R. Douglas Whitman

ADJUSTMENT

THE DEVELOPMENT AND ORGANIZATION OF HUMAN BEHAVIOR

ADJUSTMENT

The Development and Organization of Human Behavior

R. DOUGLAS WHITMAN
Department of Psychology
Wayne State University

New York ▪ Oxford
OXFORD UNIVERSITY PRESS
1980

Library of Congress Cataloging in Publication Data
Whitman, Russell Douglas.
Adjustment: the development and organization of human behavior.
Bibliography: p.
Includes index.
1. Adjustment (Psychology) 2. Developmental psychology. 3. Personality.
I. Title. [DNLM: 1. Social behavior. 2. Social adjustment. HM291 W615a]
BF335.W46 155.2'4 79-9830 ISBN 0-19-502590-3

Printed in the United States of America

Preface

This text began after many semesters of teaching the course Adjustment, for which there was never an acceptable text. A student choosing a semester's curriculum would often appear at my office door to ask, "What is adjustment?" Fellow teachers, again scheduled to teach the course, would ask the same question. The present text was written in response to this question.

Adjustment: The Development and Organization of Human Behavior provides a view of the development of the individual as an adjusting organism who integrates modern conceptualizations of learning, conflict, anxiety, and coping. First, the development of the adjusting person is traced from the early genetic origins, through adolescence, adulthood, and into old age. The presentation of current issues in psychology, like the inheritance of intelligence, mental disorder, and criminality; the origins of juvenile deliquency and prejudice; and the problems of the aged, allow the student to appreciate the complex factors which contribute to human problems and demonstrate how psychology as a science has directed its efforts towards an understanding of these issues.

The second part of the text traces the development of the traditional views of learning, conflict, and coping and relates these to current research and real-life examples. Violence, an area of paramount concern for modern society, is treated as a separate topic.

Poor coping skills and failure to adjust adequately to conflict and stress are discussed in the third section of the book. Both traditional and modern views of psychopathology are integrated with the early sections of the text to provide the student with a balanced picture of current speculations about maladjustment. Behavior therapy and a selection of the more comprehensive insight therapies, including an extensive discussion of psychoanalysis, are then presented as possible routes to readjustment.

A number of editors, colleagues, and graduate students helped me in many different ways to write this book. I cannot hope to thank them all here. Milt Strauss, Glenn Davidson, and Alan

Glaros told me to take on the project and supported me in my efforts throughout. Gerald Rosenbaum and Mark Goldman provided a great deal of encouragement. Lynn Anderson served as my tutor in social psychology and, I am sure, will continue to assist me by pointing out all the errors I have made. Several graduate students, Bill Milberg, Nancy Hebben, Steven Rao, and Thomas Wrobel, put up with me during the writing and despite my neglect of them, they managed to keep some research going in my laboratory.

Many thanks go to a friend, Len Pace, who finally convinced me to commit myself to the project. Perhaps the individual most responsible for the good parts of the text, and not responsible for the sections in which I failed to heed his advice, is another friend, Joseph Matarazzo, who, red pen in hand, virtually rewrote this book.

Also, of course, a great deal of thanks, and credit, must go to a team of professionals at Oxford University Press who are well versed in the care and handling of authors. Joyce Berry and Dale Demy guided me through the process. But it was Marcus Boggs who politely argued with me, educated me, and, when necessary, calmed me.

Finally, the greatest thanks go to Katy, Becky, and Maryann. Katy and Becky spent two early years of their childhood watching their grumpy daddy hunched over a typewriter until his kisses scratched, but they always knew that he did this because it was his "work." Maryann wrote, rewrote, advised, typed, tabulated, and, most importantly, took care of me throughout. I love you Katy, Becky, and Maryann.

R.D.W.

Detroit
September 1979

Contents

5. Adolescence, 79

6. Castes, Roles, and Prejudice: Later Adjustment, 97

Part Two
The Organization of Adjustment Behavior, 121

7. Foundations of Learning, 123

8. Conflict, 139

9. Coping, 152

10. Violence, 168

Part Three
Maladjustment and Routes to Readjustment, 191

11. Maladjustment, 195

1

Introduction

What is adjustment?

How is the game of science played?

What is the goal of the science game?

