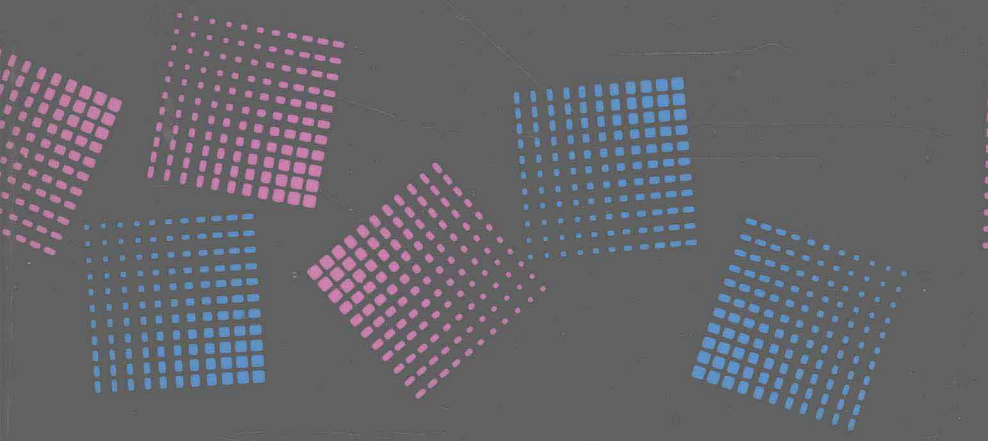
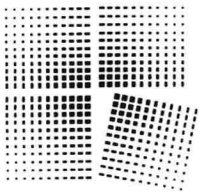
Sex Differences in Depression



Susan Nolen-Hoeksema



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Susan Nolen-Hoeksema

Preface

My interest in women's depressions began when I was an undergraduate, reading the poetry of Charlotte Perkins Gilman. Gilman wrote of endless days of mental fatigue, despair, self-hate. I soon discovered that many women poets, writers, and leaders have lost days, weeks, even years, to the pain of depression. Indeed, women in all walks of life seemed to be more likely to be depressed than men. I wanted to know why. I began to investigate the theories of women's vulnerability to depression, and the studies done to test these theories. They ranged from biological theories about the role of hormones in women's moods to social theories about the effects of oppression on women's mental health to psychological theories about the influence of women's personality traits on their vulnerability to depression. Time and time again, I found that plausible theories either had not been tested adequately or had been tested and not supported. Yet they seem to be accepted as fact in much of the psychological and popular literature. Women are being advised how to run their lives on the basis of these theories.

It is ten years since I first read Gilman's poetry and began to collect information on depression in women. Some of my own research in those years has been dedicated to testing possible sources of women's vulnerability to depression (see Chapter 7). In writing this book, I have compiled many studies of women and depression into a criti-

cal review of each of the major theories of why women are more prone to depression than men. My primary goal was to assess the current knowledge of sex differences in depression. My hope is that this review will challenge many researchers to direct their talents and energies toward understanding women's vulnerability to depression. Toward that end, I have commented throughout the book on methodological problems in existing studies that have precluded my drawing firm conclusions about the evidence for a theory, and I have suggested how studies should have been done. In Chapter 9, I outline ten questions I believe should be addressed in future research, and offer suggestions for carrying out relevant studies. I also hope that the critiques of existing theories presented here will lead clinicians and others who give advice to women to temper their advice with a caution that, as yet, we do not fully understand why women are prone to depression.

This book was written to be accessible to many groups of interested readers. It can be used as a text for advanced undergraduate or graduate courses in psychopathology, women's studies, or research methods. It can serve as a resource for social science researchers and mental health professionals. Finally, I have attempted to omit jargon and to present just enough research to enable people without training in the social sciences to understand the work that has been done and its implications. Throughout, I have worked hard to be balanced and objective in my reviews of the literature. I urge readers to open their minds and challenge their assumptions about women and depression.

