

Evaluation of Competency: Ethical Considerations for Neuropsychologists

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The assessment of decision-making capacity is an essential element of competency determinations. As experts in the assessment of human cognitive abilities, neuropsychologists may be the best adjudicators of competency. However, to maximize the contribution of neuropsychology to the courts in the determination of competency, clinicians must be aware of the professional controversies and ethical challenges inherent in the assessment of decision-making capacity and the determination of competence. Professional controversies include the lack of established methodological and procedural guidelines for capacity evaluations and the application of variable criteria to establish impairment. Ethical challenges include balancing the need to respect the individual's freedom of choice and self-determination with the need to promote the individual's safety; attaining professional competence; and selecting, using, and interpreting assessment methods appropriately. The purpose of this article is to examine these issues in the context of neuropsychological practice.

Key words: competency, cognitive capacity, neuropsychology, ethical considerations

As experts in the assessment of human cognitive abilities, neuropsychologists may be the best adjudicators of competency given that issues of competency almost inevitably boil down to determination of decision-making capacity. However, "competency" is a legal construct established and governed by the courts

that is substantively different than decision-making capacity, although the terms are often used interchangeably. In the broadest sense, *competency* refers to an individual's capacity to decide or to perform activities of daily living (Denney & Wynkoop, 2000). Among these are the capacities to work, drive, parent, make medical decisions, provide informed consent in treatment and research settings, care for oneself or one's property, and enter into legal contracts (e.g., designate a will). Competency rulings are also relevant in civil and criminal litigation, wherein a person's understanding of the issues relevant to participation in a particular legal proceeding is of primary concern. In criminal contexts, recognized legal capacities include the capacity to stand trial, waive Miranda rights, and bear the burden of criminal responsibility.

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“Determination of incompetence represents one of the most profound infringements of a citizen’s rights” (Grisso & Appelbaum, 1998, p. 15), because legal revocation of competency status may result in loss of basic individual freedoms (e.g., freedom to manage one’s personal affairs). Federal legislation reserves the right of autonomy for individuals with regard to medical decision making. For example, Congress passed the Patient Self-Determination Act in 1990 ensuring the right of persons to participate in and direct their own health care and medical treatments. This includes the constitutional right to refuse treatments such as life-sustaining nutrition and hydration. Although ultimate determination of competency is a matter of law, courts often rely on the opinions of medical and mental health practitioners regarding a person’s decision-making or functional abilities in determinations of incompetency (Reid-Proctor, Galin, & Cummings, 2001). Forensic competency assessments must therefore be conducted and presented in accordance with legal standards and

must reflect a determination that is usable for court rulings on these matters.

Legal declarations of incompetency are not always a component of civil and criminal forensic neuropsychological evaluations; such determinations actually comprise the minority of referrals to clinical neuropsychologists. Rather, clinicians more commonly face issues of competency in the context of clinical referrals, with the most common presenting issue in decision-making determination evaluations being dementing illness (Moberg & Gibney, 2005). In our own informal online survey of practicing neuropsychologists, only approximately 30% of respondents ($N = 62$) indicated that they regularly perform civil or criminal capacity evaluations as compared to more than 75% who perform the evaluations in the context of dementia (see Figure 1). In addition, issues of competency were reported to arise in up to 75% of adult referrals, although the percentage is much less (0–25%) in pediatric referrals.

