

## How to write introductions

Newsletter by Dr. Lennart Nacke (@acagamic)

When writing a research paper, the introduction serves as a critical component that sets the tone for the entire paper. It's an opportunity to capture the reader's attention, convey the importance of the research, and provide an overview of the paper's purpose and key findings.

The CaRS Model, also known as Create a Research Space, created by John Swales, is a framework that helps researchers structure their paper's introduction. The model comprises three primary moves: (1) Establishing a territory, (2) Establishing a niche, and (3) Occupying the niche. Let's learn more about each of these moves. The CaRS model helps you focus on these three aspects of an introduction section:

- Your **research question** is the foundation of your study. You must invest time creating an engaging and relevant research question. A precise research question can help you find the information you need. It will also help you establish your study scope and data needs. So, your study question should be focused, specific, and practical.
- Communication requires **context**. Context aids comprehension. This can assist people in understanding and following your message. Before diving into details, provide background. This can help your audience grasp your message's importance. Use examples or analogies to demonstrate your thesis. Context should also take audience demands and knowledge into account. Speaking to a group of specialists in an area may require less context than speaking to a general audience. Providing context helps your audience understand your message.
- Use persuasive language and strategies to **persuade your audience**. Credibility is gained through exhibiting your experience, qualifications, and subject matter understanding. Your message should also address your audience's wants and ideals (the research field you are aiming to publish in). Emotional arguments also persuade readers. You can motivate readers by appealing to their emotions. Vivid descriptions, anecdotes, and emotive language can do this. Finally, substantiate your claims with evidence. Statistics, expert opinions, and real-world examples can all be referenced through related work or self-collected data. You may strengthen your point by providing hard evidence. Persuasive writing should persuade readers to act or agree with you, not deceive them.

### Step 1: Establishing a Territory

The first step is to define the area by giving background information about the larger field where the research is being done. Most of the time, this step has the following subsections:

1. **Background:** I call this part the 'Lay of the land' - it always comes first. This section covers the research field's current situation. Give a brief bit of history if

necessary. Exploring the field's current situation might also reveal current research trends, difficulties, and possibilities.

2. **General problem:** The significance of your research cannot be overstated. It is crucial that the reader clearly understands the problem you are addressing and its importance in the field you are publishing in. Providing context or background information may help. Discussing previous research and identifying gaps that your research fills can also be useful. Expanding on these topics will help the reader comprehend the significance of your research and its potential impact on the field.
3. **Specific Problem:** This subsection details the paper's specific research problem. The paper can analyze the topic better by focusing on one element. Clearly state the problem you are addressing. You want to make it clear that your paper adds to the literature and sheds light on your particular issue. This part establishes the paper's significance and relevance by clearly describing the study challenge and approach.

## Step 2: Establishing a Niche

The second step is to find a place for your research by finding a gap in the literature that you want to fill. Most of the time, this step has the following subsections:

1. **Research gap:** This subsection identifies the literature gap this research addresses. The effectiveness of the research project depends on identifying this gap, which not only clarifies the research issue but also justifies the investigation. A thorough literature study and analysis of major concepts, theories, and research findings in the field identified this gap. The review conclusively showed that the area of interest is understudied, strongly highlighting the need for the current study. This section briefly describes the gap and how the planned research fully addresses it.
2. **Research question:** This subsection is crucial to the research project because it clearly states the core research question and its relevance. Good research questions start with "how" or "why." The trick is to be explicit and succinct. My standard pattern is "How does A influence B." This part also emphasizes the research question's potential value to the discipline and explains why it's worth pursuing. This part is the study's foundation and starting point.
3. **Hypothesis:** This subsection presents the research hypothesis. The hypothesis states that the independent (factors) and dependent (measures) variables are related. The proposed study usually examines the elements that explain this association. The identified relationship may also be affected by moderating variables and boundary conditions. The research design should account for these elements to represent the relationship's complexity.

## Step 3: Occupying the Niche

The last step is to fill the niche by explaining the purpose and goals of the paper. Most of the time, this step has the following subsections:

1. **Purpose of the study:** This section details the research's purpose. The research seeks to fill knowledge gaps and improve the field. The study answers an unanswered question that is of relevance to the field.

2. **Objectives of the study:** This part delves into the research's goals, providing a detailed breakdown of each sub-objective to help readers grasp the overall research aims. It's essential to justify each goal, because this not only clarifies the research's scope but also highlights its impact and contribution to the broader field.
3. **Significance of the study:** The importance of this section cannot be overstated. Not only does it justify the research, but it also highlights its potential social impact. For those invested in understanding the phenomena being studied, this subsection offers valuable insights that can inform their understanding and decision-making. Moreover, by contextualizing the paper's key findings within the broader field, this section provides the necessary groundwork for future research. It is crucial, therefore, to craft this subsection with great care, paying close attention to both its content and messaging, to effectively communicate the research's significance and potential impact. This part can also give a roadmap of what's to come in the paper for the reader, an outline of its structure.

A great introduction ends with a boom or a strong contribution statement that convinces reviewers (and later the readers) that this research is worth their time reading. Knowing the field where you publish is absolutely crucial for this to ensure this last statement has the right impact on that field.

It is vital to understand the venue in which you are publishing, just as it is crucial to know the results of your paper. By doing so, you give your introduction the necessary relevance for the field you are targeting.

Keep in mind that the job of your introduction is to:

- Capture the reader's interest.
- Establish a context for what will happen in the paper.
- Convince your readers why your research matters.