PERSONALITY ASSESSMENT IN MEDICAL REHABILITATION

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Many people who are considered for rehabilitative services participate in a psychological assessment. This assessment ideally informs decisions concerning need for services, the expense that accompanies sponsorship, and the provision of assistive equipment that can enhance quality of life. Psychological assessment is of particular importance during this era when many health care delivery systems limit access to care, which in turn can result in higher costs associated with the subsequent treatment of preventable conditions. Unfortunately, many psychologists are not trained to face the issues inherent in the assessment of persons with physical disabilities. These problems exist despite the original mandates of the Rehabilitation Act of 1973 for psychologists to have the rudimentary skills to conduct informed assessments of people with disabilities. In fact, the Rehabilitation Act of 1973 clearly stipulates that assessment may be necessary for the determination of eligibility and “vocational rehabilitation needs” and that the assessment might include the evaluation of “personality, interests, interpersonal skills, intelligence and related functional capacities . . . vocational aptitudes, personal and social adjustments and . . . other pertinent . . . cultural, social, . . . and environmental factors that affect the employment and rehabilitation needs of the individual” (Sec. 504, Rehabilitation Act of 1973).

Generally, assessment of personality and psychological adjustment are included within an informed and comprehensive battery, yet differences in qualifications and training can result in the differential use of these instruments and subsequent interpretation of results. For example, whereas classically trained clinical psychologists are sensitive to displays of psychopathology and aberrant behaviors, neuropsychologists focus intently on

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neurological impairment and brain–behavior relations, and those trained in counseling psychology usually are well versed in assessing career development concerns and vocational adjustment. Few psychology training programs adequately prepare doctoral students for the informed use of personality instruments with people who have physical or sensory disabilities (Elliott, 1993).

In this chapter we describe the historical background of personality assessment within medical rehabilitation. We also discuss the appropriate use of personality assessment in medical rehabilitation. Personality assessment ideally can inform consumers, health care workers, and financial providers of the costs and benefits of assistive technology (AT) for individuals from a psychological standpoint. Finally, we discuss ethical issues inherent in personality assessment in a medical rehabilitation setting.

HISTORICAL OVERVIEW

Psychological opinions about behavioral disorders among people with disabilities have historically displayed a lack of congruence. In the developing years of rehabilitation, practicing psychologists were few in number, and mental health specialists from a variety of other disciplines leaned heavily on impressionistic models of adjustment to disability. Many of these convenient and atheoretical models borrowed loosely from neo-Freudian concepts of stagelike dynamics in reaction to acute loss, and these guided many assessment practices. It was erroneously presumed, for example, that any person who acquired a physical disability would become depressed soon after injury onset, and this was considered adaptive and necessary for optimal adjustment (e.g., Nemiah, 1957). It is interesting that there was a separate camp of psychologists who believed that emotional disorders found among psychiatric populations traditionally served by mental health specialists were rare among medical patients (Belar, 1988). From this perspective, depression, anxiety, and characterological problems were often unrecognized and untreated, because clinicians suspected these behaviors were representative of transitory states.

These practices and beliefs have resulted in several unfortunate trends in assessment practices. First, there is a tendency toward use of instruments without regard to the theoretical background of the instrument and its intended use. Atheoretical models ignore individual differences and environmental influences on respondent behavior and their effects on adjustment. Second, psychologists often rely on assessment methods and instrumentation that are ill suited for the rehabilitation setting. The data that result from such methods inadvertently reinforce and perpetuate negative expectations in interpretations of behavior among people with disability.
Third, subjective interview methods are often used as a diagnostic tool (Williams & Mourer, 1990). This is a poor method for assessing enduring personality characteristics (Meehl, 1954), and clinical judgments based on interview methods are highly unreliable and inconsistent, regardless of the clinician's experience and training (Faust et al., 1988; Wedding & Faust, 1989).