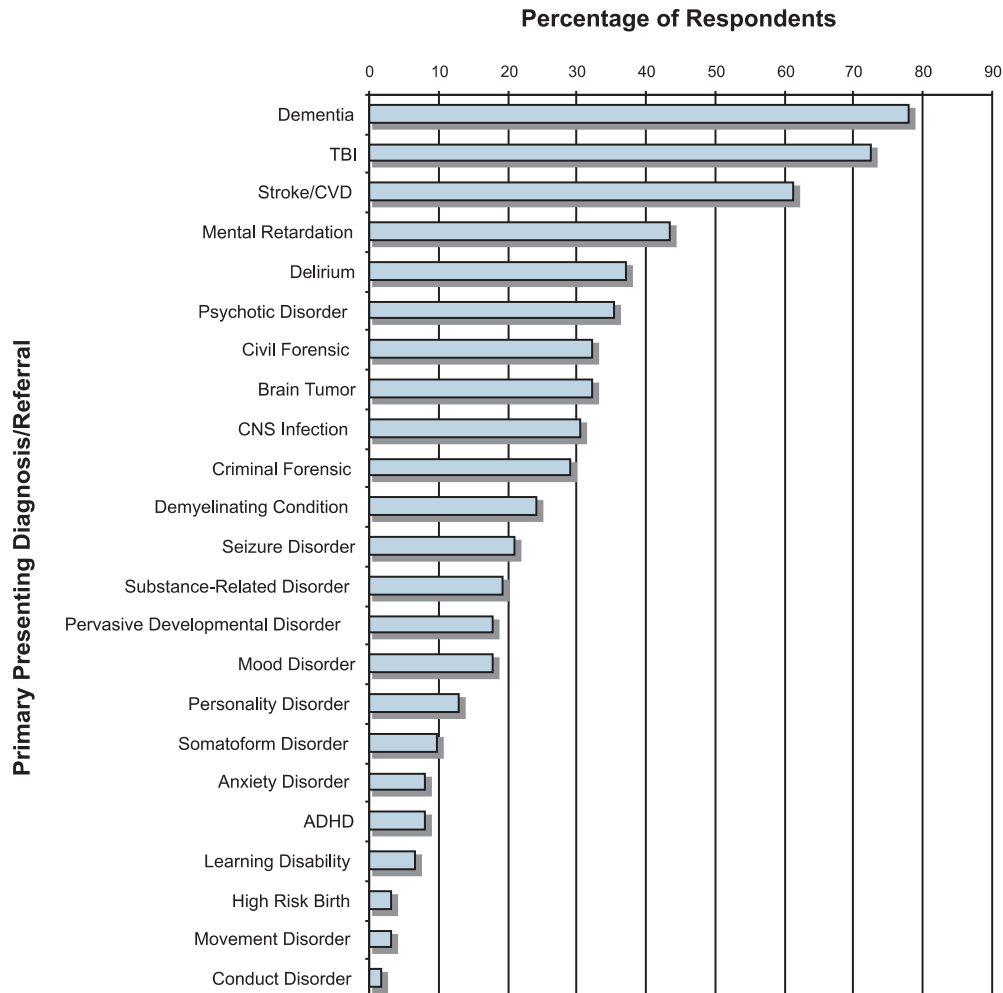


Figure 1. Context in which competency evaluations are typically performed (respondents to survey, $N = 62$).

In a society built on the values of individualism and choice, determination of incompetency status (whether formalized in law or not) is a serious endeavor that has implications for not only the person being evaluated but also the family and, in many cases, the public at large. As such, practitioners are bound by legal guidelines in the assessment process in addition to the guidelines set forth in the American Psychological Association's (APA's) Ethical Principles of Psychologists and Code of Conduct (2002), mandating that clinicians honor individuals' right to autonomy (Moberg & Gibney, 2005). Practitioners are thus faced with the task of balancing these ethical and legal guidelines for respect of individuals' autonomy with the additional charge of protecting individuals and others from harm. This task can be quite challenging, particularly when the law offers vague, nonspecific legal definitions of what constitutes incompetency and when ethical guidelines fail to take into account actuarial constraints on clinicians' abilities to determine and predict behavior.

The law deems adults as competent unless proven otherwise, and the burden of proof for incompetency is high. There must be clear and convincing evidence that the person is incapable of performing the specific task at issue. In Pennsylvania, the *General Rule* is that persons are deemed competent unless their

... ability to receive and evaluate information effectively and communicate decisions in any way is impaired to such a significant extent that the person is partially or totally unable to manage financial resources or to meet the essential requirements for physical health and safety. (Pa.R.C.P. 601(b)(1))

As Pa.R.C.P. 601(b)(1) highlights, there are three essential components to state laws with regard to the legal status of incompetency: (a) disorder or disability, (b) impairment in decision making or communications, and (c) functional impairment (Anderer, 1990a). Although these legal standards guide capacity assessments, they are quite broad and subject to interpretation. There is no clear criterion for what constitutes a disorder, impairment, or compromised function. In addressing this issue, Grisso and Applebaum (1998) presented a detailed definition of incompetence that may be used to guide neuropsychologists' assessments of capacity across clinical and forensic settings:

Incompetence constitutes a status of the individual that is defined by *functional* deficits (due to *mental illness, mental retardation or other mental conditions*) judged to be sufficiently great that the person *currently*

cannot meet the *demands* of a specific decision-making situation, weighed in light of its potential consequences. [*italics in original*] (p. 27)

Application of this standard implies that capacity evaluations must include assessment of abilities related to decision-making, determination of task demands, consideration of the consequences of a patient's decision, and recognition of the temporality of capacity determinations. Whether intended or not, this definition of incompetency and the implied necessary elements of a competency evaluation directly highlight several of the ethical issues involved in performing such evaluations. Foremost among these is the precarious balancing of respect for individuals' rights and autonomy with the ethical obligation to do no harm (Principles A and E). Additionally, adherence to the APA Ethical Standards governing assessment (9.02, Assessment) and professional competence (2.01, Boundaries of Competence) is made particularly difficult by the lack of empirical evidence as to the ecological validity and predictive ability of neuropsychological tests and by the absence of an agreed-on standard of assessment or training in the realm of capacity evaluations (see Appendix for a listing of the Ethical Principles and Standards relevant to most competency evaluations).

DECISION-MAKING CAPACITY

There is little empirical evidence as to what underlying cognitive capacities are necessary for competency status, although it is generally accepted that the ability to reason or to make decisions is essential (Standards 2.04, Bases for Scientific and Professional Judgments, and 9.01, Bases for Assessments; APA, 2002). An understanding of the cognitive functions underlying particular capacities and decision-making abilities is important to properly assess a person's ability to act on his or her own behalf. One of the unique challenges facing practitioners assessing competency is how to evaluate decision-making capacity. To this end, several authors have proposed models of decisional ability based on the assumption that all decision-making tasks rest on core functional abilities (Drane, 1984; Grisso & Appelbaum, 1998; Marson et al., 2000). Although these models vary in complexity, they share at least four key features among them: (a) expression of a choice, (b) understanding of information relevant to the choice, (c) appreciation of the significance of a choice, and (d) ability to reason or rationally evaluate a choice (see

Volicer & Ganzini, 2003, for review and comparison of these proposed standards).

Even among neuropsychologists, whose expertise lies in the area of cognitive capacity assessment, there is disagreement as to what cognitive constructs underlie these “functional” decisional abilities. Most would agree that there is no single measure that may act as a “capacitator”—a determinant of an individual’s overall capacity (Kapp & Mossman, 1996; Moberg & Gibney, 2005). Rather, there appears to be a shared belief that decision-making capacity is a multidimensional construct reliant on a combination of intact cognitive abilities including attention, orientation, memory, general intellectual functioning, problem solving, and abstract reasoning. Mood and the ability to regulate emotions are also considered by some to be an important aspect of decisional ability (Charland, 1998; White, 1994). Given the debate as to which combination of abilities comprises decisional ability, there is, not surprisingly, much variability in the methods and measures used by neuropsychologists to evaluate decision-making capacity.

MEASURING DECISION-MAKING CAPACITY

Responses to our online survey highlight the variability in test and procedure selection. Only a slight majority of respondents (56.5%) agreed that measures of executive functioning provide the most reliable findings in capacity evaluations, and several respondents argued that neuropsychological testing is irrelevant to capacity evaluations (see Figure 2 for comparison of most frequently assessed domains of functioning in neuropsychological evaluations of capacity). Most clinicians would probably agree that the clinical interview provides a crucial source of information in a capacity evaluation. In addition, observations during the interview may lend clues as to a person’s ability to reason, comprehend information, and formulate relevant responses. However, reliance on an interview alone has the potential of violating the ethical standard of using empirically based, valid, and reliable assessment tools in forming opinions about behavior, particularly when

