PART I

Defenses in Everyday Life

*I*n this first part of the book the theory of defense mechanisms is discussed, with particular attention to defense mechanism development. Chapter 1 introduces the concept of the defense mechanism and its importance in normal development. The features that distinguish defense mechanisms, defensiveness, and coping mechanisms are explained. Several frequently used measures of defense are described. The chapter ends with a statement of six theoretical premises that may be put to empirical test.

Chapter 2 describes the theory of defense mechanism development and provides empirical support for this theory. Change in defense use, as related to stage of development, is demonstrated. Although the chapter focuses on defense development in children and adolescents, it also includes studies showing defense use to be related to adult age.

Together, these two chapters set the stage for the material that follows. They provide a general orientation to the area, and they explain the particular orientation that guides my own work in the study of defense mechanisms.

CHAPTER 1

Introduction

Whether 'tis nobler in the mind to suffer
The slings and arrows of outrageous fortune
Or to take arms against a sea of troubles
And by opposing end them . . .
      —SHAKESPEARE, *Hamlet* (Act III, Scene 1)

*I*n this soliloquy Hamlet raises the question of how we are to handle the "slings and arrows of outrageous fortune" that besiege us, that make us feel powerless. With psychological astuteness, Shakespeare sets out the options for reaction: either strike out on a physical level or manage the distress through mechanisms of the mind. The first is the primary option available to the infant, but with development, mental mechanisms may replace physical reactions.

The need for such protective reaction begins early in life; babies and children suffer innumerable mishaps and defeats as they begin to make their way in the world. In order to move forward, the baby at first falls backward. The infant who is learning to sit topples sideways, waiting for someone to reinstate her to an upright position. Attempts to locomote with two, rather than four, supports are frequently followed by tumbles to the ground. Early attempts at communication are met with puzzled adult reactions. Yet these disappointments, these "defeats," do not immobilize the infant. Later, artistic efforts to create a portrait of the family dog, only to have the work misperceived as a picture of a horse, is a blow to self-esteem. The child endures these and endless other reminders of being little, weak, and inept in the world of adults.

In the peer world the preschool child encounters children who are egocentric—that is, who lack interest in, or understanding of, his feelings,

hopes, and wishes. In the school years, the child may or may not be successful in academic pursuits, social relationships, or athletic endeavors. He may or may not have some special talent in music or art. But it is the rare child who is continually successful in every area, in every endeavor. Disappointment, rejection, missed opportunities, and lost friendships are all part of the growing child's life.

Yet children survive—not unscathed, but not destroyed. Most children develop ways to protect themselves—that is, to protect their sense of self and their self-esteem. And they develop ways to control their expression of emotions, especially "negative" emotions such as anger, jealousy, and sadness. Especially as children grow older, they learn through specific instruction or by observing others. Learning these "coping strategies" is part of the process of socialization. In addition to these consciously learned and employed strategies, there are other mechanisms the developing child uses to control emotions and protect self-esteem. These operations, with their origins in the earliest reflex behaviors of the child, are known as the ego mechanisms of defense.

This is a book about these defense mechanisms—about the mental maneuvers in which we all engage to maintain our psychological equilibrium and protect our self-esteem. In this first chapter I make some distinctions between defense mechanisms and other mechanisms used for psychological adaptation. Then I present a developmental theory of defense mechanisms, stressing that defenses are part of normal development and are important to understand if we want to comprehend that development. I also consider the issue of how defenses are studied. Finally, I present six premises that are part of defense mechanism theory and indicate the chapters in the book that provide evidence relevant to these hypotheses.

WHY STUDY DEFENSES?

The phrase "in denial" is common parlance today. The student is said to be "in denial" that his failure to study will result in failing the course. The alcoholic is "in denial" that he has a problem and needs treatment. A country is "in denial" that it will be invaded by a rival nation. People are "in denial" that their government is committing atrocities toward other human beings. In these and other ways, we acknowledge that others make use of defenses in their everyday life.

Defenses change the way in which we perceive "reality" and think about ourselves. Particularly in our pragmatic American culture that values objectivity, rationality, and unbiased reporting—a culture that has produced an abundance of books on self-improvement through self-understanding—knowing about the ways in which we manage to deceive ourselves seems especially important. These self-deceptions are the work of defense mechanisms.