Off the west coast of Ecuador lies a group of unique and fascinating islands known as the Galapagos. Long ago, volcanic activity caused the formation of these thirteen islands and their numerous rock outcrops. Surrounded by deep, fast ocean currents and located some 600 miles from the mainland, these islands can be viewed as natural laboratories for the study of evolution. Occasional storms would deposit a few animals and some plant life on the islands, where they would be required to adapt and survive in a different ecological environment or become locally extinct. Living among the islands today are many species that have been able to exist in the hot, barren world of the Galapagos. In September 1835, Charles Darwin, then a naturalist on a voyage of the H.M.S. *Beagle,* discovered that some of the accidental inhabitants of the islands had not only survived but had continued to evolve into species unlike their relatives on the mainland. Although each of the thirteen islands had been born as approximately alike as fraternal twins, slight differences in their upbringing had given each of them a different personality. A bit of plant washed up on the shore of one island might flourish there, but be relatively unknown on any of the others. If a branch did survive a journey between the islands, a species of insect or lizard, unknown on the island where the plant had flourished, might readily devour the new migrant. Over the years, these minor variations in chance habitation produced thirteen different little worlds.

Even more fascinating than the primordial lizards and tortoises are a set of drab, brown finches thought to be the descendants of a small, sparrowlike finch native to South America.

They have evolved into thirteen distinct species, one species for each island, different from their largely unchanged mainland relatives. Given the evolutionary opportunity, the original finches had adapted to the thirteen different environments in thirteen different ways. In many ways alike, these finches are most easily distinguished by the large variety of beak shapes. Perhaps the most interesting is a species known as the woodpecker finch. It feeds on insects and grubs, which it digs out of trees and stumps, and has evolved a longer beak than many of the Galapagos birds; but, unlike a true woodpecker, it does not have a long, probing tongue. In order to compensate for this, the woodpecker finch has further adapted to its environment by utilizing small twigs or cactus spines, which it breaks off and uses to dig out its food.

These adaptations undoubtedly took many

Figure 1-1. Charles Darwin. (National Library of Medicine.)

generations. In every generation of a species, there occur, by some unknown genetic process, variations in some of the individuals. Many of these variations are no more significant than the length of an earlobe or the shape of a fingernail. Others might either be deadly for that unfortunate individual or, on the other hand, might fortuitously improve its chances for survival, signaling the dawn of a new species. Much as in the manner of the Galapagos finches, the animal, the plant, and indeed even the universe, have been evolving.

A large conceptual leap may seem necessary to relate the tool-using behavior of a group of finches to the everyday adaptation of human beings, but millions of years of evolution have provided the human organism with a very capable set of adapting mecha-

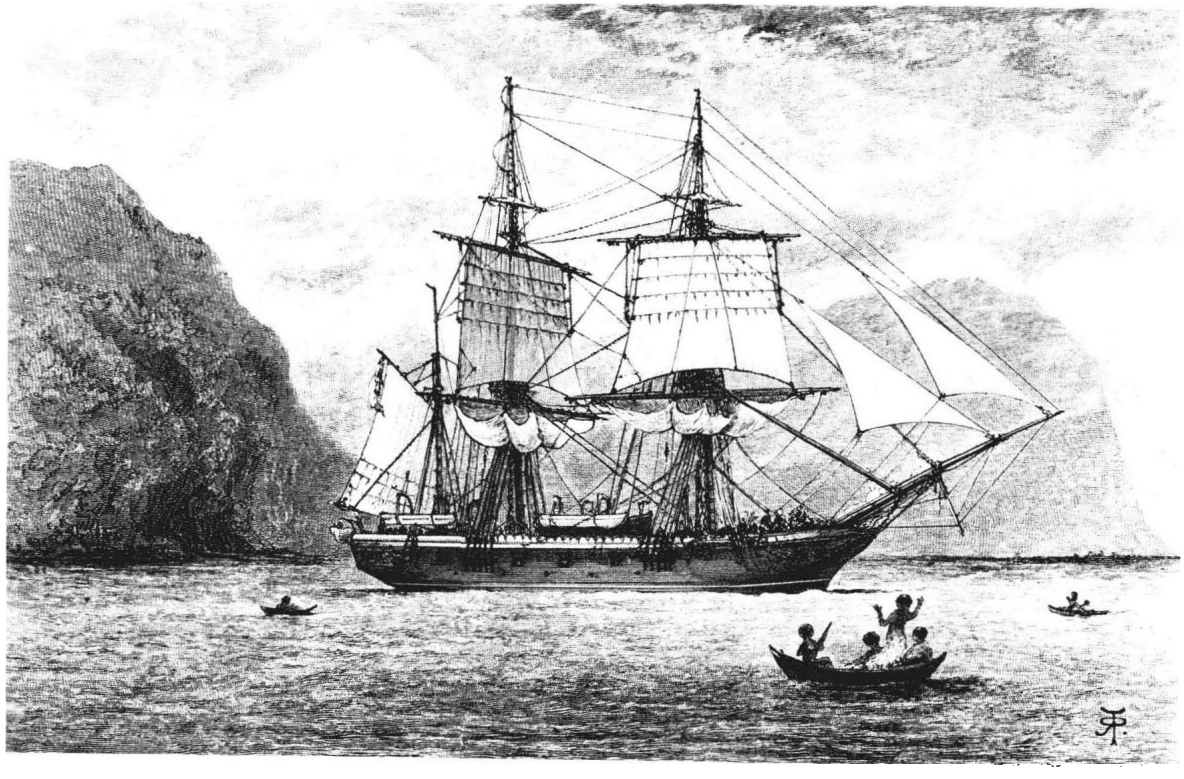
nisms. Many of the processes and results of this evolution can be observed in the lifetime of every member of the species. This text examines human beings as adjusting organisms and the manner in which they operate. Several approaches are necessary to accomplish this task.