Over the years I have been writing this book, I have received a tremendous amount of intellectual guidance and personal support from Martin Seligman of the University of Pennsylvania, with whom I worked as a graduate student and now continue to collaborate. Marty taught me how to take a scholarly approach to critiquing a literature, and also helped me to maintain my motivation for this topic by reminding me frequently how important it is. Christopher Peterson, of the University of Michigan, has also provided insightful comments on both the content and the writing style of this book, and I am very grateful. Much of the most recent information on the effects of hormones on moods was provided by Jean Hamilton, of the Institute for Research on Women's Health. Jean's comments

on the chapter on biological explanations helped me to understand where the research on hormones and moods may be going in the future. I also wish to thank the students who have contributed to my thinking on sex differences in depression and to research on the topic, particularly Jannay Morrow, Tomi-Ann Roberts, and Barbara Fredrickson, all of Stanford University.

Muriel Bell, my editor at Stanford University Press, has supported the idea of a scholarly review of the literature presented here since she learned of the project, and has facilitated the project in many ways over the last few years. Neil Channing Hughes has provided excellent advice on how to make the text both scholarly and comprehensible to the reader.

My thanks for moral support during the writing of this book go to many people: my husband, Richard, my parents, Catherine and John Nolen, my late aunt Bonnie Behner, my parents-in-law, Marjorie and Renze Hoeksema, and several other friends and relatives. Their confidence in me has been tremendous. Every woman should have such support.

S.N.-H.

Contents

CHAPTER ONE

The Dark Cloud: Definitions and Explanations of Depression

"A sort of gray fog drifted across my mind, a cloud that grew and darkened."
—Charlotte Perkins Gilman

We have all had periods when we feel depressed or unhappy, when we have no motivation, find it difficult to concentrate, and become passive and have no energy. Survey studies have found that at any given time, approximately one out of six adult Americans reports moderate to severe levels of depression (Eaton & Kessler, 1981). For most of us these episodes last only a few hours or a few days and do not interfere with our day-to-day functioning. However, nearly 8 percent of all Americans have at some time in their lives experienced an episode of severe depression that has left them incapacitated for a period of weeks or months (Robins et al., 1984). Depression is a common experience, then. It is more common among women than among men, however. Women are about twice as likely as men to develop both moderate and severe depressions (Nolen-Hoeksema, 1987; Weissman & Klerman, 1977). This book explores why depression is so much more common in women than in men.

Many explanations for the sex differences in depression have been proposed over the years. In the nineteenth century and before, depression and anxiety in women were usually viewed either as inevitable consequences of women's inferior anatomy or as the consequences of shirking the "natural" feminine role (Ehrenreich & English, 1978). For example, the clinician who treated Charlotte Perkins Gilman for the depression she describes in the epigraph to

this chapter thought that Gilman's depression resulted in part from her "manly" habit of writing books. He recommended that Gilman "live as domestic a life as possible. Have your child with you at all times. Lie down an hour after every meal. Have but two hours intellectual life every day. And never touch a pen, brush or pencil as long as you live" (Gilman, 1975, p. 96). Gilman followed the doctor's orders and soon had a "nervous breakdown." Later Gilman became an influential feminist who spoke out against nineteenth-century modes of treatment for women's emotional and physical problems.

It would be easy to dismiss nineteenth-century attitudes about emotional health as uninformed and no longer relevant. Yet these attitudes still affect the present-day view of women's emotional health. For example, the notion that women are predestined to fulfill certain roles in life if they are to be emotionally healthy remains with us in psychodynamic theories of women and depression. Moreover, the notion that women's emotional health is strongly influenced by biological changes associated with their reproductive organs remains with us in some of the biological explanations for sex differences in depression. That these notions date from the nineteenth century and before does not mean they are wrong. It means only that many of our current perspectives on women's health are rooted in some very old presumptions about females. The history of theories of depression in women is reviewed later in this chapter.