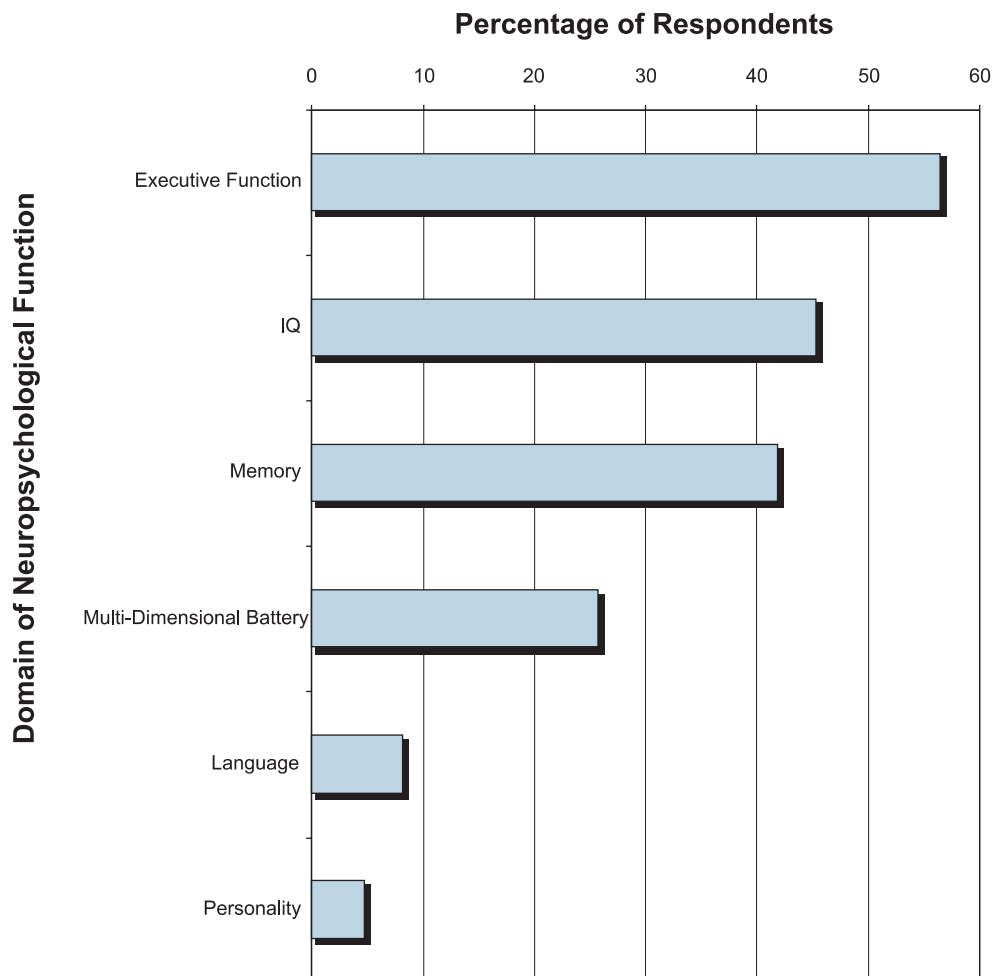


Figure 2. Domains or factors considered to be most important in determining competency (respondents to survey, $N = 62$).

the interview is unstructured and not guided by legal standards, practice standards, or both. Use of traditional neuropsychological measures known to be correlated with decisional abilities, in conjunction with an interview of the individual and collateral informants and capacity-specific assessment measures, would likely provide the most comprehensive approach to assessing decision-making capacity.

Ecological Validity of Neuropsychological Tests in Predicting Decisional Ability

Early in the history of neuropsychology, the main purpose of assessment largely was to diagnose the presence of brain damage or localize brain lesions (Reitan, 1994; Reitan & Tarshes, 1959). The advent of structural and functional neuroimaging technologies, however, has largely supplanted the role of neuropsychology in lesion location and most clinical diagnosis. Although there is still clearly a role for cognitive assessment in the diagnosis of some disorders (i.e., dementing illnesses, aphasia, learning disorders, etc.), there has been a paradigm shift in neuropsychology. Essentially, there has been movement away from diagnostically focused referral questions to an emphasis on a patient's functional or everyday cognitive abilities or disability (Chaytor & Schmitter-Edgecombe, 2003). Examples of such assessments include whether or not a patient is able to live independently, manage personal finances, drive, or make health or life-care decisions (Heinrichs, 1990; Long & Kibby, 1995; Sbordone, 1997; Wilson, 1993).