First, we must study the nature and development of people as biological mechanisms. Although this is not a text in development, certain aspects of development are essential in understanding the adjustment process. After a discussion of genetics, the text concentrates on the manner in which individuals grow, adjust, and readjust: thinking, language, socialization, and the development of identity in the form of roles. These separations are, of course, highly artificial. They represent overlapping, highly interrelated facets of human behavior. Our discussion of each of these areas will center on the development of the person.

The second section of the text concentrates on the organization of adjustment processes. Learning, discussed in Chapter 7, is at the core of human adjustment. It is the human species' amazing capacity to learn that sets it apart from all others as the supreme adjusting organism. Conflict, the subject of Chapter 8, includes the conditions under which the need to adjust is established. Coping, covered in Chapter 9, deals with the means of adjustment. Finally, the topic of violence is considered in Chapter 10; it represents an important problem for the species.

Finally, in the third section, we will discuss

Figure 1-2. The H.M.S. *Beagle* in the Straits of Magellan. (American Museum of Natural History.)



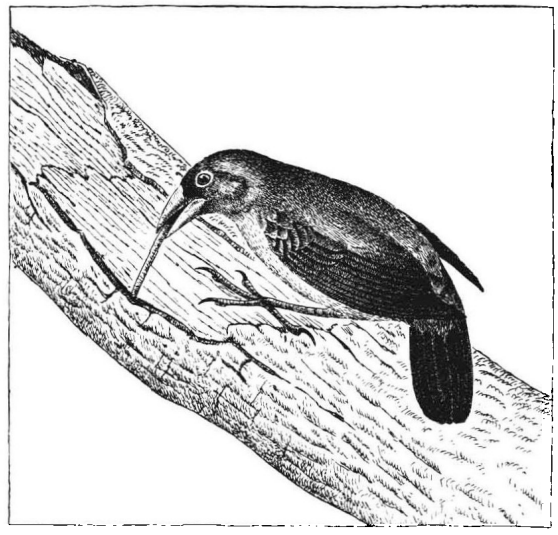


Figure 1-3. The woodpecker finch, isolated on a single Galapagos island, adapted to its special environmental demands by using sticks as tools with which insects could be extracted from otherwise inaccessable places. (From David Lack, "Darwin's Finches." Copyright © 1953 by Scientific American, Inc. All rights reserved.)

what happens when the individual is subjected to stress, the possible maladjustments that occur, and some of the ways that have been proposed for aiding readjustment.