The focus of this book, however, is contemporary explanations for sex differences in depression. The purpose of the book is to evaluate the evidence for each theory critically, and to reach some conclusions about what we do and do not know about sex differences in depression. There is much we do not know: the data supporting most of the commonly believed explanations for sex differences in depression prove to be meager. Often the crucial studies for testing these explanations have yet to be carried out, and the studies that exist have often been inconclusive. In fact it is remarkable how little attention empiricists have given to such an important phenomenon as sex differences in depression. Another purpose of this book is therefore to suggest directions for new research on sex differences in depression. Studies that are needed are described intermittently throughout the chapters. The final chapter highlights ten important but unanswered questions that should guide future research.

Definitions of Depression

Common symptoms of depression include loss of motivation, sadness, low self-esteem, physical aches and pains, and difficulty concentrating. The depressed person often talks about "not caring any more" and shows decreased interest in the activities she used to enjoy. She may lose her appetite, or she may begin eating more. She may have trouble sleeping, or she may want to sleep all the time. Depressed people are slowed down in movement, in speech, and in thought. Very common to depression are thoughts of worthlessness and guilt. And some depressed people attempt or commit suicide.

The opposite of depression is mania. Manic symptoms include greatly increased energy, racing thoughts, pressured speech, wild and extravagant behaviors, and grandiosity. A manic person may sell all his worldly goods in one afternoon in order to raise money to run for president of the United States. One person I know gets married or divorced during manic episodes, which occur every few years. People who suffer manic episodes typically also suffer, at other periods in their lives, from episodes of depression.

Unipolar Disorders Versus Bipolar Disorders

Empirical studies (e.g., Andreasen et al., 1987) have indicated that people who suffer only from episodes of depression and people who suffer from alternating episodes of mania and depression have two distinct types of disorders. People who suffer only from depression are said to have a *unipolar depressive disorder*, and those who suffer from both depression and mania are said to have a *bipolar disorder* (American Psychiatric Association, 1987). People with unipolar depressive disorder have different genetic histories, different biochemical abnormalities, and different reactions to drugs from people with bipolar disorders.

To date, almost all the discussion of sex differences in depression has been concerned with sex differences in unipolar depression. It has been generally assumed that there are no sex differences in bipolar disorder (e.g., Boyd & Weissman, 1981; Weissman & Klerman, 1977). Yet in a review of the literature on bipolar disorder, Clayton (1981) showed that both bipolar disorder and unipolar depression are more prevalent among women than among men. The

only explanation that has been offered for sex differences in bipolar disorder is the suggestion of Winokur and colleagues (see Cadoret & Winokur, 1974; Gershon & Bunney, 1976) that both bipolar disorder and unipolar depression are associated with genetic abnormalities linked to the female chromosomes. I will discuss this explanation in reviewing biological explanations in general. Since all other explanations of sex differences in depression to be reviewed refer only to sex differences in unipolar depression, I will be dealing primarily with studies of unipolar depression.

Depressive Disorders Versus Depressive Symptoms

I have been referring to depressive *disorders* thus far. But how do we know when an episode of depression qualifies as a disorder? To diagnose psychological disorders, clinicians in the United States use the criteria in the *Diagnostic and Statistical Manual of the American Psychiatric Association*, known as DSM (American Psychiatric Association, 1987). The DSM lists nine symptoms of depression: (1) a depressed mood, (2) a diminished interest or pleasure in most activities, (3) significant weight loss or weight gain that is unintentional, or a decrease or an increase in appetite, (4) insomnia or hypersomnia, (5) psychomotor agitation or retardation, (6) fatigue or loss of energy, (7) feelings of worthlessness or excessive or inappropriate guilt, (8) diminished ability to think or concentrate, or indecisiveness, and (9) recurrent thoughts of death or suicide attempts. To be diagnosed as having a major depressive episode, a person must show at least five of these symptoms (at least one of which must be a depressed mood or a diminished interest or pleasure) for two or more weeks. These symptoms must also represent a change from the individual's previous functioning.*

But what about people whose depressive symptoms do not meet these criteria? Are they not truly depressed? The question whether depressive disorders are discrete and distinguishable from "subclinical" depressive symptoms is debated by clinicians and researchers

*A major depressive episode is *not* diagnosed, however, if the disturbance is a normal reaction to the death of a loved one, or if it is established that an organic factor initiated and maintained the disturbance. It also is not diagnosed if the person has experienced hallucinations or delusions in the absence of mood symptoms or if the person already has a diagnosis of schizophrenia, schizophreniform disorder, or delusional disorder.

alike. There are clearly some people whose depressions "feel" like a disorder to those observing them, much as multiple sclerosis and epilepsy feel like disorders. For these people, depressive episodes often seem to come on without warning or obvious cause. Some people even become psychotic during an episode of depression. But do these depressions differ in kind or only in degree from the subclinical depressions we all experience occasionally?