Although most clinicians have adapted their interpretation of neuropsychological measures and modified their report writing and recommendations to account for this shift, most of the commonly used neuropsychological measures have not kept pace with this transition in their usage. Traditional neuropsychological measures have largely been validated in the diagnostic realm not in the functional. The question remains whether do the standard neuropsychological measures used by most clinical neuropsychologists have "ecological validity" or "real-life" application and consequences (Standards 9.01, Bases for Assessments, and 9.02, Use of Assessments; APA, 2002)? In the context of ecological validity, Ginsberg, Kibby, and Long (1995) defined such validity as the "... functional and predictive relationship between the client's performance on a set of neuropsychological tests and the client's behavior in a variety of real-world settings (e.g., at home, work, school, community, etc.)" (poster presentation). Re-

searchers have attempted to address these issues through two general approaches. First, some investigators have attempted to improve real-world translation of test results by obtaining self or informant report or behavioral observations and combining them with the data from neuropsychological testing. Examples of this approach include the use of questionnaires such as the Everyday Memory Questionnaire (Sunderland, Harris, & Baddeley, 1983). Second, a number of neuropsychological measures have been developed to more closely resemble everyday behaviors or experiences. Examples of this approach include standardized tests such as the Rivermead Behavioral Memory Test (Wilson, Cockburn, & Baddeley, 1985) or the Test of Everyday Attention (Robertson, Ward, Ridgeway, & Nimmo-Smith, 1994). A recent study by Higginson, Arnett, and Voss (2000) attempted to combine these two approaches in examining the relation of cognitive status to functional disability in a sample of multiple sclerosis patients. The authors administered a modified version of the Everyday Memory Questionnaire, Rivermead Behavioral Memory Test, Test of Everyday Attention, and a more traditional neuropsychological battery along with basic measures of functional status. The authors reported that the more ecologically valid tests, such as the Rivermead Behavioral Memory Test and the Test of Everyday Attention, were better predictors of functional impairment in multiple sclerosis than both standard neuropsychological tests of memory and attention and memory questionnaires completed by the patient or a significant other.

Overall, as neuropsychologists are being asked to make determinations and recommendations from their evaluations that have far-reaching consequences in their patient's lives, the need for ecological validity becomes paramount for the field. There have been few studies examining the real-life translation of neuropsychological tests (Sbordone & Long, 1996). Indeed, a recent survey of clinical psychologists in the United Kingdom concerning neuropsychological predictors of driving ability found that, although 70% of surveyed clinicians used neuropsychological tests in evaluating fitness to operate an automobile, more than 50% of these same psychologists were "not confident" or "not very confident at all" about their recommendations in this capacity (Christie, Savill, Buttress, Newby, & Tyerman, 2001). These findings suggest concerns about the translation of findings on standardized measures of neurocognitive function into real-life situations.

Although the field has made considerable progress in this area, there are indications that much more work in this area is needed, both across different

neuropsychological tests and across disorders and specific competency referral questions. In an attempt to examine ecological validity empirically, Reger et al. (2004) conducted a comprehensive meta-analysis of the neuropsychological literature concerning prediction of driving ability in dementia patients. In their compilation of 27 studies, significant correlations were reported between all reported cognitive domains and on-road or nonroad driving measures. Generally, as cognition declined, driving ability did as well. When studies using a control group were excluded, however, the only moderate effect sizes were observed for tests of visuospatial skills with on-road and nonroad measures. Notably, aggregate measures of attention were only weakly associated with on road tests ($r = .25$), and measures of executive function were not significantly related to driving performance. The data from this study indicated that within a sample of dementia patients, neuropsychological test results correlated relatively poorly with real-world on-road driving performance. The results of this study highlight the need to link commonly used neuropsychological measures with the actual tasks and behaviors in question when evaluating any patient for competency.

In summary, the inclusion of more ecologically valid neuropsychological tasks in conjunction with self-reports or informant reports or behavioral observations when making competency decisions can help tie the results of the neuropsychologist's assessment more closely to the actual day-to-day behavior and functioning of the patient. The reader is directed to an excellent

review of some of the concepts and issues underlying the ecological validity of neuropsychological tests by Chaytor and Schmitter-Edgecombe (2003).