The general theme of the text, and the author's approach to the developing and adjusting individual, is expressed very well by Kuo:

> . . . the relationship between the behaving organism and its environment is an extremely complex and variable dynamic process. It goes deeper and beyond the molar level . . . behavior is far more than the visible muscular movement. Besides such movements, the morphological aspect, the physiological (biophysical and biochemical) changes, the developmental history of the animal, and the ever-changing environmental context are interwoven events which are essential and integral parts of behavior. In our study of behavior all such events must be investigated in a coordinated way. The behavioral process is not just a stimulus-response relationshp, a conditioning process, nor just a revelation of innate actions in the form of "courtship," "threat," "food-getting," "egg-rolling in the nest," and the like. In other words . . . the chief objective is . . . to obtain a comprehensive picture of the behavioral repertoire of the individual and its causal factors from stage to stage during development; and to explore the potentials and limitations of new behavior patterns.
>
> (Kuo, 1967, pp. 25–26)

The Nature of the Science Game

Psychology may be variously referred to as a natural science, a social science, and humbug. Whether it is any kind of science and not humbug depends on how closely the psychologist plays according to the rules of the scientific game, for it is the rules which make the game science, not the pieces used. The pieces in the game may be called "electrons," "muscles," "words," or even "sensations." The player may be anyone with enough curiosity.

In our game there are two main types of play: naturalistic observation and the experiment. When an infant realizes that there is a world out there which it wants to reach, it does a great deal of naturalistic observation. We can read in the infant's eyes such pure fascination with sunlight, shadows, moving objects, and colors that we might wish we could, if only for a moment, experience the same wonderment. However, we soon observe that the child is not satisfied with mere looking. The child reaches out and experiments, pushing a ball and watching it roll, a look of delight replacing the wonder. The scientist does the same—one naturalist in Africa observing the mothering behavior of apes; another in Wisconsin replacing the mother monkey with a model to watch what happens.

Successful observations often increase the curiosity of the observer, leading frequently to either hypotheses about the observed or bringing new questions to mind. When the observer can go no further, or wishes to test or demonstrate a theory, he or she may turn

to experimentation. If allowed to manipulate the conditions under which the behavior usually occurs, the researcher can confirm or extend the beliefs which have been generated by the naturalistic observation.

In the usual experiment, the scientist is interested in two factors. He or she will usually measure one or more observable events. These are called *dependent variables,* presumably because any change in their value is dependent upon what the experimenter manipulates. The second factor of interest is the variable that has been manipulated—the *independent variable.* An example should make this clear.

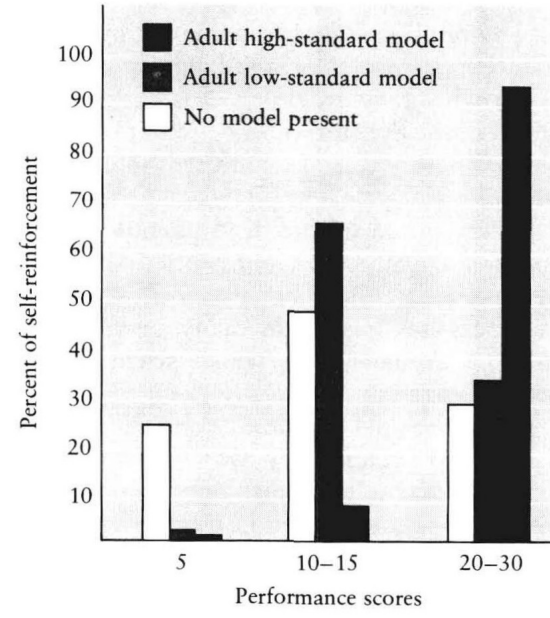
Bandura and Kupers (1964) were interested in the effects of various types of adult models on the self-reward performance of young children. In their study, three groups of children played a bowling game. One group first watched an adult who praised or rewarded himself with candy whenever his turn was over. The second group watched an adult who praised or rewarded himself only when he had bowled very well. The third group did not watch an adult. All the children then bowled alone while their behavior was monitored by the experimenters. The amount of self-rewarding behavior, and the extent to which it occurred when the child bowled well, were recorded. The results are presented in Figure 1-4.

As you can see, if a model is very self-demanding, the child will demand more of himself or herself before taking a reward. The behaviors of the adult models (high standards, low standards, or no model) were the manipulated, or independent, variables and the percentage of self-reinforcement was the dependent variable.