In addition to this opportunity for greater understanding of human nature, mental health practitioners and scholars are interested in defense mechanisms for other reasons. Defense use may be helpful in formulating clinical and differentiate diagnoses. Knowledge of defense mechanisms may also guide the type of therapeutic intervention selected by clinicians, as may knowledge of the specific relations between defenses and symptoms (Andrews, Singh, & Bond, 1993; Shaw, Ryst, & Steiner, 1996). Identifying defense mechanisms may be useful for targeting groups of individuals who are at risk for developing psychopathology, as well as for understanding why some individuals are vulnerable to pathology, whereas others, in the same environment, are resilient. For example, Vaillant (2000), in his longitudinal study of college men, found that the occurrence of a major depressive disorder occurred only among men who had experienced a large number of severe life stressor. However, not all men who were severely stressed became depressed. Within this group the use of adaptive defenses was a significant linear predictor of the *absence* of depression. Likewise, the incidence of posttraumatic stress disorder symptoms in World War II veterans was significantly lower in those who used the most adaptive defenses, as compared to those who had similar combat exposure but used less adaptive defenses (Vaillant, 2000). Other research has shown a difference in the well-being of people who are, and are not, aware of their unconscious strivings. Those whose explicit, conscious goals agree with their implicit, unconscious goals have been found to report greater emotional well-being than people whose implicit and explicit goals were inconsistent (Brunstein & Schultheiss, 1998; Schultheiss & Brunstein, 2001). One reason for this discrepancy is that implicit goals are kept out of awareness through the use of defense mechanisms.

The study of defense mechanisms is important for these reasons, but there is a problem: Defenses are effective because we are unaware of their functioning, and this absence of awareness creates a dilemma. How are we to study an important aspect of our inner life that colors our perception of reality and affects our adaptation but functions at a level that precludes our awareness? In short, how are we to learn about something that we can't know about? We will see how this dilemma has been addressed.

DEFENSES OCCUR EVERY DAY

Now you see it, now you don't.

We are all fascinated by magicians and their capacity to make us "not see" that which we just did see. How can magicians change reality—or, rather, change our perception of reality—so that what just existed appears to no

longer exist? The magician's maneuvers accomplish for a group of people what a defense mechanism, such as denial, accomplishes for the individual.

I was introduced to this idea that we could change the perception of reality rather early in my life. When I was a child, there were three wooden monkeys that hung on the wall of our breakfast room, their curlicue tails connecting one to the next. The hands of the three monkeys were placed, first, to cover the eyes, then to cover the ears, and lastly to cover the mouth. My mother explained the moral to me: See no evil, hear no evil, speak no evil. Never mind if evil exists: The point is to protect the senses, protect the self from acknowledging what exists. In iconic form, these monkeys represented the capacity for self-protection through denial.

The occurrence of denial is not confined to wooden monkeys. My 4-year-old daughter received a lovely, decorative papier-mâché hand mirror as a gift from her aunt. The mirror was kept on a shelf in her bedroom. One afternoon she brought it to me, the long, elegant handle broken in two. With a look of considerable puzzlement on her face, she said, unprompted, "I didn't break it." Although it seemed likely that she had been responsible for the breakage, the expression on her face suggested to me that her statement "I didn't break it" was not an effort at conscious deception—that is, was not a lie. Rather, I think she was demonstrating her (likely) misconstrual of reality. To protect herself from self-reproach and, perhaps, an anticipated reproach from her parent, she had used the unconscious mental operation of denial.

On the playground of any school can be found children who are rejected by their peers. These "rejected" children are often trapped in a self-perpetuating cycle: Typically they attribute, or project, their own hostility onto others and then anticipate that the others will be hostile toward them—an anticipation that is sometimes validated (Crick & Dodge, 1994). However, through this use of projection, rejected children are able to attribute their difficulties to others rather than to themselves. In this way, they protect the self.

By adolescence, the teenager is beginning to struggle with issues of identity and the associated areas of personal values and goals. A frequent way to find security in this period of confusion is by adopting the clothes, hairstyle, and manners of the "in" group at school or of a current media star. In this way, for the time being, the adolescent knows who he is, or at least what he should look like, on the outside. His sense of self is protected through the use of the defense of identification.

Another example of defense use in everyday life comes from the story of the king who, on receiving a letter telling him that one of his cities had been lost in battle, burned the letter and had the messenger killed. By destroying the upsetting letter, he could deny that such an upsetting event had taken place. By projecting the cause of the upset onto the messenger, the king himself was absolved from any responsibility for the great loss.

WHAT IS A DEFENSE MECHANISM?

Thus far, I have been using the term *defense mechanism* in a rather loose, colloquial sense. Now I provide a more formal definition.

As presented by Freud in 1894, the original definition of a defense mechanism was that of a counterforce directed against the expression of drives and impulses. The idea here was that defenses served to control or modulate impulse expression so as to protect the individual from being overwhelmed by the anxiety that would result from conscious recognition of unacceptable impulses. This conception was subsequently expanded to include the use of defenses as reactions to external sources of stress as well as to internal forces (i.e., drives).