Nonneuropsychological Measures of Decisional Ability

In addition to neuropsychological tests, there are a variety of self-report and structured interview instruments that are useful in competency assessments. Some of these measures address specific functional capacity issues (e.g., ability to manage a checking account); others provide more general information regarding decision-making ability. Although a discussion of each of these measures is beyond the scope of this review, Vellinga, Smit, Leeuwen, van Tilburg, and Jonker (2004) provided a useful comparison of capacity assessment instruments that are frequently used in geriatric populations. Among these, the MacArthur Competence Assessment Tool (MacCAT-T; Grisso & Appelbaum, 1995) emerged as the most cited and most reliable assessment tool for evaluating the four legal aspects of decision making. Grisso's (1986) *Evaluating Competencies: Forensic Assessment Instruments* presents a thorough review of competency assessment instruments relevant to civil and criminal proceedings. Table 1 provides a list of available capacity assessment instruments.

Functional Assessment of Capacity

Due to inadequacies of traditional tests to assess everyday life situations, several states have passed

Table 1. *Measures for Use in Competency/Capacity Evaluations*

Measure	Authors
<i>Financial Capacity</i>	<i>Review:</i> Marson, D. C. (2001). Loss of financial competency in dementia: Conceptual and empirical approaches. <i>Aging, Neuropsychology, & Cognition. Special: Competency and dementia in later life</i> , 8, 164–181.
Financial Capacity Instrument	Marson, D. C., Sawrie, S. M., Snyder, S., McInturff, B., Stalvey, T., Boothe, A., Aldridge, T., Chatterjee, A., & Harrell, L. E. (2000). Assessing financial capacity in patients with Alzheimer disease: A conceptual model and prototype instrument. <i>Archives of Neurology</i> , 57, 877–884.
Measure for assessing Awareness of Financial Skills (MAFS)	Cramer, K., Tuokko, H. A., Mateer, C. A., & Hultsch, D. F. (2004). Measuring awareness of financial skills: Reliability and validity of a new measure. <i>Aging & Mental Health</i> , 8, 161–171.
<i>Decision-Making Capacity</i>	<i>Review:</i> Vellinga, A., Smit, J. H., van Leeuwen, E., van Tilburg, W., & Jonker, C. (2004). Instruments to assess decision-making capacity: An overview. <i>International Psychogeriatrics</i> , 16, 397–419.
Capacity to Consent to Treatment Instrument (CCTI)	Marson, D. C., Ingram, K. K., Cody, H. A., & Harrell, L. E. (1995). Assessing the competency of patients with Alzheimer's disease under different legal standards: A prototype instrument. <i>Archives of Neurology</i> , 52, 949–954.

(continued)

Table 1. (continued)

