

**SCREENING FOR BRAIN DYSFUNCTION  
IN PSYCHIATRIC PATIENTS**



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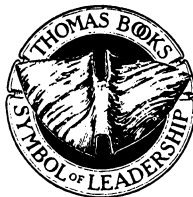
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*To my family and colleagues  
To Jordin, Geri, Jo and Meg  
To Chris, Nick, Dave and Phil*



## PREFACE

As a clinician, I have worked in a variety of settings: a state hospital, a mental health center, a private psychiatric clinic, and private practice. The longer I worked as a clinician, the less comfortable I became with the fact that I knew an insignificant amount about the brain, the organ that controls nearly everything we do (there are spinal reflexes). To address this deficiency I turned to training in neuropsychology. As a professor of psychology and a researcher, I daily focus on empirical evidence and critical thinking. All of these have combined to generate my interest in the misdiagnosis of medical diseases as psychiatric disorders. In my clinical work I have seen over and over again how medical diseases can present with what appear to be classic psychological symptoms. The client is not only misdiagnosed, but is then denied the medical treatment he or she needs. The research cited in this book, dating back to the 1890s, establishes beyond a doubt that such misdiagnoses are more common than most clinicians would guess.

This book focuses on one type of medical condition that is likely to be misdiagnosed: brain injuries and illnesses. Disturbances of brain function can create, quite literally, every psychological symptom known to clinicians. After all, since the brain produces everything we do why should it not produce “psychological” problems? The psychological consequences of *known* brain injuries and illnesses have been adequately addressed in the literature, and will not be a part of this book. Rather, this book examines the situation in which a person comes for psychiatric help but in reality has an as yet *unknown* brain problem. Clearly, the consequences of a misdiagnosed brain disorder can range from at best improper treatment to at worst a life-threatening situation.

The basic premise of this book is that clinicians without extensive training in the neurosciences can do a competent job of screening psychiatric clients for possible brain disorders. Not only can clinicians do a competent job, they *must* do so. It is not the task of the mental health

clinician to diagnose brain disorders; this would be a formidable requirement entailing considerable medical training. It would be unfair to expect clinicians to diagnose such problems; this is not their area of interest or expertise. It is the task of the clinician to *screen* for brain problems, and, when sufficient concern is warranted, refer the client to a specialist for further evaluation. The specialist will decide if there is a brain problem. Learning to effectively screen for brain disorders is not an especially daunting task. As clinicians, mental health professionals already possess some of the basic screening skills, e.g., interviewing. All that is needed is knowledge of the signs that suggest the possibility of brain dysfunction, signs that are available to clinicians in the course of their usual work with clients. This book presents and discusses those signs.

CBH



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# CONTENTS

	<i>Page</i>
<i>Preface</i>	vii
Chapter 1. Introduction	3
Chapter 2. Research on Undiagnosed Brain Dysfunction in Psychiatric Settings	13
Chapter 3. The Mental Health Professional in the Screening Process	39
Chapter 4. Client History	49
Chapter 5. Physical Signs	69
Chapter 6. Psychological Signs	81
Chapter 7. Psychological Tests in Screening	99
Chapter 8. Referring A Client	107
Chapter 9. Professional Development	115
<i>References</i>	121
<i>Index</i>	133



**SCREENING FOR BRAIN DYSFUNCTION  
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## Chapter 1

### INTRODUCTION

**R**esearch shows a significant number of patients seeking mental health care are physically ill. In some cases, psychological symptoms are directly caused by the medical disease, while in others the physical illness exacerbates the psychological problem. There is a large body of literature on the relationship between physical illness and psychological problems which points to the need for psychiatric clients to have a medical examination. This book focuses on one class of medical problems: brain disorders.

A significant number of people seeking mental health care have undiagnosed brain conditions. Considering all types of brain conditions, over all age ranges, it is reasonable to assume that an average of about 7 percent of the clients now in mental health care are presenting what appear to be psychological problems but in fact are signs of a brain disorder. This alone is cause for concern but the numbers are even more striking when considering specific conditions. On average, around 10 percent of hospitalized psychiatric patients are found to have an undiagnosed brain tumor at autopsy. As high as 62 percent of patients presenting with conversion disorder symptoms are ultimately found to have an organic condition. About one-third of children and adolescents in psychiatric care have some form of neurological involvement. It is evident that mental health professionals must be vigilant in screening for brain conditions during the diagnostic process. The ramifications of misdiagnosis and continuing to treat a patient psychologically when she or he has a medical problem are enormous. The worst scenario is that a patient dies because of an undiagnosed medical condition. This of course leads to the possibility of a lawsuit, accusations of ethics violations for not diagnosing and treating the

patient properly and, of course, guilt and questions about one's competence. The second scenario is that the patient does not have a fatal condition but remains in psychological treatment when it is inappropriate. The third scenario is that the client drops out of treatment because he or she is gaining nothing from it—after all, if the problem is a medical one, psychological treatment will not cure it.