In current psychoanalytic theory of defenses, some emphasis has been placed on interpersonal factors in defense use and development (Cooper, 1998). A child may learn that the expression of certain feelings or needs would arouse a negative reaction in the caregiver; as a result, these feelings "go underground." Keeping the unacceptable feelings out of awareness helps maintain a relationship with the caregiver. This operation of putting thoughts and feelings out of awareness by keeping them "underground" is classically referred to as the defense of repression; its result is the development of a "false self," as described by Winnicott (1965) and Miller (1981).

Thus defenses operate both in reaction to internal pressures, as described in classical psychoanalytic theory, and as a reaction to external pressures, including those that emanate from significant adults. Especially important in this regard is the empathic failure of caregivers: The child mobilizes defenses to avoid recognizing these failures.

In contemporary theory, defenses also are understood to have another function: to protect the self and the sense of self-esteem (e.g., Kohut, 1977).[1] Here defenses are understood to protect the self from the negative effects of disappointment, including the disappointment of empathic failures that are experienced during childhood.

Thus defenses may be defined as unconscious mental mechanisms that are directed against both internal drive pressures and external pressures, especially those that threaten self-esteem or the structure of the self, as might occur when friends or family fail to be empathic or in some other way are "lost" to the individual. The function of the defense mechanism is twofold: to protect the individual from experiencing excessive anxiety, and to protect the integration of the self.

There are different opinions about how many defenses exist. Vaillant (1992) provided a list of 18 defense mechanisms about which there is some agreement across investigators, but others have listed up to 44 different defenses (Bibring, Dwyer, Huntington, & Valenstein, 1961). As I discuss below, different measures of defense assess different numbers of defenses.

DISTINCTION FROM COPING MECHANISMS

Using defense mechanisms is one way that people protect themselves from psychological upset. However, other strategies are available for this purpose, and people can usually describe these methods. When experiencing stress, an individual may consciously try to ignore it, focus on something else, find a solution, or seek assistance from others. These and other conscious attempts to reduce anxiety are referred to as *coping mechanisms*. Although they are similar to defense mechanisms in their purpose, there are important theoretical differences between the two concepts.

I have suggested (Cramer, 1998d, 2000a) that there are two critical differences between coping and defense mechanisms.[2] First, coping mechanisms involve a conscious, purposeful effort, whereas defense mechanisms that occur without conscious effort and without conscious awareness (i.e., they are unconscious). Second, coping strategies are carried out with the intent of managing or solving a problem situation, whereas defense mechanisms occur without conscious intentionality. In this way, defenses function to change an internal psychological state but may have no effect on external reality and so may result in nonveridical perception—that is, in reality distortion.[3]

Both defense mechanisms and coping strategies are aroused by situations involving psychological disequilibrium. In this sense they are similar in that both are adaptational processes. Further, if the purpose of coping mechanisms is to (1) decrease negative affect, (2) return to baseline functioning as quickly as possible, and (3) solve or manage the problem (Aldwin, Sutton, & Lackman, 1996), then defense mechanisms may be seen as similar with regard to points 1 and 2. Defense mechanisms function (1) to ward off excessive anxiety or other disruptive negative affect, so as (2) to restore a comfortable level of functioning. It is with the third purpose of coping—to solve or manage a problem—that differences between coping and defense are seen. Coping strategies intentionally engage in activity that will address the problem (which includes diminishing negative affect). Defense mechanisms also function to diminish negative affect, but they do so without the conscious intent or awareness of the person. In addition, coping strategies sometimes address the problem by acting directly on the problematic situation, thereby reducing negative affect, whereas defenses are focused on changing internal states (negative affect) rather than external reality.

Three other differences between coping and defense mechanisms should also be considered, although these are not so much critically defining differences as they are a matter of emphasis. The first of these differences involves the question of whether the use of these mechanisms is best explained by situational or dispositional factors. Coping mechanisms are

commonly thought of as reactions to situations, whereas defenses are generally conceptualized as dispositions that are part of the individual's enduring personality. Despite this theoretical difference, there is little empirical evidence that clearly supports the distinction. Clearly, situational factors are important for influencing defense use; under conditions of stress, more defenses should be used. Likewise, coping strategies have been found to be related to stable personality traits, suggesting that coping choice is to some degree dispositional (Watson & Hubbard, 1996).