Fourth, assessment is typically driven toward the detection of problems and is generally insensitive to the assessment of potential (Wright & Fletcher, 1982). Psychologists are primed to determine areas of concern and deficit and are generally insensitive to the assessment of abilities, resources, and personal and social assets. Psychologists, like others in the helping professions, are often insensitive to the situational and environmental determinants of behavior among people with physical and sensory disabilities. Consequently, many psychologists are apt to attribute the locus of a particular problem within the respondent and ignore contributing environmental and situational factors that frame, precipitate, or define a particular problem experienced by a client.

Finally, many clinicians are guided by the expectations that people with disabilities are preoccupied with the limitations imposed by the condition, and they are less sensitive or attentive to displays of commonplace, nonpathological behavior (Wright, 1983). Clinical observations are thus influenced by the clinicians' expectation that a person with a disability will exhibit advertent behavioral patterns (Wright, 1983). Thus, an overview of the extant research reveals a widespread use of measures of psychopathology and maladjustment in the assessment of people with physical disabilities—e.g., the Minnesota Multiphasic Personality Inventory [MMPI]; Elliott & Umlauf, 1995). Clinicians often infer personality characteristics from measures of distress, yet these measures were designed to assess problems and symptoms rather than routine and stylistic ways of thinking, behaving, and emoting under ordinary circumstances. Appropriate assessment of personality can and should take into account both nonpathological and potentially pathological aspects of the individual to provide a well-rounded and accurate cost–benefit psychological analysis for each individual who may be a potential AT user.

PERSONALITY EVALUATION FOR AT

When evaluating an individual with a disability for the explicit purpose of providing recommendations regarding AT, several concerns arise. What personality assessments are available? How should the results of the assessment be interpreted as they regard physical and sensory disabilities? What
can the results of the evaluation tell health care professionals in terms of providing recommendations for AT?

Nonpathological and Pathological Assessment Devices

Nonpathological personality measures typically encompass trait or social–cognitive measures of personality. Trait measures, such as the NEO Personality Inventory and the NEO Five Factor Inventory (Costa & McRae, 1989), emphasize nonpathological assessment of personality in comparison to a normative sample. Social–cognitive measures, such as measures of problem-solving ability and locus of control, attempt to account for the situational context of an individual's character by examining nonpathological social–cognitive factors involved in everyday emotional functioning. In contrast, pathological personality measures typically include the more "traditional" personality measures in psychological assessment, such as the MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989) and the Millon Clinical Multiaxial Inventory–III (MCMI–III; Millon, 1997).

Obvious differences between nonpathological and pathological types of assessments include (a) the manner in which the items are worded and in which the respondents answer, (b) the length of the measures and the time necessary to complete them, and (c) the theoretical and clinical interpretation of the resulting profile. It is important to consider that individuals who are asked to complete these assessment instruments may also notice these more obvious differences when given both types of measures. The manner of development and the theoretical background provide more subtle differences between the two types of measures.

Personality profiles from most psychopathological assessment devices imply that a respondent with a physical disability is preoccupied with physical sensations or ailments in comparison to the normative–nondisabled population (Elliott & Umlauf, 1995). This interpretation reinforces a stereotypic belief that people with acquired disability are preoccupied with limitations imposed by the physical condition (Wright, 1983). Established instruments should be used with caveats kept in mind for considering the influence of physical disability experiences on responses to certain items.

