Consideration of Neuropsychological Factors in Interviewing

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INTRODUCTION

Our world is, first and foremost, a world of other persons. For most individuals, success is based on ability to successfully interact with other individuals, to convey and receive information. The salesman’s ability to assess a potential client, an advertiser’s sensitivity to consumers, a judge’s ability to evaluate an individual’s guilt, a suitor’s ability to determine receptivity, and a psychologist’s ability to infer parental fitness are all examples of the importance of assessment. Assessment is the process by which we acquire information about other individuals.

We learn about or “assess” other individuals by questioning or observing—we either “ask ‘em or watch ‘em” (Sundberg, 1977). In some cases, we learn about individuals by questioning others who know them or by reviewing historical documents (e.g., medical records, school records, military records), but this occurs only in very specialized contexts. Similarly, assessment through observation (which includes test administration) is performed by a small percentage of highly trained individuals, such as psychologists or psychiatrists. By and large, the vast majority of information that we acquire about individuals is obtained through conversation and by asking questions. Salesmen ask questions of potential clients, advertisers query focus groups of consumers, and family physicians begin their physical examination with “What seems to be the matter today?” The interview process is thus the foundation of all assessment. Put another way, “Clinical interviews compose the essential core of current diagnostic and assessment methods” (Rogers, 1997).

Interviewing is decidedly low-tech and does not have the glamour of magnetic resonance imaging (MRI), quantitative electroencephalography (EEG), or computerized assessment. Most beginning clinicians are more likely to have a
course in pharmacology than interviewing (despite the critical importance of both topics), just as in a world filled with television, CDs, and the internet, conversation seems to be a lost art. In this author's experience, however, the most highly skilled clinicians are those most skilled in the art of interview. I recall the late Norman Geschwind, who could evoke critical information from a patient in a few short minutes. This efficient use of the clinical interview was the result of vast clinical experience and highly developed observation skills.

The clinical interview can be adapted to a variety of circumstances and diverse patient populations. Such versatility is also the greatest liability of the clinical interview. On scientific grounds, the individuality of interviews and interviewing styles makes standardization impractical and empirical study difficult (Rogers, 1997). This liability can be addressed by crafting structured interviews, but only at the expense of versatility. Experienced clinicians have in their heads a set of questions designed to elicit critical information, perhaps even utilizing structured or semistructured interviews with specific populations. Put simply, seasoned clinicians possess knowledge that efficiently guides the interview. This may sound trivial, but it takes years of practice to know what to ask and how to ask it while avoiding unimportant questions.

The Relationship between Brain and Behavior

Psychology is defined as the study of mental processes or alternatively as the study of human or animal behavior (Webster's New Universal Unabridged Dictionary, 1983). Unfortunately, both of these definitions tend to overlook recent trends in neuroscience that emphasize the role of the machinery of the brain as opposed to the theoretical operations of the mind. An understanding of this machinery is vital if a clinician is to recognize neurologic disease or injury. Put another way, there are many individuals who do not understand the operation of the internal combustion engine yet are safe drivers. However, it would be inadvisable to depend on one of these individuals to diagnose a fault with a modern fuel injection system (although they may be perfectly capable of referring you to a qualified mechanic).

The human brain is the most complex system that we are aware of, rivaling the known universe in terms of numbers. For example, it is estimated that there are $10^{12}$ neurons in the human nervous system (Nauta & Feirtag, 1986). (Neurons come in a great variety of sizes and shapes such that estimates may vary by several orders of magnitude.) Each of these neurons has synaptic connections with an average of perhaps 5,000 other neurons, although again there is enormous variation. This elaborate neuronal network is supported by huge numbers of non-neural glial cells, with estimates suggesting perhaps ten times as many glial cells as neurons (Nauta & Feirtag, 1986). While initially thought of as mere scaffolding, neuroscientists now recognize that glial cells play an important role by transporting, secreting, and sequestering chemical agents important for neuronal communication. More important than sheer numbers, however, is the precise and elaborate arrangement of neurons as well as their inputs and outputs.