In this next module, we're going to talk about writing the abstract.,This will be a short module,,because after you finish writing your paper, it should be fairly easy to write your abstract.,In fact, the word abstract means literally to pull out.,So what you're going to do to write your abstract is to pull out snippets from the rest of your paper.,It gives readers an overview of the main story of your paper.,If you're writing the abstract last, it should be fairly easy to write, because you're just highlighting bits and pieces from each section.,It's usually short, which means you can use your skills in cutting clutter to make sure you fit within the word limits, like tables and figures.,The abstract has to stand on its own, and it's the part that most often is people read.,Sometimes people only read the abstracts and not the full text.,One major caution I have on the abstract One mistake I see commonly is that authors often write abstracts prior to writing the paper,, because maybe they want to present some data at a conference, so they rummage through their data quickly and throw together some abstract just so they can present it at a conference.,Then months later, when they actually go to write up the paper, they're like, oh, I already wrote that abstract.,Great. I can't just plug that abstract in my paper and I'm going to start my whole paper there.,Once you have something written, it feels like, wow, I've already got this written.,I should use it. Why waste work?,The problem with this is, when you threw that abstract together months before, ,you probably hadn't nailed down all of the data analyses and the tables and the figures and the story of your paper, it was probably very preliminary.,That abstract that you wrote months ago is simply not going to fit into your final analysis.,My recommendation is throwing in the garbage and start over.,Start over on the abstract, using the material in your newly written paper.,Don't just try to modify that abstract that's months old.,Again, it's really easy to write an abstract after you've written the paper, so I recommend always writing the abstract last. Just throw out any old abstracts you might have hanging around.,What should go in your abstract?,Again, it's essentially just pulling out little bits from the rest of your paper.,It's good to start with a $0.01 in statements.,Uh, of some background. Give the reader some contacts, maybe motivate the importance of the work.,Then you're going to explicitly state the research aim or question, just like you did at the end of the introduction section.,You're going to use that exact phraseology.,We asked whether we hypothesize that or we speculated that.,Then you're going to give a quick summary of the experiments that you did.,Obviously, you're not going to have room for a lot of details, but give it overview of the methods.,You can pull all these pieces right out of the method section, but make it minimal.,Then you're going to give a couple of key results in just a few important numbers, not too many.,Then you're going to have a brief conclusion.,You're going to answer the question that you asked or the hypothesis that you were testing in your study.,You're going to give some kind of k CO message about whether or not your hypothesis was proven.,E.g., did you find that breast cancer in smoking are associated?,And then one more thing that I think is very important to put in.,You need to have, as mimi's Iger puts, at some kind of implication, speculation or recommendation.,So what that means is that there's one sentence at the end of your abstract where you're going to go a little beyond and give readers though.,Why should I care? What's the implication?,Why does this research matter? I'm often scanning abstracts for articles to write about for the lay public,, and I need to quickly discern the real world relevance of that research, so make sure you put that implication, speculation or recommendation in at the end of your abstract.,Now, abstracts come in two forms.,They may either be structured, where the journal says, hey, we want you to have something for each of these specific pieces with subheadings like Introduction, results, methods. The subedings are fairly obvious. Or you may have a free form abstract.,The structured ones are obviously a lot easier to write.,I'm just going to go through one example of a structured abstract.,This is from that same bm J Christmas issue study on email spam to academics.,So it's a structured abstract, so they go through the background, the objectives.,The aim of the study was to assess the amount, relevance, content and suppressibility of academic spam invitations to attend conferences or submit manuscript.,So we're getting both the background and the questions asked.,We get several pieces on the experiments done.,What type of study was it?,What was the setting? Who were the participants?,These were five intrepid academics. Academics, just the five people who got together.,Um, then we get some details about the main outcome measures.,That's,important, but that's also part of the,experiments done. Then we get the results found At baseline, recipients received an average of 312 spam invitations each month.,Unsuscribing reduced the frequency of the invitations by 39% after one month, but by only 19% after one year.,So that suppressibility is not so good.,Overall, 16% of spam invitations were duplicates, and 83% had little or no relevance to the recipients.,So we're getting to the amount and relevance of the email spam.,And then the content spam invitations were characterized by inventive language, flattery and exuberance, and they were sometimes baffling and amusing.,Those were the main results addressing all of the content relevancy, suppressability, an amount that they laid out as their objectives for this study.,And then we get a big picture conclusion Academic spam is common, repetitive, often irrelevant and difficult to avoid or prevent.,So that's their take home message.,That's one example of an abstract, but they're all going to be, um, hopefully this easy to write.