The selection of any assessment device should ideally be intricately connected to a logical intervention program that would enhance rehabilitation efforts for the respondent (Glueckauf, 1993). From this perspective, psychologists should be aware of a variety of assessment methods and the unique strengths and limitations of each. Moreover, these clinicians should know how to integrate assessment data within meaningful theoretical models of behavior so that logically derived intervention efforts may ensue. Psychometric data can provide a basis for a scientific approach to development of well-informed interventions. For example, cognitive–behavioral models of
behavior often have clear directives for therapeutic intervention. Certain cognitive-behavioral skills (e.g., problem-solving skills), which would otherwise remain unmeasured and unnoticed by a treatment team that relies on interview methods or measures of psychopathology, have been related to the incidence of secondary complications and long-term adjustment among people with physical disabilities (Elliott & Jackson, 1996). Collectively, empirical data available across several patient populations indicate that psychological characteristics are crucial in patient adjustment, quality of life, and overall health above and beyond features of the chronic condition, etiology, or initial medical procedures (Taylor, 1991). Furthermore, use of nonpathological inventories to assess personality and behavioral functioning can be useful in appreciating the influence of the situation and environment on current behaviors and can aid in the interpretation of behavior within its particular context (Wright, 1983).

Interpreting the Results

There is a tendency for psychologists to administer psychometric instruments to people with disabilities and interpret the scores as if the respondents were not disabled (Myerson, 1957). Psychologists should use appropriate norms for people with disabling conditions. Unfortunately, appropriate norms and comparison groups are often not available. When appropriate norms are collected, personality profiling may reveal more important information than the typical finding of “preoccupation with physical sensations.” In addition, appropriate norms may clarify the extent of symptomatology compared to peers who have similar physical limitations. For example, research has provided profile corrections for some populations on certain instruments (i.e., the Premorbid Somatic Complaint Questionnaire; Rodevich & Wanlass, 1995, correction for the MMPI-2 for use with individuals with spinal cord injury). Most important, however, psychologists should use theory-based perspectives in administering, interpreting, or conceptualizing data to develop theory-based interventions (Elliott & Umlauf, 1995).

Making Recommendations for AT

Few published studies to date have examined the association between personality and use or nonuse of ATs (Scherer, 1988, 1990), and no studies have examined personality profiles on pathological measures (e.g., the MMPI or MCMII) and their relation to use or nonuse of ATs. Although it is important that client behavior be understood and interpreted within the perspective of the interaction between person and environment (e.g., the field-theory perspective; Leung, 1984), it is equally as important that the relation between person and technology be understood. The technology must
fit the person. For example, personality screening for potential sociopathy is important to complete before individuals are provided with videoteleconferencing equipment at home. There have been cases in which sociopathic individuals were provided with such technology and later pawned the device because the value they placed on the device was different from that of the provider of the technology. In this case, personality assessment conducted prior to the dispensation of the devices would have provided vital information regarding the potential for nonuse or misuse of the technology.

Until published studies examining personality inventories and use-nonuse of ATs are performed, we can provide only hypotheses and clinical anecdotes as a method of illuminating the need for personality evaluation when assessing an individual's suitability for AT. For example, individuals who are open to novel techniques and are emotionally stable (e.g., the Openness and Neuroticism factors on the NEO Five Factor Inventory) are probably more likely to use assistive devices than individuals who are resistant to novelty and who are anxious by nature. The case studies that follow provide powerful examples of the importance of personality testing in relation to provision of AT.

Clinical Anecdotes

Timothy R. Elliott was asked to evaluate a 30-year-old male with a spinal cord injury, Bob, who had been referred by vocational rehabilitation services after it was discovered that he was not using an expensive, specially designed bed purchased for him with vocational rehabilitation services funds. Despite Bob's history of several pressure sores, which initially prompted the suggestion of the purchase of the special bed, he was apparently sleeping on the floor. This in turn resulted in yet another pressure sore. He apparently continued to sleep on the floor after the special bed was provided. Because his demeanor was consistently pleasant, optimistic, and cooperative when he met with his caseworkers, they were confused regarding his nonuse of the technologies provided.