Measure	Authors
Executive Interview (EXIT25)	Royall, D. R., Mahurin, R. K., & Gray, K. F. (1992). Bedside assessment of executive cognitive impairment: The executive interview. <i>Journal of the American Geriatrics Society, 40</i> , 1221–1226.
Hopemont Capacity Assessment Interview (HCAI)	Edelstein, M., Nygren, L., Northrop, N., Staats, & Pool, D. (1993). <i>Assessment of capacity to make financial and medical decisions</i> . Paper presented in August at the meeting of the American Psychological Association, Toronto, Canada.
MacArthur Competence Assessment Tool (MacCAT–T)	Grisso, T. & Appelbaum, P. S. (1998). <i>MacArthur Competence Assessment Tool for Treatment (MacCAT–T)</i> . Sarasota, FL: Professional Resource Press/Professional Resource Exchange, Inc.
<i>Competency to Stand Trial</i>	<i>Review:</i> Mumley, D. L., Tillbrook, C. E., & Grisso, T. (2003). Five year research update (1996–2000): Evaluations for competence to stand trial (adjudicative competence). <i>Behavioral Sciences and the Law, 21</i> , 329–350.
Competency to Stand Trial Instrument	Lipsitt, P. D., Lelos, D., & McGarry, A. L. (1971). Competency for trial: a screening instrument. <i>American Journal of Psychiatry, 128</i> , 105–109.
Georgia Court Competency Test	Wildman, II, R. W., White, P. A., & Brandenburg, C. E. (1990). The Georgia Court Competency Test: the base-rate problem. <i>Perceptual and Motor Skills, 70</i> , 1055–1058.
Fitness Interview Test–Revised (FIT–R)	Roesch, R., Zapf, P. A., Eaves, D., & Webster, C. D. (1998). <i>The Fitness Interview Test</i> (Rev. ed). Burnaby, BC: Mental Health, Law and Policy Institute.
MacArthur Competence Assessment Tool–Criminal Adjudication (MacCAT–CA)	Poythress, N. G., Nicholson, R., Otto, R. K., Edens, J. F., Bonnie, R. J., Monahan, J., & Hoge, S. K. (1999). <i>Professional manual for the MacArthur Competence Assessment Tool–Criminal Adjudication</i> . Odessa, FL: Psychological Assessment Resources.
MacArthur Structured Assessment of the Competencies of Criminal Defendants (MacCAT–CD)	Hoge, S. K., Bonnie, R. J., Poythress, N., Monahan, J., Eisenberg, M., & Feucht-Haviar, T. (1997). The MacArthur adjudicative competence study: Development and validation of a research instrument. <i>Law and Human Behavior, 21</i> , 141–179.
<i>Testamentary Capacity</i>	<i>Review:</i> Marson, D. C., Huthwaite, J. S., & Hebert, K. (2004). Testamentary capacity and undue influence in the elderly: A jurispudent therapy perspective. <i>Law & Psychology Review, 28</i> , 71–96.
<i>Adaptive Functioning</i>	<i>Review:</i> Winters, N. C., Collett, B. R., & Myers, K. M. (2005). Ten-year review of rating scales, VII: Scales assessing functional impairment. <i>Journal of the American Academy of Child & Adolescent Psychiatry, 44</i> , 309–338.
Scales of Independent Behavior–Revised (SIB–R)	Bruininks, R. H., Woodcock, R. W., Weatherman, R. E., & Hill, B. K. (2004). <i>Scales of Independent Behavior–Revised (SIB–R)</i> . Itasca, IL: Riverside Publishing.
Vineland Adaptive Behavior Interview	Sparrow, S. S., Cicchetti, D. V., & Balla, D. A. (2005). <i>Vineland Adaptive Behavior Scales, Second Edition (Vineland–II)</i> . Circle Pines, MN: AGS.
<i>Personal Care Capacity</i>	
Dementia Rating Scale (DRS)	Nadler, J. D., Richardson, E. D., Malloy, P. F., Marran, M. E., & Hosteller Brinson, M. E. (1993). The ability of the Dementia Rating Scale to predict everyday functioning. <i>Archives of Clinical Neuropsychology, 8</i> , 449–460.
Handicap Assessment and Resource Tool (HART)	Vertesi, A., Darzins, P., Lowe, S., McEvoy, E., & Edwards, M. (2000). Development of the Handicap Assessment and Resource Tool (HART). <i>Canadian Journal of Occupational Therapy, 67</i> , 120–127.
Independent Living Scales	Loeb, P. A. (1996). <i>ILS: Independent Living Scales Manual</i> . San Antonio, TX: Psychological Corp, Harcourt Brace Jovanovich.
Observed Tasks of Daily Living (OTDL)	Diehl, M., Willis, S. L., & Schaie, K. W. (1995). Everyday problem solving in older adults: Observational assessment and cognitive correlates. <i>Psychology and Aging, 10</i> , 478–491.
	Diehl, M., Marsiske, M., Horgas, A. L., Rosenberg, A., Saczynski, J. S., & Willis, S. L. (2005). The Revised Observed Tasks of Daily Living: A Performance-Based Assessment of Everyday Problem Solving in Older Adults. <i>Journal of Applied Gerontology, 24</i> , 211–230.
<i>Driving Capacity</i>	<i>Review:</i> Reger, M. A., Welsh, R. K., Watson, G. S., Cholerton, B., Baker, L. D., & Craft, S. (2004). The relationship between neuropsychological functioning and driving ability in dementia: A Meta-analysis. <i>Neuropsychology, 18</i> , 85–93.