## PURPOSE OF THIS BOOK

The purpose of this book is to demonstrate the need to screen for brain disorders and to provide the tools to do it effectively. Although this book focuses on brain conditions, those in which the brain is the primary affected organ, at times it will be necessary to discuss other conditions that lead to impaired brain function. For example, diabetes is not a brain disorder per se, nor are hormone imbalances, most infectious diseases or blood disorders, yet each of these may affect brain function. When all is said and done, regardless of the specific illness, for it to create a psychological symptom a medical condition must affect the brain in some way. This book will not address the broader area of psychology and medicine usually called psychosomatic illnesses. To cover all the research and writing on the relationship between the body and mind would require multiple volumes. Nor will this book address the broad area of *known* brain disorders and the psychological effects they produce. If the brain disorder is already known, there would be no reason for screening.

## TERMINOLOGY

A brief section on terminology will insure that terms are understood by all of us to mean the same thing. While some writers distinguish between terms (psychological vs. psychiatric, mental vs. emotional), much of the time their purpose is lost to the reader. I have worked in the field long enough to know that most mental health workers do not use the fine distinctions devised by researchers or other presenters. For example, I once attended a presentation by a neuropsychologist who made an issue about the term “organic” being inaccurate and outdat-



ed. I did not understand his point then or his rationale for it. I will not make such arbitrary distinctions in this book because I do not make them in my teaching and practice.

Problems of a purely psychological nature, those in which there is no evidence of brain disorder or dysfunction, will be identified as *psychological*, *mental*, *emotional*, *functional*, *psychiatric*, *psychogenic*, or *nonorganic*. No subtle professional or theoretical differences are implied by these terms. If the condition is physical it will be referred to as *medical*, *physical*, *physiological*, *brain*, *biological*, *neurological*, or *organic*. Again, no professional or theoretical differences should be implied. Whether or not a person receiving mental health care is a “patient” or “client” is not an important distinction to me or most mental health providers; therefore, I will use them interchangeably.

When discussing a brain that is not functioning normally, a number of terms will be used: *impaired*, *dysfunction*, *damage*, *disorder*, or *injury*. In this field, the term brain injury (or head injury—referring to the brain) is sometimes used rather broadly, referring to any problem, not just one that resulted from an accident. The terms *insult* and *lesion* require explanation. They refer to *any* type of brain problem, from a stroke to a gunshot wound to a brain tumor.

Regardless of professional identity (e.g., psychologist), degree (e.g., M. A.), or type of service provided (e.g., diagnostic or counseling), the terms *mental health worker* or *mental health professional* will refer to *anyone* providing mental health services. It follows, of course, that *mental health care* or *mental health services* cover the field as a whole.

Referring to neurological terms, I am aware of how daunting they can be, with their barely pronounceable, Latin-based origins. Before training in neuropsychology, I had a clinical and academic background with as little science as possible; I know first-hand about learning the terminology. The reader will be pleased to know that such terminology is used sparingly in this book and when it is unavoidable, I briefly explain it.

## KNOWLEDGE OF THE BRAIN

Given the purpose of this book, you may wonder how much knowledge of the brain is needed to understand it and to screen for brain

impairment. The answer is none beyond what you already have. The emphasis of this book is not on neuroanatomy or neuropsychology. The only assumption I make is that the reader is a mental health worker with knowledge of psychiatric diagnoses, or, if not a mental health provider, is informed about the area. No special knowledge of the brain and brain function is needed.

The more one knows about neuroanatomy and brain function the better one can be at screening for brain disorders, but even without such training a competent job can be done. Since the more you know the better you can do, I urge you to read more on these subjects. To this end, I later present a list of suggested readings.

## PSYCHOLOGICAL THEORIES

It is reasonable to ask if the shift toward biological/medical emphasis so popular today means a diminished role for psychological theory. The answer is, "No," for two reasons. First, the majority of clients do not have a brain condition. On average, 93 percent of psychiatric clients are free of directly causal brain conditions, 90 percent of hospitalized patients will not have a brain tumor at autopsy, and so on. Clearly, psychological explanations are appropriate for these cases. The second, and related reason that psychological theories are needed is that the brain is not programmed at conception to determine the specific details of one's personality and emotional state at various points in life. The brain is influenced by physical events (e.g., genetics, damage, exposure to toxins, nutritional deficiencies) and by psychological and social experiences. What we are is a combination of these factors. The brain is a physical organ; what goes into it in the form of knowledge and experiences comes from life events. There will always be a need for psychological explanations to understand how these events affect us. Simply stated, we need biological knowledge and psychological and social theories if we are to fully understand people. Even in those cases where brain damage is known, there will be emotional reactions to it and problems associated with psychological and social functioning that will require use of non-biological theories. Psychological theories are safe for the time being but they must be complemented by knowledge of brain structure and function. A total