environmental variables influence human development. Traditionally, psychology has been broken down and introductory textbooks organized according to distinct content areas. In this book, these content areas are separated into those heavily influenced by genetics (biological psychology, sensation, motivation); those heavily influenced by experience (learning and cognition); and those emphasizing nature/nurture interactions (lifespan development, personality, social psychology, and maladaptive behavior). As will be observed as you advance through these content areas, the scientific method has been successfully applied to complex and important behavioral phenomena. Just as with other sciences, the establishment of cause and effect relationships has enabled the development of applied strategies.

The idea of potential is a paradox. It implies absolute limits and enormous possibilities. It is simultaneously pessimistic and optimistic. Potential can result in good or harm, creation or destruction. To consider psychology the science of human potential requires recognizing and accepting these contradictions. Every acorn has the potential to become a mighty oak but not every acorn will achieve that potential. Every healthy human child has enormous potential but not every child will achieve their potential.

The first paragraph of the serenity prayer, usually attributed to Reinhold Niebuhr, states:

God grant me the serenity
To accept the things I cannot change;  
Courage to change the things I can;  
And wisdom to know the difference.

The college experience can be described as encouraging students to consider the meaning of their lives within the context of lives that have been lived and lives that could be lived. This requires knowledge of history and culture to inform one regarding the likelihood of accomplishing change and imagination to consider other possibilities. The hope is that such knowledge and imagination will be applied wisely throughout one's life.

An amusing distinction related to the serenity prayer describes three types of individuals: those that make it happen (i.e. demonstrate courage), those that watch it happen (i.e. are passive), and those that ask “what happened” (i.e. are clueless). The messages conveyed by the serenity prayer and this distinction relate to human potential. Those that are informed and active in considering options and making decisions are more likely to achieve their potential than those less informed or passive.

The Importance of Grades and Performance Standards

Do you think people have traits? Do you think some students are
industrious and others are lazy? We will discuss such issues in Chapter 9 (Personality). I think I know that if you are a college student, you care about the grades you receive on exams. It is very difficult to be accepted into a college if you did not do reasonably well on exams. It is unlikely that you would have done well on exams if you didn't care how you performed. Similarly, you will not excel at anything in life unless you are motivated to meet acceptable standards of performance. Parents and teachers probably tried hard when you were young to get you to care about how you performed in and out of school. We know that with respect to school grades, this often happens early. The reason we know is that research has demonstrated that some Head Start (Edlund, 1972), first-grade, and second-grade students (Clingman & Fowler, 1976) do better on IQ tests if they are given extrinsic rewards (e.g., candy or trinkets) for correct answers. Other students perform to the best of their ability without the extrinsic rewards. We will discuss such issues in Chapter 4 (Motivation & Emotion). Getting students to care about how they performed was obviously very important. Do you think research conducted with rats and pigeons can help us develop procedures to get children to care about their performance in school and on other tasks? We will review related questions later in this chapter and examine some of the practical implications of animal research in Chapter 5 (Direct Learning).

Edlund, and Clingman and Fowler are the first researchers cited in this book. Many more will follow. Complete references are listed alphabetically at the end of the book. You are encouraged to consult the original references whenever you have questions concerning a particular finding or conclusion or wish to obtain additional information. We live in a world where we are continually exposed to information designed to influence our beliefs and opinions. One of the most important skills you can acquire as a college student or in life is the ability to determine what constitutes a credible basis for believing something is true.
The Importance of Knowing When You Know and When You Don’t Know

Even experienced college students and adults sometimes have difficulty determining when they understand something and when additional (or more likely, different) preparation is required. One of the ways in which I will try to help you determine whether you understand material is by inserting essay questions at the end of major sections. Some of these questions can be answered through memorization. Others will require a level of understanding beyond memorization. They will require integrating key concepts and applying them so that you will appreciate the basis for our current understanding of psychological issues. Test yourself by writing out your answers to these questions. I suspect you will sometimes find that even though you thought you understood the material after you read it, you have difficulty providing a clear, complete, and accurate answer. If this is the case, you will know that it is necessary to review the material until you are able to provide such an answer. For example, can you answer the following question?

**Exercise**

What is a good strategy for determining whether you understand the material in this textbook?

Take some time to write your answer and try to give yourself a grade. It is very important in life, not just in school, that you be able to objectively evaluate yourself and take steps to improve if you think you can do better. The reason I am giving you many essay problems to solve is that I think this will improve your ability