

# Introduction

The E-Primer is written with a reader in mind who is eager to learn, but knows little, *if anything*, about programming, computer science and the actual implementation of all those wonderful scientific experiments that populate the reading lists of psychologists and cognitive scientists. This is not to say, however, that more experienced readers will not find it instructive, as many chapters also deal with advanced E-Prime and programming skills.

## What is E-Prime and what will I learn?

E-Prime® is a software package developed and distributed by Psychology Software Tools, Inc. It is specially designed to facilitate development of custom psychological experiments, and to acquire and analyse data. E-Prime consists of several programs with different functions. In The E-Primer, we will discuss **E-Studio**, **E-Basic**, **E-Merge**, **E-Recovery** and **E-DataAid**. We will assume you are using E-Prime 2 or 3, but most of the features we discuss were already introduced in E-Prime 1. When versions differ significantly in operation, we discuss each version separately.

You will learn how to use each of these programs effectively, ultimately in order to implement your very own experiments. First, however, you will learn how to recreate a number of fascinating, famous experiments. We will guide you through this process in an easy-to-follow, step-by-step approach – ‘now click on this button over here’ – using **Tutorials**. Along the way, we’ll explain the reasoning behind each step and give you tips on good practice in experimental design. Gradually, we will move beyond the narrow confines of ‘click-here-now-click-there’ and ask you to implement simple variations on the experiments you’ve met so far. These form the **Exercises** at the end of each chapter. Finally, in the **Additional Exercises**, you will be invited to explore, with minimal guidance, the horizons of E-Prime and how you could use what you’ve learned to implement your own research questions. Always make sure that you save your work, because you may need it in subsequent chapters.

## Why should I learn E-Prime?

There are a number of reasons to learn E-Prime. First, many students will become involved in a research project during their studies. This will eventually involve setting up and programming an experiment, which requires good E-Prime programming skills.

Second, learning to program is more than just learning a specific programming language. Programming essentially involves logical thinking. Once you have learned to program in E-Prime, you can easily transfer your knowledge and skills to new programming languages. Moreover, you will have learned to think about experiments in a structured and logical way. This skill is not only useful for setting up an experiment yourself (for example, during a research project), but it also helps you to read and understand empirical papers. Finally, we hope we can communicate some of our own enthusiasm: in the end, programming and realising your ideas – creating something from scratch – is really a lot of fun.

## Online support

E-Prime has a useful support website: <https://support.pstnet.com/hc/en-us>. Here, you will find examples of experiments, answers to frequently asked questions and solutions for problems. If you encounter a problem and can't find the answer on their FAQ and Knowledge Base pages, you can simply send them your question via a special form on the website. You'll then receive a personal answer, usually within a day or two. All you have to do in order to get this personal support is to register (for free) on the website.

More information can be found in the E-Prime manuals. There is a short 'Getting Started Guide' and a more extensive 'User's Guide' and 'Reference Guide' (Schneider, Eschman, & Zuccolotto, 2002). You can also find more information on the STEP (System for Teaching Experimental Psychology) website. STEP is a webbased project designed to maximise the use of E-Prime: <https://step.talkbank.org/> This website includes a multitude of examples of common paradigms in experimental psychology. Some of these experiments are programmed in an earlier version of E-Prime (E-Prime 1). However, you can still open and run these experiments in more recent versions of E-Prime. PST (Psychology Software Tools, the developer of E-Prime) has also set up their own Experiment Library, see <http://www.pstnet.com>.

Lastly, you could think about joining the E-Prime mailing list. It's independently run and has a sizeable community who may be able to help you out with urgent queries when you haven't got time to wait for a response from E-Prime support. Or perhaps you have a question that's more about experimental design. Or maybe you just want to let everyone know how much you love designing experiments in E-Prime! Visit <http://groups.google.com/group/e-prime>.