Another factor that has been suggested to differentiate between coping and defense is the idea that defenses are related to psychopathology, whereas coping is part of normal psychological functioning. This idea likely stems from the original work of Freud (1894) in which the idea of a defense mechanism was identified within the context of understanding disturbed patients. However, this idea was forever changed by Anna Freud in 1936, when she wrote that the use of defense mechanisms is a part of *normal* development; this idea has been an integral part of psychoanalytic defense theory since that time. Nevertheless, as with any psychological function, a normal process may come to serve pathological ends if overused or if age or situationally inappropriate. However, the distinction between defense and coping on the basis of pathology or normality is not well founded. Empirically, the association of pathology or health with defenses or coping has shown that each of the two adaptational mechanisms may be related to either pathology or health, depending on which level of defense or which type of coping strategy is being considered. Mature defenses are related to psychological health (e.g., Vaillant, 1993, 2000; see also Chapters 11 and 12), whereas emotion-focused coping strategies are associated with psychological distress (e.g., Carver & Scheier, 1994; Watson & Hubbard, 1996).

In sum, the distinction between defense and coping mechanisms is based on theoretical differences in the two constructs rather than on whether they are situationally versus dispositionally determined, or by differences in their relation to health and pathology. A more detailed discussion of the criteria for distinguishing between defense and coping mechanisms is provided in an article devoted to this topic (Cramer, 1998d).

DISTINCTION FROM DEFENSIVENESS

Another source of difficulty in studying this area has been an occasional confusion between the terms *defense mechanism* and *defensiveness*. The term *defense mechanism* is a theoretical construct that describes a cognitive operation that occurs on an unconscious level, the function of which is to modify the conscious experience of thought or affect. Specific defense mechanisms are defined by the specific cognitive operations that bring

about this modification, as discussed below. *Defensiveness* is a more general term and refers to behaviors that protect the individual from anxiety, loss of self-esteem, or other disrupting emotions. Defensiveness may thus be served by defense mechanisms, but there are other mechanisms that support defensiveness, such as the conscious decision to act differently from how one feels, or to suppress a disturbing idea. A critical distinction between the concept of defense mechanism and defensive behavior is that the former is always unconscious whereas the latter may be consciously recognized by the individual. Thus defensiveness is the broader category, including both defense mechanisms as well as other behaviors that are designed to reduce anxiety. (For further discussion of this issue, see Cramer, 1991a.) Both defensiveness and the use of defense mechanisms have been shown to distort people's self-report of their emotional state.

DEFENSES AS PART OF NORMAL DEVELOPMENT

As indicated above, defense mechanisms are part of normal development—in fact, are essential to normal development. Although Freud wrote about the connection between pathology and defenses, he also wrote that defense mechanisms are necessary as part of normal development, adding that it is "doubtful whether the ego could do without them altogether during its development" (1937, p. 237).

Although unusually heavy reliance on defense mechanisms may signal psychopathology, the use of defenses within a normative frequency is essential for daily, healthy adaptation. Similarly, some forms of defense fall outside of the range of normality, whereas other forms are normatively appropriate. These distinctions apply equally to physical functioning: A heartbeat that is too rapid or too irregular may signal cardiac pathology, but *having* a heartbeat is a requirement for everyday living.

Yet the idea that defense mechanisms are an integral aspect of development that influence psychological functioning from childhood through adulthood is a novel idea to some researchers. In 1998 I published a paper with Jack Block in which we showed that psychological upset at age 3 predicted defense use at age 23. A reviewer of that paper was amazed that such a topic would even be considered for investigation, that anyone would even consider the idea that early childhood characteristics could be related to defense use in adulthood. I was as amazed by the reviewer's doubt as the reviewer must have been by my idea and by the positive findings that we reported in the paper. In reaction to the reviewer's remark, I thought, "Who could *not* think that this might be the case?" Clearly, anyone who holds a developmental, psychodynamically oriented view might expect to find a relation between early life experiences and later development.

All of which is to say, our theoretical orientations frame the kinds of questions we ask as well as the method we use to answer the questions. If you don't think there is developmental continuity from earlier to later life, you are unlikely to look for it. If you don't think that defense mechanisms exist, you are unlikely to find them.

THE DEVELOPMENTAL THEORY OF DEFENSES

In my previous book I discussed the theory of defense mechanism development in some detail. This continues to be an important way to conceptualize defenses because it makes clear that whether or not a defense is considered to be immature depends on the age of the person using the defense. For example, the defense of denial, when used by a 25-year-old, is immature, but when used by a 5-year-old is age appropriate. Defense maturity is relative to the age of the defender.

