of a citation makes it obvious you are referencing the literature.

In some cases, it's impossible to name all the papers that support a finding: in these cases, you can use “many studies” and “e.g.” or “see”.

Many studies have shown that process innovation is critical in influencing service industry dynamics (e.g., Klepper 1996).

What Does This Have to Do with Confidence?

You probably know intuitively that the Introduction section should progress from broad to narrow: it should start with broad, high-confidence statements about your field and subfield, and gradually introduce specific findings and studies relevant to your research.

For broad statements, it makes sense to present the findings as facts (Method #2); for specific findings, on the other hand, it makes sense to name or enumerate the studies individually (Method #1). Enumerating the number of studies (“one study”, “several studies”, “only a few studies”, etc.) is less precise than naming the authors of the relevant studies, but can imply the level of importance of a finding with greater nuance.

What about Controversial or Contradictory Findings?

Note that good research should not only present well-supported or established findings, but also controversial or contradictory findings. There are several possible reasons to report findings or evidence that might not be completely true:

1. The purpose of your study is to corroborate the low-evidence finding.
2. Your findings disagree with the other study’s findings.
3. To tell your reader there is controversy, or that conflicting findings have been found, or that a final agreement has not been reached.
4. To acknowledge a high-profile paper in your field, if you agree with it (or especially if you don’t!).

Summary

As we can see, readers can draw different inferences from language that is only slightly different, even for some of the most common phrases in academic writing! Mastery of reporting verbs like “show”, “demonstrate”, and “report”, combined with efficient use of citations and the active voice, will ensure your readers can separate the uncontroversial background of your study from its new, unusual, and groundbreaking elements.

END OF TIP