There is no definitive answer to this question. The line between subclinical and clinical levels of depression is blurry at best (Hirschfeld & Cross, 1982). Subclinical depressions are usually assessed by asking subjects to complete questionnaires. Cut-off scores are designated for the level of symptoms representing "severe" depression. About 60 percent of persons scoring in the "severe" ranges of depression questionnaires are diagnosed by DSM criteria as having a depressive disorder (Weissman & Myers, 1978). But the cut-off scores for the "severe" ranges of depression questionnaires are made arbitrarily, and it would probably not be too difficult to make the cut-off score such that 100 percent of the people who scored above it would be diagnosed as depressed by DSM criteria. The DSM criteria for depression are themselves arbitrary to some extent. They were derived by agreement among a number of clinicians and represent compromises between those clinicians' differing points of view about the defining characteristics of depression.

I would argue, moreover, that we do a disservice to people whose depressions do not quite meet diagnostic criteria by discounting their depressions as "only normal." Even moderate levels of depression appear to significantly impair functioning in work and school settings and in social situations (e.g., Hirschfeld & Cross, 1982; Kandel & Davies, 1986; Masters, Barden & Ford, 1979). If a moderately depressed person is having problems keeping up at work or at school, such problems can have lasting effects. For example, a college student who is moderately depressed during final exam week may be more likely to fail one or more exams, lowering her grade-point average and perhaps hurting her chances of being accepted by a graduate or professional school.

It is also important to examine rates of depressive symptoms, and not just rates of diagnosed depressive disorders, because several factors affect whether a person seeks medical treatment from health professionals and thus is diagnosed as having a depressive disorder.

The effects of a person's socioeconomic status, geographic setting (for example, urban versus rural residence), and age on help-seeking appear to be substantial (Wing, 1976). Usually, only a person willing and able to be treated by mental professionals is given a diagnosis. Thus it is important to survey all sectors of the general population, asking about the experience of depressive symptoms, in order to obtain accurate estimates of the rates of depression in the population.

The review of the data on sex differences in depression presented in Chapter 2 will cover studies of people who were depressed enough to seek treatment, and studies in which cut-off scores from depression questionnaires were used to define depression. As we shall see in that chapter, no matter how you define depression, after puberty women show more depression than men.

The History of Theories of Depression

In ancient times, depression and mania, like all abnormalities, were thought to result from possession by demons or from punishment by the gods. Treatments usually involved exorcism by shamans or priests, or having the victim sleep in religious temples in the expectation of relief from the gods. In the fifth century B.C., however, the Greek physician Hippocrates argued that it was not demons or gods that caused psychological disorders, but abnormalities in physiology. Hippocrates classified mental disorders into three categories: melancholia, mania, and "brain fever." The label *melancholia* was applied to the syndrome we now call depression. Hippocrates considered melancholia a physical disorder, caused by an excess of black bile, one of the four basic body "humors" or fluids. (The term *melancholia* is from the Greek *melan* for "black" and *cholē* for "bile.") Hippocrates' prescribed treatment for melancholia was quietness, abstinence from alcohol and sexual activity, and a careful diet (Davison & Neale, 1982).