Two basic tenets are critical parts of defense development theory. The first is that different defenses become predominant at different ages, and that there is a developmental pattern for the emergence and decline of defenses. The second tenet is that each defense has its own developmental history, beginning as a motor reflex and ending as a mental mechanism that increases and then decreases in prominence. The theoretical model of defense mechanism development is shown in Figure 1.1 for the three defenses that I have studied most closely.

There is considerable empirical evidence for this theory. Both cross-sectional and longitudinal studies of defense mechanisms have shown that different defenses become predominant at different ages (Cramer, 1991a, 1997b; Cramer & Gaul, 1988; Cramer & Brilliant, 2001; Porcerelli, Thomas, Hibbard, & Cogan, 1998; Smith & Danielsson, 1982; Laor, Wolmer, & Cicchetti, 2001). In early childhood the defense of denial is predominant but by age 7 its use declines and remains at a relatively low level in future years. As denial decreases, the use of projection increases so that by age 7, denial and projection are used equally often. As children grow older, projection continues to increase in use and becomes predominant throughout late childhood and early adolescence, remaining important during late adolescence. A third defense, identification, is used very little in early childhood; its use increases slowly across childhood and early adolescence, until it becomes predominant in late adolescence. Thus, by late adolescence, denial is used infrequently, whereas projection and identification remain as important mechanisms for control and adaptation. Recent work (Cramer, 2003b, 2004) suggests that, under normal circumstances, the use of identification declines after late adolescence.
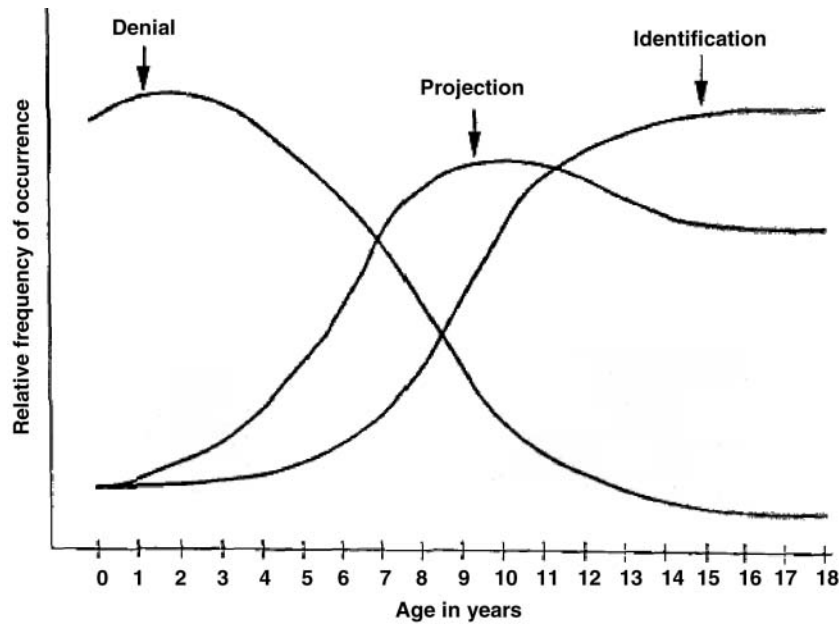
FIGURE 1.1. Hypothetical model of defense mechanism use. From Cramer (1991a). Copyright 1991 by Phebe Cramer. Reprinted by permission.

THE IMPORTANCE OF UNDERSTANDING
WHAT DEFENSES ARE AND HOW THEY FUNCTION

To understand how defense mechanisms function, it helps to believe that such motivated cognitive processes exist. It also helps to have some knowledge of psychodynamic theory, unconscious mental processes, and developmental theory. For these reasons I strongly suggest reading Chapters 3, 4, and 5, in which I present a theoretical description of the nature and development of three major defenses: denial, projection, and identification. Although some of this theorizing is summarized in Chapter 2, your thinking about the research reported will be enhanced by a greater understanding of the theory associated with the three defenses.

When approaching the study of defense mechanisms, it also helps to understand that human thinking is not always "logical," not always reality based, and not always objective. Even the most conscientious, intelligent person may sometimes deceive himself—that is, may not recognize the motives that guide his behavior—whereas an outsider, looking at the same behavior but without the need to protect the self-image of that person, can identify its defensive nature. It is this latter difference between the person

displaying the defense and the person observing the defense—that is, the need, or not, to protect the self—that makes possible the assessment of defenses.

