

Longer Research Papers

When you read an RP, you may think that it is a fairly straightforward account of an investigation. Indeed, RPs are often designed to create this impression so that authors can appear more convincing to their readers. However, we believe that such impressions are largely misleading and may lead novice authors to conclude that writing up research should be an uncomplicated process for those with some experience. A more accurate picture is that RP authors typically operate in a highly competitive environment. They need to establish that their research questions are sufficiently interesting for others to read. They need to demonstrate that they are familiar with the relevant literature to demonstrate that the research questions have not already been answered. And they need to compete against other RPs for acceptance and recognition. As a result, RP authors are very much concerned with positioning—with showing that their studies are relevant and make some new contribution to the field.

The overall rhetorical shape of a typical RP is shown in Figure 14. The arrows indicate that the sections are closely connected. In fact, some journal editors have suggested that authors try to create a strong connection between the Introduction and Discussion. In addition, authors should make sure that every method described is related to some results and all results are related to a method.

Some empirical papers will follow a slightly different pattern in which the Results and Discussion sections appear in the same section. This eliminates the difficult task of deciding in which section authors should interpret or give meaning to their results. In other types of papers, several studies may be discussed, which results in some cycling of the Methods-Results-Discussions sections. Despite these and other variations, the basic format remains relevant.

FIGURE 14. Overall Shape of a Research Paper

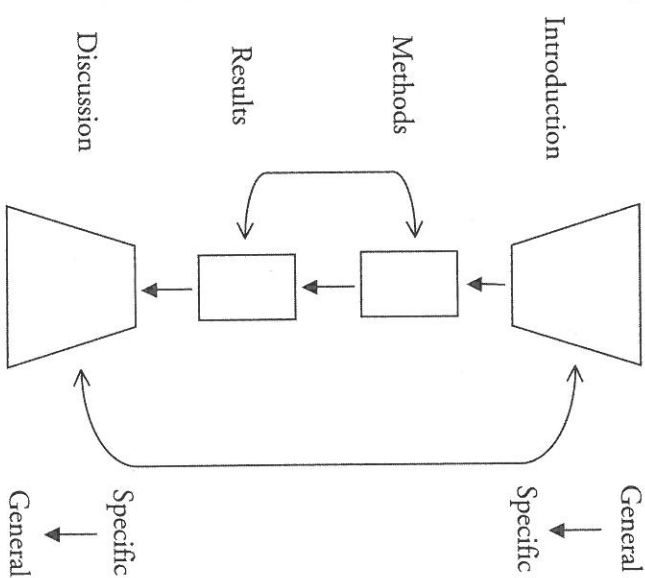


Figure 14 gives a useful indication of the broad-narrow-broad or general-specific-general movement of the typical RP. As the RP in English has developed over the last hundred years or so, the four different sections have become identified with four different purposes.

Introduction (I)	The main purpose of the Introduction is to provide the rationale for the paper, moving from a general discussion of the topic to the particular question, issue, or hypothesis being investigated. A secondary purpose is to attract interest in the topic—and hence readers.
Methods (M)	The Methods section describes, in various degrees of detail, methodology, materials (or subjects), and procedures. This is the narrowest part of the RP.
Results (R)	In the Results section, the findings are described, accompanied by variable amounts of commentary.
Discussion (D)	The Discussion section gives meaning to and interprets the results in a variety of ways. Authors make a series of “points,” at least some of which refer to statements made in the Introduction.

We assume that you will be using a typical organizational pattern for your paper—in other words, the IMRD format or some variant of it. Fortunately, many of the units deal with topics that are relevant for this purpose, as shown in this list.

Research Paper Parts	Relevant Topics Covered
Title	Unit Eight: Titles
Abstract	Unit Five: Summary writing Unit Eight: Abstracts
Introduction	Unit Two: General-specific Unit Three: Problem-solution Unit Six: Critiques
Methods	Unit Three: Process descriptions
Results	Unit Four: Location statements Unit Four: Highlighting statements Unit Four: Qualifications
Discussion	Unit Four: Explanations Unit Five: Summaries
Acknowledgments	Unit Eight: Acknowledgments
References	(not dealt with in this book)

As a result of the different purposes given in the box on page 285, the four sections have taken on different linguistic characteristics. We explore some of these linguistic characteristics in this next task.

TASK FOUR

Table 18 shows how the frequencies of selected linguistic features can vary from one section to another. For example, we would normally expect the present tense to appear regularly in the Introduction and Discussion sections, but, depending on the field or type of study, not to be a major tense in the other two sections. Review Table 18 and then do the task.

TABLE 18. Frequencies of Selected Features in RP Sections

	Introduction	Methods	Results	Discussion
Present tense	high	low	low	high
Past tense	mid	high	high	mid
Present perfect	mid	low	low	mid
Passive	low	high	variable	variable
Citations	high	low	variable	high
Hedges	mid	low	mid	high
Evaluative comments	high	low	variable	high

As you can see, there are some similarities between the Introduction and Discussion, on the one hand, and between Methods and Results, on the other. This may suggest a pattern of more “concrete” inner sections and more “conceptual” opening and closing sections.

With a partner, discuss the features of RPs in your field. Would you rate the frequency of the features as high, variable, or low in each of the sections? Use the chart below.

Analyze 3–5 papers in your reference collection (or more, if you have time) to determine whether your perceptions were correct or correspond to Table 18. If possible, add another feature of your own to the final row.

	Introduction	Methods	Results	Discussion
Present tense	High	Low	Variable	High
Past tense	X			X
Present perfect				
Passive				
Hedges				
Boosters*				
Citations				
Evaluative comments				
One of your own				

*Boosters consist of language that is chosen to add strength to a claim. They allow authors to indicate a strong conviction to a claim. Examples include *clearly*, *obviously*, and *of course*.