The word *mania* comes from the Greek *mainesthai*, which means "to be mad." Hippocrates and his students also considered mania, and other forms of behavior and thought that seemed completely out of touch with reality, to be the result of biological factors. Later, in the second century B.C., Aretaeus, another Greek physician, argued that at least some mental disorders were simply exaggerations in normal personalities. He suggested that persons who were naturally

irritable and often became elated were prone to mania (Davison & Neale, 1982). In turn, people who were naturally serious were prone to melancholia. Thus Aretaeus proposed one of the earliest personality theories of the affective disorders. He also noted that people could switch back and forth between episodes of mania and melancholia.

From about the third century to the twelfth century A.D., the care of the sick, including the care of the mentally ill, was often left to monks. Many people who had lost touch with reality were simply abandoned, however, and allowed to roam the countryside. There was essentially no progress in theorizing about mental disorders or treatment for them during the Dark Ages. From about the twelfth century, the mentally ill were often the victims of witch-hunts. In a crusade that reached its peak in the seventeenth and eighteenth century, the Church sent forth its inquisitors in search of heretics and witches, to extract confessions from them, by torture if necessary, and usually to execute them by burning at the stake. In 1486 two inquisitors named Heinrich Kraemer and Johann Sprenger published a guide to witch-hunting called the *Malleus Maleficarum* or *The Witches' Hammer*. This practical guide gave tips on how to recognize witches. Birthmarks were considered indications that a person had been touched by the devil. Another sign of demonic possession was a sudden loss of reason (Davison & Neale, 1982). Indeed, some historians have argued that many people suffering from mania, schizophrenia, or psychotic depression were charged as witches and burned at the stake during the Middle Ages (see Zilboorg & Henry, 1941); others argue that only a small proportion of those burned at the stake were insane (see Davison & Neale, 1982; Ehrenreich & English, 1978). It is well established that over 85 percent of those burned at the stake were female. Over 100,000 women, along with many thousands of men, were executed over the three centuries of witch-hunts. According to the *Malleus Maleficarum*, women were particularly likely to become possessed by the devil because their insatiable lust led them to submit to intercourse even with devils.

Following the witch-hunts, asylums became the repositories both for the mentally ill and for beggars. Patients who made a nuisance of themselves (for instance, those showing symptoms like those of mania and schizophrenia) were chained to walls and floors for years, put in straitjackets, restrained in chairs, and sometimes locked in

small coffinlike boxes. The large, cold stone rooms in which inmates stayed were unsanitary, with rats roaming freely. Not until the late eighteenth and early nineteenth century did people begin to question the idea that the insane were no better than animals and could be treated as such. Reformers such as Philippe Pinel and William Tuke argued for more humane treatment of the insane and, despite much public resistance, won freedom and care for many inmates of asylums (Foucault, 1965).

Finally, late in the nineteenth century, Emil Kraepelin suggested one of the first systems for distinguishing and classifying different types of mental disorders. The development of a classificatory system was a breakthrough that was necessary before research could be done on the causes and cures of disorders. Kraepelin proposed that there were two major groups of severe mental disorders: manic-depressive psychosis and dementia praecox (later called schizophrenia). Kraepelin argued that manic-depressive psychosis was caused by metabolic irregularities and that schizophrenia was caused by chemical imbalances.

About the same time, a young Viennese neurologist named Sigmund Freud began to study with Jean Charcot, a famous French neurologist who was using hypnosis to help cure women suffering from hysteria. Hysteria was an exceptionally common disorder among middle- and upper-class women of the Victorian period. It was characterized by headaches, muscular aches, weakness, indigestion, depression, and sometimes complete loss of functioning in some part of the body (for example, paralysis of a limb) with no apparent physical cause. In dramatic presentations before other physicians and medical students, Charcot supposedly would hypnotize such patients and give them the suggestion that their symptoms would remit. Sometimes he would have them try to recount, under hypnosis, any traumatic event they thought was connected to their disorder. Charcot believed that the emotional release, or catharsis, of recounting a traumatic event, along with his hypnotic suggestions, produced the cures that seemed to occur during his presentations. In reality, Charcot's medical students were coaching the patients to fake hypnosis and to overcome or deny their symptoms during Charcot's presentations.

Although it is questionable whether Charcot's patients benefited from the presentations, Sigmund Freud certainly did. Charcot's theo-