To recognize defenses it also helps to have a "third ear" with which to sense a disjunction, disruption, or nonsequitur in the flow of discourse—something that hovers on the edge of illogicality or disbelief. It is also important to recognize that defense mechanisms occur within a context, and that context will help determine whether a particular remark reflects a defense mechanism or not. For example, although it is true that the defense of denial may be schematically summarized as having an idea or feeling to which a negative marker (*no*, *not*, *doesn't*) is attached, this cannot be mechanically translated into a computer program that can identify the presence of denial in samples of text. This is because the defense of denial, or negation, involves more than the presence of the negative. Whether or not it is an example of a defense depends on the motivation, or intent, of the speaker who uses the negative marker. And here I do not refer to the conscious intent of the speaker but to sources of motivation that are likely unknown to her—that is, to unconscious motivation. It is the listener who must evaluate the nature of the statement and the intent of the speaker—that is, the context in which the remark occurs—in order to determine the presence of a defense mechanism.

PROBLEMS OF DEFENSE ASSESSMENT

This topic leads us into the important question of how to assess the use of defenses. Clearly, from what I have written, it does not make sense to directly ask a person if she reacts to stress or anxiety by using a mechanism that operates outside of awareness. As is shown later in the book, once a person understands the connection between motive and the mental mechanism of defense, she gives up the defense because its adaptive purpose is no longer functional.

However, it has been argued that it is possible to ask questions about behavior in stressful situations in such a way that the unconscious intent of the mechanism can be circumvented, allowing the individual to report on the mechanism without understanding its function. Measures of this type ask questions about behaviors that are derivatives of the defenses, assuming that these will be reported without being distorted by the work of the defense. Although it is possible that this approach may obviate the problem of asking people to report on a mechanism that operates outside of awareness, this is not clearly obvious. If the defense functions to disguise the connection between the unconscious motive and the behavior, then the response given to the questionnaire may deny the link made in the question.

On the other hand, some people may have some understanding that their behavior is influenced by defense mechanisms, and they may be able to report on these derivative behaviors. For others, such awareness is lacking. Equally likely is the case in which the very defenses under study are in use while responding to the self-report measure, such that, for example, the respondent denies that he uses denial as a defense.[4] Thus the question remains as to whether these self-report measures yield an assessment of defense use that corresponds with that obtained from clinical observation. There is little information on this issue.[5]

An alternative approach to asking people to self-report on their use of defense mechanisms is to give people free reign to express their thoughts and feelings while a trained observer closely follows what they say and how they say it. The expressions may be coded subsequently to indicate the use of different defenses. For the purpose of such coding, clear criteria for evidence of defense use are developed and applied to the narrative material.

These observer-based methods—which clearly rely on the acumen of the observer—include approaches in which the individual is given a standard "prompt" to which he crafts a perceptual or narrative response, as well as approaches based on verbal prompts to which the individual responds in a clinical interview.

The two most commonly used standard prompts are the Thematic Apperception Test (TAT; discussed in subsequent chapters) and the Rorschach Ink Blot assessment procedure.[6] The Rorschach consists of 10 abstract pictorial prompts. The viewer describes what she sees and provides a justification for that response. The use of various defense mechanisms in these descriptions may be assessed through the application of previously developed coding rules, which are applied to both the content and formal characteristics of the response. The most widely used methods of this type are the Lerner Defense Scales (Lerner & Lerner, 1980) and the Rorschach Defense Scales (Cooper, Perry, & Arnow, 1988). I discussed research using these methods in my previous book (Cramer, 1991a).

The second observer-based method to assess defense mechanism use is the clinical interview. Several scales have been developed for use in coding the interview material obtained.[7] The most widely used of the interview methods are Vaillant's clinical vignette method (Vaillant, 1976, 1977, 1993) and the Defense Mechanism Rating Scales (DMRS; Perry, 1990; Perry & Ianni, 1998). In the former approach, life vignettes are taken from more extensive interviews and rated for the presence of 18 defense mechanisms, based on the definitions of those defenses. In the DMRS interviews are rated for the presence or absence of 27 defenses, which are then grouped into seven defense levels, representing increasing levels of defense maturity, which may be additionally combined into an Overall Defensive Functioning (ODF) score, again indicating level of defense maturity.

As was true for self-report measures, there are also limitations associated with observer-based approaches. For one, they are time and labor intensive. Generally, they are conducted one-on-one; every subject hour requires an examiner hour,[8] and then numerous hours are required to code the material obtained. Further, considerable training and clinical sensitivity are required for the administration of the procedure and the coding of the material obtained. Coders who lack a clinical "ear" that is sensitive to the manifestation of defenses are unlikely to use this approach with success. In addition, although some of these approaches allow for the coding of many different defenses, the results obtained with these coding schemes indicate that many of the defenses are coded very infrequently. Moreover, as is repeatedly shown in the measures discussed in Chapter 16, when extended lists of defenses are factor analyzed, they are reduced to three or four factors. Grouping the defenses into three or four levels (e.g., Bond, 1992; Vaillant, 1976) or seven levels (Perry, 1990), based on defense maturity, produces more stable results and provides meaningful relations with personality variables and psychopathology. Perhaps due to low incidence, many of the defenses in the extended list fail to reach acceptable levels of reliability and do not relate to personality and psychopathology.