Dr. Elliott decided to assess Bob's personality with the MCMI–2, which provides a profile of personality styles that suggest potential for personality disorders. Bob's responses to the MCMI–2 suggested that he tended to display characteristics often found among people with antisocial and passive-aggressive personality disorders, as defined by the Diagnostic and Statistical Manual of Mental Disorders (4th ed.; DSM–IV; American Psychiatric Association, 1994) and DSM–III (1980). In other words, he was unlikely to conform to behavior that was expected of him, and he tended to be deceitful and irresponsible and lack remorse for his behavior. In addition, his profile suggested that he may also be likely to passively agree with and report
compliance with treatment regimens and use of AT while actually being noncompliant when he was not in the caseworkers' presence (at home).

If the psychological assessment had been conducted before the expensive AT was purchased, this information could have been considered before investing considerable financial resources in this case, given that Bob's profile suggested that he would likely be nonadherent to the ATs provided. In addition, behavioral intervention, such as setting up a reward schedule, could have been recommended to boost his compliance with ATs. Specifically, Bob would be offered a reward for consistent use of the ATs provided with the understanding that he would not receive his reward if he could not show consistent use of the technological device.

A second clinical anecdote provides an example of the use of nonpathological devices in assessing personality. Mary, a 16-year-old girl who received a severe head injury in an automobile accident, underwent a neuropsychological evaluation approximately 6 months after her injury. As a part of this evaluation, she was given the Children's Depression Inventory and Revised Children's Manifest Anxiety Scale, and her parents completed the Child Behavior Checklist. In addition, Mary was interviewed individually by the psychologist; her parents also were interviewed. Although the measures given and the interviews were appropriate, the information gained through these methods focused on potential pathological behaviors and did not provide an adequate picture of the more positive, nonpathological aspects of her emotional functioning. Mary and the examiner may have benefited from administration of a measure of commonplace personality characteristics and social–cognitive abilities or attributes (e.g., the Hope Scale, a social–cognitive measure of goal orientation; Snyder et al., 1991). An additional measure of nonpathological personality functioning would have provided the examiner with a more positive orientation toward the aspects of Mary's personality that may have elucidated and informed decisions regarding recommendations for AT use. Mary and her parents ultimately decided, without benefit of the psychologist's input, that use of audiotapes of classes would assist her learning and would allow her to continue to progress toward her life goals of graduating high school and eventually attending college.

ETHICAL ISSUES

Several ethical issues have accumulated and increased under the prevailing winds of managed care and health care costs. Despite the fact that opportunities for psychologists in rehabilitation have been increasing over the past 10 years (Frank, Buckelew, & Gluck, 1990), adequate training of psychologists for conducting assessments with people who have physical
and sensory disabilities is lacking. Clinical assessment is a key component of psychological practice with people who have disabling conditions (Eisenberg & Jansen, 1987). However, inappropriate and insensitive use of psychological instruments with people who have disabling conditions can produce an array of inappropriate and misleading interpretations to the detriment of the client, the clinic, and the profession.

Elliott and Umlauf (1995) noted that psychological assessment with people who have disabling conditions is no longer a function of a simple, well-defined psychologist–client relationship. Psychologists should carefully consider prior to any psychometric assessment “who is the client” in any given assessment (Monahan, 1980). In medical systems, for example, the psychologist may be part of a larger rehabilitation team, and the “client” may be the medical system, the physician, the third-party health care provider, or the rehabilitation team. In fact, in many of these situations it is the system and the team that have requested psychological assessment and consultation in determining how to work best with a given patient. In addition, legal systems may be involved, and psychological data resulting from the assessment may be used to monitor client behavior. Moreover, in the current managed-care environment psychometric data may be used to deny or restrict treatment options for a person with a disability. In business and industrial settings, psychologists representing a given company are obviously required to give informative feedback to the client who is requesting and reimbursing the psychologist for the assessment. Similarly, health maintenance organizations and other health care payors may be well deserving of feedback from the psychologist concerning assessment results.