在下一个模块中，我们将讨论如何撰写摘要。这将是一个简短的模块，因为在你写完论文之后，写出摘要应该相当容易。实际上，抽象一词的字面意思是退出。因此，要写摘要，你要做的就是从论文的其余部分中提取片段。它为读者提供了论文主要故事的概述。如果你最后写的是摘要，那么写起来应该相当容易，因为你只是在突出显示每个部分的点点滴滴。它通常很短，这意味着你可以利用自己的技能来减少混乱，以确保自己符合字数限制。像表格和数字一样，摘要必须独立存在。这是人们最常读的部分。有时人们只读摘要而不是全文。我对摘要有一个重要的警告。我经常看到的一个错误是，作者经常在撰写论文之前写摘要。因为也许他们想在会议上展示一些数据。因此，他们快速浏览数据，整理一些摘要，这样他们就可以在会议上展示这些数据。然后几个月后，当他们真正去写论文时，他们想，我已经写了那篇摘要。太棒了，我可以把那篇摘要塞进我的论文里，然后我就从那里开始整篇论文。一旦你写了点东西，感觉就像，哇，我已经写好了，我应该用它。为什么要浪费工作？问题在于你在几个月前把那份摘要拼凑在一起的时候。你可能还没有确定所有的数据分析、表格、数字和论文的故事。这可能是非常初步的。你几个月前写的那份摘要根本不适合你的最终分析。我的建议是把它扔进垃圾桶然后重新开始。使用你新写的论文中的材料重新开始摘要。不要只是试图修改它，那份已有几个月历史的摘要。再说一遍，在你写完论文之后写摘要真的很容易，所以我建议你在最后写摘要。把你可能随身携带的任何旧摘要都扔掉就行了。你的摘要里应该写什么？再说一遍，它本质上只是从论文的其余部分中提取一点点内容。最好从一句带有某种背景的陈述开始。给读者一些背景信息，也许可以激发作品的重要性。然后，你将明确陈述研究目标或问题，就像你在介绍部分末尾所做的那样。你要用那个确切的措辞。我们问是否，我们是假设的，还是我们猜测的。然后你要简要总结一下你所做的实验。显然，你不会有太多细节的余地，但要概述一下这些方法。你可以将所有这些部分直接从方法部分中拉出来，但要尽量减少它。然后你要给出几个关键结果和几个重要的数字。不算太多。然后你将得出一个简短的结论。你要回答你提出的问题或你在研究中检验的假设。你要给出某种带回家的信息，说明你的假设是否得到证实。例如，您是否发现乳腺癌和吸烟有关？然后还有一件我认为非常重要的东西要放进去。正如咪咪·齐格所说，你需要有某种暗示、猜测或推荐。所以这意味着，你的摘要末尾有一句话你要超越一点，让读者知道我为什么要在乎？这意味着什么，为什么这项研究很重要？我经常浏览摘要，寻找可供非专业公众撰写的文章，我需要快速辨别这项研究与现实世界的相关性。因此，请务必在摘要的末尾写上暗示、猜测或建议。现在，摘要有两种形式。它们的结构可以是日记上写的，嘿，我们希望你为每篇带有副标题的特定文章准备一些东西。比如，简介、结果、方法，副标题相当明显。或者你可能有一个自由格式的摘要，结构化的摘要显然更容易写，我只想举一个结构化摘要的例子。这来自英国医学杂志圣诞节刊关于向学者发送垃圾邮件的同一份研究。因此，这是一个结构化的摘要，所以他们要仔细研究背景，目标。该研究的目的是评估学术垃圾邮件邀请参加会议或提交手稿的数量、相关性、内容和可抑制性。因此，我们既了解了背景情况，也得到了被问到的问题。我们得到了几篇关于实验的文章。这是什么类型的研究？设定是什么？谁是参与者？这是五位勇敢的学者，只是聚在一起的五个人。然后我们得到一些关于主要结果衡量标准的细节。这很重要，但这也是所做实验的一部分。然后我们得到找到的结果。按基线计算，收件人平均每月收到312封垃圾邮件邀请。取消订阅使邀请频率在一个月后减少了39％，但一年后仅减少了19％。所以抑制性不太好。总体而言，16％的垃圾邮件邀请是重复的，83％的垃圾邮件邀请与收件人几乎没有或根本没有关系。因此，我们要了解垃圾邮件的数量和相关性。然后，内容、垃圾邮件邀请函的特点是富有创造力的语言、奉承和热情。他们有时会感到困惑和有趣。这些是主要结果，涉及他们为本研究设定的目标的所有内容的相关性、可抑制性和数量。然后我们得出了一个大概的结论，学术垃圾邮件很常见、重复，通常无关紧要，很难避免或预防。所以这是他们带回家的信息。这是摘要的一个例子，但希望它们都很容易写出来。