There is another type of problem associated with the assessment of defenses from clinical interviews, if these interviews are also used to make other ratings of psychological functioning, such as diagnosis, adjustment, or life satisfaction. As suggested by Bond (1990),[9] knowledge of the overall content of the interview, including diagnostic material, may influence the coding of defenses. In fact, this does happen, as noted by Busch, Shear, Cooper, Shapiro, and Leon (1995); when psychiatric interviews were being used to code the DMRS, "it was not possible to prevent discussion of symptoms that revealed the diagnosis" (p. 302). When this conflation happens, there is a clear confound, or bias, in the defense rating. This important problem is avoided when defense assessment is made entirely separate from other knowledge of the patient.

THE PRESENT BOOK

The research studies reviewed in this book are based primarily on three measures of defense mechanisms, two of which are observational and one self-report.[10] The Defense Mechanism Manual (DMM; Cramer, 1991a) assesses the use of defenses by coding narrative material, primarily stories told in response to the TAT, but also material from clinical interviews. The DMRS (Perry, 1992) assesses defense use by coding information obtained from clinical interviews and is most similar to the method used by Vaillant in his long-term study of defense use in men (Vaillant, 1975, 1983, 1993).

In contrast to these observational methods, the Defense Style Questionnaire (DSQ; Bond, 1992; Andrews et al., 1993) relies on the self-report responses of individuals to a series of structured questions. A detailed description of the DMRS and DSQ is provided in Chapter 16; the rationale for, and description of, the DMM is given in Chapters 15.

In addition to the DMM, DMRS, and DSQ, research based on several other measures is occasionally reported in the chapters to follow, including the Life Style Index (LSI; Conte & Plutchik, 1993), the Defense Mechanism Inventory (DMI; Gleser & Ihilevich, 1969), the Defense-Q (Davidson & MacGregor, 1997), the Ego Defense Scale (Pfeffer, 1986), the Comprehensive Assessment of Defense Style (CADS; Laor et al., 2001), and the Response Evaluation Measure (REM-71; Steiner, Araujo, & Koopman, 2001). A description of each of these measures is provided in Chapter 16.

As indicated above, the DMM, DMRS and DSQ differ in being either an observational (DMM, DMRS) or self-report (DSQ) measure. They also differ in the number of defenses assessed. The DMRS and the DSQ have individual measures for more than 20 defenses. The DMM, on the other hand, yields scores for only three defenses (denial, projection, and identification), although each of the three DMM defense measures is composed of seven subscales, several of which may be considered to represent individual defenses. For example, the Denial measure includes subscales for Negation, Reversal, Reaction Formation, Repression, Minimization, Disavowal, Distortion, and Fantasy. Projection includes Displacement, Magical Thinking, and Falling Ill, and Identification includes Introjection, Idealization, Controlling, Compliance, along with Identification with the Aggressor, with the Loved Object, with the Lost Object, and Out of Guilt (see Bibring et al., 1961).

An obvious question in comparing the three measures, then, is whether the multiscaled DMRS and DSQ yield more usable information than the DMM. Significantly, in research studies, the larger number of DMRS and DSQ scales are typically grouped into a smaller number of defense categories. In the case of the DSQ, factor analysis has been used to identify these more stable, underlying dimensions of the larger number of scales. Repeatedly, these analyses find three (or sometimes four) underlying factors, designated as Immature, Neurotic, and Mature. It is these summary categories that are typically used in research and clinical studies. In the case of the DMRS, the individual defense scales are grouped into seven categories or hierarchical levels. Although the results of selected individual defenses from both of these measures are sometimes also reported, the low incidence and low reliability of the individual defense scales reduce their likelihood of providing significant findings. Thus, for practical purposes, the DSQ and DMRS provide three or seven defense scales. Sometimes these are further collapsed into a single measure of defense maturity (ODF; Hersoug, Sex-

ton, & Hoglend, 2002). Similarly, the 18 defenses assessed from Vaillant's (1993) clinical vignettes are grouped into four levels—Psychotic, Immature, Neurotic, and Mature—with the Psychotic level ignored when studying nonclinical samples, because this type of defense occurs so rarely in normal people. Again, it is three defense levels that are most often used to relate defenses to other aspects of personality, pathology, and life functioning. Sometimes the defenses are collapsed into two levels: Mature present (defenses coded at levels 1–3), and Mature absent (defenses coded at levels 4–9) (Vaillant & Mukamal, 2001). Thus, despite the coding of 18 defenses, the research findings are based on two defense scales. Furthermore, as with the DSQ and DMRS, Vaillant's defense measure is often collapsed into a single dimension of defense maturity.

