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Preface

The past decade has seen increasing interest in psychology in every kind of college and university in the United States and Canada. Nearly every college student takes an introductory psychology course, and more students are choosing psychology as a major area of study than ever before. What is so special about psychology that can account for this growing attraction to it as a discipline and as a field of concentration?

Part of the answer lies in the perceived relevance of psychology to contemporary life, problems, and personal well-being. Living a satisfying life in today's world requires that we learn to know ourselves and to know others. The study of psychology makes it possible to learn how to solve new problems, not just understand old ones. The fact that psychology is a science of the study of human behavior rather than merely a storehouse of facts about such behavior accounts for much of its growing appeal.

A second reason for the appeal of psychology is more personal. As human beings, we are all psychologists. We have observed human behavior and have developed some general principles that have explanatory power, and even occasionally predictive power. Psychology is the only scientific discipline in which the scientist and the subject matter are the same—human beings. However, though we all may be psychologists at heart, we are not all scientists. This means that much of our knowledge is incomplete, inaccurate, biased, and even distorted. A course in psychology, then, offers each of us a chance to "test" ourselves against the experts.

A third appeal of psychology has to do with its direct application to fundamental problems facing us all. We hope that psychology may tell us how to equalize opportunities, reverse the effects of poverty and discrimination, make people honest with themselves and with others, and resolve a host of other real problems of individuals

living in society.

Though there are other reasons for the appeal of psychology, the three reasons suggested are important ones and draw substantial attention throughout the text. All of the student's expectations may not be met, for some of them may turn out to be unreasonable or ill-founded on careful examination, but the examination is important.

Every new text must have a justification for its existence, especially one designed for a course that already has good textbooks available. Several features make *An Introduction to Psychology* a distinctive addition to the group.

1. Coverage is complete, including the full range of topics receiving the greatest attention in psychology today. I have not tried to write an encyclopedia, but have provided a range of coverage of sufficient depth so that the student will not have gaps in

his knowledge or understanding of the discipline after using this text.

2. New topics that have come into their own within the past decade receive their due share of attention. Information processing analysis of perception, language, thinking, and memory is represented by an entire chapter in addition to significant parts of several others. The discussion of development is subdivided into those factors reflecting maturation and those that derive from an interaction between the individual and the world around him, a trend now permeating much of psychology beyond development. Consciousness as a topic is no longer taboo in scientific psychology, and an entire chapter is included. A revolution has been occurring in our concept of mental health, especially regarding treatment versus prevention, and the trend is reflected in the discussion of these topics.

3. Boxed material is included in every chapter to provide further discussion, illustrative experiments, more examples, an aside, or important information which is tangential to the content of the chapter at that point. The student may refer to the boxes while reading the text, turn to them after finishing the chapter, or omit them. They provide a mechanism for the better student to draw more from each chapter and

be further challenged.

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4. Introductory questions, marginal glossary terms, and substantial summaries are included throughout. The questions serve as an introductory guide to the important concepts in each chapter. The summaries are particularly helpful for review and as an aid in organizing what the student has understood from the chapter. Each of the marginal terms appears in the glossary along with a brief definition. The glossary is incorporated within the subject index so that the student may easily refer back to the text page where the terms appear.

5. The student is introduced to the scientific method. This is not a book on how to be a scientist, but is concerned with allowing the student to see the interplay of research, knowledge, and discovery. Research methods are discussed in the introduc-

tion as a set of principles to be applied and reapplied throughout the course.

6. A substantial appendix covers a rather full range of scaling and descriptive and inferential statistics. Although this text does not present results of experiments in great statistical detail, students have the opportunity to learn something about statistical methods. The instructor can refer the student to the chapter for independent study

or it may be taught at any appropriate point within the semester.

7. The arrangement of chapters is flexible and may be reordered as the instructor wishes. The sequence in the text is from basic mechanisms (sensation, perception, learning, verbal processes, and biological bases) through more general cognitive processes (thinking, language, information processing, consciousness), on to personality, and finally to the influence of society upon the individual—that is, from building blocks to complete edifices.