The degree of confidentiality and a frank explanation of the use of test data must be discussed with the client. Most people who agree to psychological assessment simply have no idea how such information may be used for or against them. It is incumbent on the administering psychologist to discuss these issues with the respondent prior to any formal assessment so that the respondent can make an informed choice regarding his or her degree of cooperation and have an opportunity to make any special requests or inquiries regarding the procedure. It may be difficult at times, then, to please both the consumer and the managed-care organization. Although the consumer may not want the information he or she shares with the psychologist to be released to the managed-care entity, the managed-care organization might desire and expect full disclosure of information deemed important to allocating its resources and services. Similarly, personal information about the client that is somewhat tangential to the overall vocational rehabilitation process (e.g., past experimentation with marijuana, elevated scores on a measure of personality disorders from a client with a stable vocational history, etc.) may be inappropriately used by vocational rehabilitation professionals to deny sponsorship or support for assistive devices.
Within standard rehabilitative practices, the Rehabilitation Act of 1973 stipulates that “applicants and eligible individuals must be active and full partners” in the process, including “assessments to determine eligibility and vocational rehabilitation needs.” Unfortunately, in many cases the assessment is used to “screen out” eligible participants, as clinicians focus on problems and characteristics that might pose difficulties to the rehabilitative process, and the degree of actual “partnership” is thus dubious indeed. This lack of partnership is also obvious in the increased pressure on health care systems and rehabilitation programs to provide the most inexpensive and streamlined program for an eligible or potential client, regardless and independent of client opinion. These issues should be openly discussed and presented to a participant prior to the assessment. The clinician should be judicious and thoughtful concerning which assessment tools should be used and how results may be interpreted by the multiple clients involved in the assessment process.

The demand to efficiently manage health care resources now limits input into the rehabilitation program, and it compromises the ability of the client to participate as an equal partner in the rehabilitation program. The perspective of the client is often considered immaterial or it is altogether ignored by the rehabilitation team members who may be compelled to economically provide services. Efficient and thorough assessment involves considerable expertise and time investment; reimbursement should be expected. Minimizing or eliminating psychological assessment data and client opinion in any rehabilitation plan may produce short-term financial gain, but this will be negated when characteristics previously ignored are manifested in subsequent resistance, distress, or secondary complications that require costly rehospitalizations or attendant care.

Other challenges may emanate from societal changes, such as an increase in the incidence of severe physical disability due to acts of violence (Elliott, Richards, DeVivo, Jackson, & Stover, 1994). In addition, other issues are important to address, such as the assessment of children and elderly individuals who have sustained physically disabling conditions (Richards, Elliott, Cotliar, & Stevenson, 1995) and assessment of people from different minority ethnic and cultural backgrounds (Uswatte & Elliott, 1997). Furthermore, psychologists working in emerging health care delivery systems must be adept at providing informed psychological assessment and interpretations at all levels of health care delivery. This involves the strategic use of assessment devices at the individual level of service delivery as well as at the higher echelons where decisions are made concerning resource allocation, formation of health care policy, seamless continuum of service delivery across the life span and across acute care episodes, and overall integration of psychological services into health systems (Elliott & Klapow, 1997; Elliott & Shewchuk, 1996; Elliott & Shewchuk, cited in Johnstone et al., 1995).
SUMMARY

In this chapter we have reviewed both historical and contemporary issues that exist within the profession of psychology to deliver competent and expert personality assessment services to people with debilitating conditions, particularly regarding recommendations for provision of AT. We also have described the appropriate use of personality assessment in medical rehabilitation, including a brief description of the typical measures used to assess personality. Research is still required to address the validity and reliability of many assessment instruments for use with people with physical and sensory disabilities to ensure accurate interpretation and application of assessment data. Moreover, research in the relation between personality and use of AT is critical. In the meantime, psychologists must strive to understand the relation between person and environment, as well as the relation between person and technology, when assessing individuals with severe disability. Personality assessment will soon become the hallmark of a thorough evaluation for assistive technology when a broader understanding of the Person X Technology fit is formed.

REFERENCES


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