The finding that defense measures with multiple scales are often reduced to three-factor scales has also been demonstrated in recent measures developed to assess children's defenses (CADS; Laor et al., 2001) and adolescents' defenses (REM-71; Steiner et al., 2001). Factor analysis of the 28 defenses of the CADS yielded three factors. The first factor is defined by Projection (the defense with the highest factor loading). The second factor is defined by Reaction Formation; Denial has the second highest loading on this factor. The highest loadings on the third factor are for Humor and Identification. Similarly, factor analysis of the 21 defense scales of the REM-71 yielded three factors.[11] The first is defined by Projection, the second by Denial, and the third by Altruism (the defense of identification is not assessed in the REM-71).

Thus, in the defense measures that include multiple defense scales, factor analyses consistently indicate the presence of three underlying dimensions. Conceptually, these dimensions are similar to the three defense measures of the DMM, indicating either increasing levels of developmental maturity or defense styles defined by denial, projection, and identification. Looked at in this way, the information provided by the DMM and the multidefense measures such as the DMRS or the DSQ is not so different.

The major difference between the DMM and the multidefense measures such as the DRMS and DSQ is not, I think, the number of defenses assessed, but rather the psychological range. Both the DMRS and the DSQ include defenses that are "healthy" or adaptive in adults. The expansion of these defense lists to include mechanisms such as suppression, humor, altruism, and sublimation follows from Vaillant's earlier studies of defense maturity in adult men. The DMM, which was originally devised to study defense development in children, does not include defenses that are more characteristic of adulthood. The DMRS and DSQ also include defenses that are characteristics of severely disturbed patients, such as splitting and projective identification. The DMM, which was originally designed to be used

with healthy children and adolescents, does not include the most primitive defenses.

For many purposes, then, the use of three or four broader defense measures, rather than multiple individual defenses, is advantageous. Although some studies do show that an individual defense within one of the three factors is differentially related to some outcome variable, this is not a typical finding. More often, it is one of the three factor scores that is the successful predictor of behavior or pathology. Scores based on these three or four factors have shown adequate reliability, whereas many of the individual defense scales have not. This problem may well be due to the fact that the individual scales generally consist of only two or three items.

In thinking about this question of defense assessment, the words of Anna Freud[12] are relevant. Referring to defense mechanisms, she noted:

> If you look at [defenses] microscopically, they all merge into each other. . . . You will find five or six defenses compressed into one attitude. The point is, one should not look at them microscopically, but macroscopically, as big and separate mechanisms, structures, events. [Then] the problem of separating them theoretically becomes negligible. You have to take off your glasses to look at them, not put them on. (Sandler & Freud, 1985, p. 176)

GENERAL ISSUES TO BE ADDRESSED

The theory of defense mechanisms includes several premises that may be tested empirically. The theoretical assumptions examined in this book are listed below. Evidence relevant to these assumptions is presented in the following chapters.

1. The theory of defense mechanism development asserts that the use of defenses changes with age. As a corollary, the implication of using any particular defense may change at different ages. (See Chapters 2 and 10.)
2. Defense mechanism theory says that the use of defenses increases under conditions of stress and anxiety caused either externally or internally. (See Chapters 6 and 7.)
3. Defense mechanism theory says that the use of defenses should reduce the subjective experience of anxiety. (See Chapters 6 and 7.)
4. Defenses are effective because they function outside of awareness—that is, they are unconscious; the awareness of the functioning of a defense should render it ineffective. (See Chapter 2.)
5. Excessive use of defenses—that is, greater than that found in

nonclinical community and student samples—is associated with psychopathology. (See Chapters 11, 12, and 13.)
6. Use of age-inappropriate, immature defenses is associated with psychopathology; use of mature defenses will be associated with healthy adaptation. (See Chapters 11, 12, 13, and 14.)

In addition to these issues that relate directly to defense mechanism theory, other intriguing issues are considered in the following chapters. One of these is the question of whether different environmental stressors elicit the use of different defenses (see Chapter 7). Second is the question of whether different defenses are related to different aspects of personality and personality change (see Chapters 8 and 10). Third is the question of whether the implications of defense use differ for men, as compared to women, or for psychologically healthy, as compared to seriously disturbed, individuals (see Chapters 9 and 13).