8. A full range of ancillary materials is available. Most important is a study guide designed either for personalized study at the student's own rate or for more traditional study. It includes a summary and review of the content of each chapter and several sets of study and test questions. For the instructor there is a manual which provides lists of concepts introduced in each chapter, cross references to other parts of the text, suggested demonstrations, films and other audiovisual aids, and hints on effective means

for presenting the content of each chapter.

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Finally, I offer my love and thanks to my wife Lyn, who helped me survive the birth of this book with her understanding, patience, and love. For each of these, I

dedicate the book to her.

Rochester, New York January 1975

R.N.H.

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Intraduction



What Psychology 1s

Something in our human nature impels us to seek order out of confusion. We need to feel at home, surrounded by people and things about which we can make predictions and assumptions. We expect our friends to greet us with a smile; strangers to stay at a correct social distance; and our loved ones to remain affectionate.

There are two aspects of this human need to order our lives. On the one hand we share with our cousins the apes an irresistible drive of curiosity. We need to find out about the world around us, to understand and master our environment, both animate and inanimate. And when our assumptions fail us, when we learn that something is not what is seemed to be, we are confused and disturbed. If out of the blue a stranger greets us like an old friend or affection turns suddenly to hostility, we feel and behave as if we have "lost our bearings"—the world, or that part of it with which we are presently intimately involved, can no longer be understood.

A very important part of sanity is the ability to understand behavior. Psychologists have often remarked on the similarity of behavior of one who is suddenly confronted with the unexplainable and someone who is suffering from a serious mental disorder.

UNDERSTANDING BEHAVIOR

We start acquiring the ability to understand behavior in our first days of life. A face becomes familiar, becomes Mother, and then becomes particularly welcome when it smiles. We amass a collection of recognizable sights and sounds and learn to expect certain consequences from things we do or things other people do to us. We begin to map our world.

As our world widens, so does our search for significance in it. A toddler explores a new pattern of behavior just as he does a new toy: How does it feel to bang two pots together? What will Mother do if I bang them? Is banging pots good or bad? And gradually what had been initially an innate behavior—or behavior we are born with—becomes personally directed and verbal. We begin to articulate questions about people, things, and events around us; we acquire the ABC's of understanding behavior—we become, in a sense, psychologists.

There would seem to be a universe of difference between the tentative, exploratory approaches of a newcomer to a kindergarten class and the activities of a social psychologist studying a small group of people. Actually, the only real difference lies in the reasons for their behavior: the kindergartner has no choice—his mother has, so to speak, thrown him to the wolves, and he must learn about his classmates in order to survive; the psychologist has chosen to study the group and remains more or less aloof from it. For the toddler, attempting to order and understand other people's behavior is part of his life; for the psychologist it is part of his job as well. In both cases the experimenter, age 5 or 50, almost always arrives at an understanding of a particular type of behavior by moving from the general to the particular and back again. The baby does not say: "Smiles mean good; this face is smiling; this face is good," but something like that is going on inside its central nervous system. The kindergartner uses whatever he has learned about behavior in general to interpret the behavior of



We start acquiring the ability to understand behavior in our first days of life.

the other toddlers, and in the light of his experience with them he modifies his general concepts about certain types of behaviors. The psychologist too selects some general statements about behavior, tests them in the light of specific behaviors he observes, and concludes that the general statements are right, wrong, or a bit of both. As we mature, our explanations of the world and of the people in it become more conscious. We move from direct and unreflective use of experience to speculation and enquiry. We begin to advance—to ourselves and others—"psychological theories," generalizations from what we have read, heard, or experienced, to explain why people act as they do.

But we soon realize that a statement explaining why somebody does something will satisfy some inquirers but not others, depending upon their ideas about the motives for the behavior. If, for example, we want to account for a good-looking and intelligent student who is nevertheless a loner, both in general campus activities and in terms of close friends of either sex, we can imagine at least two approaches to explaining the situation.