Science is very much like the experiment just described. Observation and individual experimentation add to, contradict, or qualify the results of previous experiments and, in turn, set the stage for further experimentation. A consensus has developed among scientists regarding the manner in which their results should be communicated to one another. The general rule is that the procedures and their results should be described so clearly that any scientist can make the same observations or repeat the same experiment and thereby confirm or disconfirm the conclusions of the first scientist. This state of affairs should make scientific progress a matter of time. However, nature (and the subjective aspects of language) prevents the scientist from having an easy time of it.

Many naturalistic observations cannot be easily reduced to an experimental situation.

Figure 1-4. The percentage of self-reinforcement and its relation to performance by control children and children who were exposed to models with low and high standards for self-reinforcement. (From Albert Bandura and Carol J. Kuper, "Transmission of Patterns of Self-Reinforcement Through Modelling," *Journal of Abnormal and Social Psychology,* 69 [1964]: 1–9. Copyright © 1964 by the American Psychological Association, Inc. Used by permission.)



There may be too many uncontrollable factors, or the situation may be impossible to manipulate experimentally (e.g., the solar system). Also, theory making is not a simple task. In order to better understand the difficulties involved, we must clarify some of the terminology which psychologists and other scientists have developed to handle some of their problems.

Determinism (Science Game: Rule 1)

Determinism is the belief that all events are caused. The psychologist must believe that the observed behavior is caused. If this were not the case, there would be no point in studying behavior. Indeed, without determinism, life would be quite precarious. There is probably no one who does not act like a determinist. If one did not, one would not expect things to behave as they did in the past, and life would be capricious. It may be nonsensical, in fact, for someone to assert (determine for us or themselves) that life is not determined.

Operationalism (Science Game: Rule 2)

Operationalism is a procedure used by scientists to optimize clarity in talking and thinking about what they are doing. It is basically the answer to the question, "What do you mean?" when you are confused about what someone is saying. An analysis of the use of the term would quickly lead us into difficult epistemological issues, but a brief discussion of the special role it has played in science is necessary to appreciate many of the hair-splitting arguments in which scientists frequently engage.

An operational definiton is one which specifies the procedures by which the concept can be measured. Thus, one psychologist might define an emotion in terms of a change in the resistance of the skin to electrical current (related to changes in the amount of sweating of the palm), whereas another might define it in terms of a score on a particular questionnaire. Both are correct. Certainly one may ask many questions about both approaches. Neither researcher is asserting any equivalence between the two operational procedures, but both are making it perfectly clear what they are doing. Thus, one could not argue that they were not measuring emotion *as they had defined it.* A third psychologist could contend that he or she means something different by emotion. Dumpty has put the issue quite succinctly:

> ". . . There's glory for you!"
>
> "I don't know what you mean by 'glory'," Alice said.
>
> Humpty Dumpty smiled contemptuously. "Of course you don't—till I tell you. I meant 'there's a nice knock-down argument for you!' "
>
> "But 'glory' doesn't mean 'a nice knock-down argument'," Alice objected.
>
> "When I use a word," Humpty Dumpty said, in a rather scornful tone, "it means just what I choose it to mean—neither more or less."
>
> "The question is," said Alice, "whether you can make words mean so many different things."
>
> "The question is," said Humpty Dumpty, "which is to be master—that's all."
>
> (Carroll, 1960, p. 269)

Humpty Dumpty's statements might be amusing, but they are also to the point. Whether a particular operational procedure is accepted depends upon its usefulness.

Reductionism (Science Game: Tactics)

It is generally accepted that the sciences are ultimately reducible from one another, from the social sciences to physics. This belief, called *monism,* argues that psychological phenomena can be ultimately reduced to discussions of chemical reactions, which may, in turn, be reduced to a discussion of atomic particles. It should be apparent, however,

that recipes for lasagna written in terms of chemical reactions would be cumbersome and less useful than more molar terms. Thus, even if we could talk reasonably about people's social behavior in chemical terms, we would probably not find it useful to do so at our present levels of knowledge.

There are times when it appears useful to reduce the level of discussion to more molecular terms in order to explain some phenomenon. However, to do so can be dangerous. Some scientists remain, or attempt to remain, only with the observable facts, while others feel the need to hypothesize unobservables to explain observed phenomena. The first group can be shown to be inaccurate only when new observations are made which alter the previous description. The second group is more likely to have their entire theoretical structure undermined by the same facts. These issues are often put in the context of "hypothetical constructs" and "intervening variables."

Hypothetical Constructs and Intervening Variables (Science Game: More Tactics)

A *hypothetical construct* is a hypothesis which invents or creates for explanatory purposes a thing, a process, or an event which is more than a mere description of observable events. It is generally used as an explanation of observable events. Force, weight, wind, electricity, and the electron are all hypothetical constructs. We infer the existence of each from observable events, but we cannot see it. Usually, properties are given to hypothetical constructs which then allow for further predictions about observable events. *Intervening variables,* on the other hand, are directly tied to observable events. They are, in fact, simply shorthand terms which describe reliable correlations between two or more observable variables (see MacCorquodale and Meehl, 1948, for an excellent discussion of this topic). Certain substances conduct electricity (as measured by the deflection of a needle on a voltage meter) more or less readily than other substances. In operational terms, the degree to which a particular substance prevents the voltage change is called its resistance. *Resistance* is used here simply to condense the description just given. It is interesting to note that in an attempt to explain the nature of resistance, the physicist will go one step further and will talk about resisting the "flow of electrons," which are hypothetical constructs. Some day the physical concept of electrons may be undermined and replaced by a better intervening variable, by new information, but the term *resistance* cannot be shown not to exist, since no one claims it does exist. No one would think of cutting apart a copper wire in order to find the resistance. Happily, the worst fate possible for the concept of resistance is that the new discoveries will lead to a scientifically more useful term—one that will explain all the phenomena which were understood or explained by resistance *and more.*

Models (Science Game: Goal)

Models are the best, or most economical, way scientists can describe the phenomena they observe. It is very difficult to distinguish semantically between a theory and a model. The theory of the atom is also referred to as the model of the atom. If there is any practical difference, it is that models describe a smaller part of the world than do theories. Both theories and models are systems of definitions and rules which, once laid down, represent the observable world with the greatest accuracy and the fewest inconsistencies possible. Thus, the Freudian model of personality development and the Skinnerian model of behavior analysis (though this might be better called a descriptive system) are both sets of definitions and rules which represent their

creators' best attempt to construct an explanatory model of what they have observed.

Many times in science, so-called mini-models are employed which are designed to handle only part of the observable phenomena. Engineers frequently make use of such smaller representations of the world. W. Grey Walter (1953), attempting to engineer such a model, constructed an experimental machine robot to mimic some simple human and animal behaviors. Walter's mechanical "tortoises," as they were called, were of several varieties which could learn to seek light, avoid obstacles, and respond to sound signals.

Imagine yourself visiting Walter's office. He would, no doubt, politely ask you to sit. You notice a movement on the floor. A small, round, insectlike object moves smoothly out from behind a bookcase, hesitates, then darts toward you before veering sharply and heading for the center of the room, where, in the bright light, it appears to pause and sun itself. After resting a bit, it moves toward you again. Just as you are about to squash this odd bug with your foot, Walter takes a whistle off his desk and blows it. The "tortoise," a small light on its head blinking in response, stops abruptly and shoots back behind its bookcase.

A model, of course, is artificial, but even as the "tortoise" is being described, it is easy to imagine it alive. The function of the science game is to produce models which accurately describe and predict the world. Accordingly, the psychologist's model should describe and predict behaviors.

Many textbooks in the sciences devote little attention to these issues (although many biology texts discuss the scientific method). Psychology texts, on the other hand, usually include discussions similar to those above. There are several reasons for this concern on the part of psychologists, given the nature of their investigations. First, it seems appropriate for psychologists to be interested in their own behavior as scientists. Second, psychology as a science is in its infancy, compared with the other sciences. Thus, it is still engaged in finding its own identity. It has no atomic theory within which to orient its research or discuss its observations. Finally, as one of the most general or molar members of the tree of science, it deals with very general, difficult-to-define events. Also, for ethical reasons it is severely limited in its ability to manipulate, measure, and experiment with behavioral events. All of this is not cause for pessimism; since psychology is a young, poorly defined discipline, there is much room for growth and discovery. Indeed, in the end, no science is logically safe from a new revolution of knowledge. "In the ultimate analysis, everything is incomprehensible and the whole object of science is simply to reduce the fundamental incomprehensibilities to the smallest possible number" (Huxley, 1967).