Understanding Jim

Psychologist One would take a careful history of the subject. What experiences have taught Jim to behave as he does? Consciously or unconsciously, people repeat the behaviors they have found to be rewarding. If Jim is a solitary sort of person, some past experiences must have either rewarded him for keeping apart from others or hurt him when he tried to be sociable. Perhaps his father was an Army officer who moved with his family from one military post to another throughout Jim's childhood and adolescence. An only child, Jim never had the chance to sink his roots into a community, either in school with his classmates or in a neighborhood with the other children. This isolation was perhaps aggravated by parents who were neither sociable nor very interested in Jim's loneliness and by the caste system of the Army, which limited even further the opportunities for socializing. Jim has never known what it is to be "one of the crowd"; to be a comparative loner is the only way of life he knows. And because the art of socializing is one of the most important and difficult childhood accomplishment, the verdict on Jim must be that he is merely undertrained; he just doesn't know how to behave as part of a closely knit peer group. The treatment must be to help him practice the social skills he lacks.

That is all very well, Psychologist Two may say, but not all Army children are loners, and Jim has certainly not lacked for peers who appreciate his good looks and are impressed by his grades. People are not the passive products of circumstance: Jim behaves the way he does because of the way he feels. What is important is not the objective world in which he has lived but the subjective world he experiences now—and apparently has always experienced. Jim spends several hours with Psychologist Two, taking tests and talking with him, until Jim's "personality profile" is ready.

Jim, Two reports, has the feeling of living in an alien universe. Other people are strangers, and strangers do not like you. For him the important thing

is not to seek friendship and affection (both dangerous and futile) but to avert hostility. And one of the safest ways to do this is to avoid close contacts. Jim, Psychologist Two reports, has a very negative self-image. A postscript to the report, however, emphasizes that he is in no sense seriously ill emotionally; he is perfectly rational and well oriented, and his mild and apparently chronic depression does not prevent him from functioning efficiently, though in a somewhat limited fashion.

One thing, however, did concern Two. Whereas Jim did well on the psychological tests, just as he did on college tests, in conversation with him Two felt it hard to make adequate contact. Jim's answers sometimes didn't seem appropriate. It was almost as if Jim hadn't heard all that Two was saying. . . . as if he hadn't heard. "Jim," the psychologist asked the next time they met, "have you ever had a hearing test?" Jim appeared surprisingly disturbed by the question, but replied that he had not.

The answer came back quickly from the audiologist. Jim definitely, though not acutely, had a hearing loss in both ears. It was clear that whatever else had contributed to Jim's sense of alienation, his inability to hear a good deal of what was going on, his difficulty in carrying on casual conversations, particularly in a group, and his frequent sense of social embarrassment were major factors.

The total Jim, then, lived in three worlds: the objective world of experience, the subjective world of feeling, and the sensory world of perception. None was unimportant, but was one more important than the others? Would Jim become able to live more satisfactorily in all three worlds by tackling his misfit in one? After considerable debate it was decided to attack all three problems. A simple hearing aid was able to bring Jim's hearing almost to normal. He was encouraged to join a couple of clubs concerned with his main scholastic interests and there learned the art of mixing freely and happily with others. And in group therapy he found that it was possible to be liked for his own sake and to exchange feelings and affection without fear or embarrassment. A new Jim began to emerge.

Is there an answer to the original debate? Was there a reason for Jim's behavior? We are all the products of our past; we are what we have become and we have become what we have learned. Regardless of anything else, Jim would have been a very different person if he had grown up in a stable and homogeneous community of lifelong friends and relatives. But at the same time behavior is motivated by the present, not the past. One cannot forecast a personality accurately by merely writing a biography. The main outlines may be the products of the past, but to understand a specific individual at a specific time the inner world—the personality, the self-image, the "feeling tone"—needs to be explored. And last but not least, we are creatures of flesh and bone—and nerves and hormones. We react by our bodily behavior to the stimuli our sense organs provide, and changed messages from either our sense organs or the rest of our body will result in changes in behavior.

Jim was helped by two different psychologists and a hearing specialist. Each probably contributed to his improvement; each may have taken full credit