laws requiring evaluation of everyday living skills in competency hearings. Unfortunately, no agreed on standard exists to assess construct validity of functional assessment measures (Willis, 1996; Standards 2.04, Bases for Scientific and Professional Judgments; 9.01, Bases for Assessments; and 9.02, Use of Assessments; APA, 2002). In addition to the concerns surrounding the ecological validity of neuropsychological tests, the determination of functional abilities or impairment (i.e., Does the patient have the ability to adapt to and manage their surroundings?) is even more difficult. Although the definition of *adaptive function* varies, the concept generally refers to an individual's ability to effectively meet social and community expectations for personal independence, physical needs, and interpersonal relationships. Because functional independence tends to be socially defined, an individual's performance must be considered within the context of the environments and social expectations that affect his or her functioning. There are a number of measures that have attempted to address this domain including informant scales such as the Vineland Adaptive Behavior Interview (Sparrow, Cichetti, & Balla, 2005) and the Scales of Independent Behavior–Revised (Bruininks, Woodcock, Weatherman, & Hill, 2004), and direct observation methods such as the Observed Tasks of Daily Living (Diehl et al., 2005). It is important to note that with regard to self-report or informant scales, the neurologically impaired patient's self-report of daily function tends to be a weaker measure than clinician and informant ratings (Chaytor & Schmitter-Edgecombe, 2003). In general, the most direct approach is to attempt to gain information in a structured manner from a knowledgeable informant concerning the patient's day-to-day functioning on a variety of tasks. Although direct observation in the patient's natural environment tends to be the most advantageous approach, there are obvious limitations to covering the wide scope of behaviors and situations required to make an informed decision about a patient's competency. Overall, the inclusion of environmental assessment in studies of the ecological validity of neuropsychological assessment has yet to be widely adopted (McCue & Pramuka, 1998).

Risk: Benefit Ratio of Consequences of Impaired Decision Making

Lacking clear standards as to what constitutes the threshold for determining incapacity in specific instances, the ethical practitioner faces a dilemma—

namely, how to protect individuals' rights of autonomy while protecting them from harm (General Principles A and E; APA, 2002). Anderer (1990b) noted that to deprive someone of self-rule, it must be demonstrated that the person's "functional impairment endangers his or her physical health or safety or may lead to the waste or dissipation of his or her property" (p. 108). Determination of whether the patient has realistic appreciation of the cost:benefit ratio relevant to the decision is thus imperative in capacity evaluations (Hazelton, Sterns, & Chisholm, 2003).

If a person can articulate and understand the costs and benefits of making a particular decision, then evaluators do not bear the burden of responsibility if the person exercises judgment that others deem to be poor, provided that the associated costs do not infringe on others' rights or welfare. To illustrate, we are mandated to respect a patient's decision to donate his or her life's savings to "Save the Whales" provided that the patient appreciates the costs associated with the decision, even though some may consider this to be an ill-advised financial move. Clearly then, capacity determinations must be free of personal bias and must take into account an individual's beliefs, values, and personality characteristics.

Presumably, people will act in their best interests if they are capable of understanding, appreciating, and reasoning through the relevant issues. However, even highly intelligent and logical persons make poor decisions. How do we separate making bad decisions from being unable to actually make decisions? At what point is it our duty to intervene and override an individual's right to make decisions regarding his or her own affairs? In cases of personal care competency and financial competency, the criterion for incapacity is high. Buchanan and Brock (1990) asserted that there should be greater respect for autonomy in these cases because they are matters of personal values and preference, which impact little on the health and safety of others. In contrast, the bar is set lower for revocation of competency status in cases in which the risk of harm to the individual or to others outweighs the benefit of preserved autonomy, such as in driving, return to work, and custody evaluations.

Limits of Capacity Determinations

Situation-specific deficit. Viewing incapacity as a global rather than a situation-specific deficit is a common mistake among clinicians (Ganzini, Volicer, Nelson, & Derse, 2003). However, there are distinct rules governing different types of competencies, and courts recognize that competency is situation specific. The

criteria for determining financial incompetency are distinctly different from those used in driving capacity decisions. Evaluators thus have the duty to identify the specific capacity at issue and to tailor the assessment using methods and procedures designed to assess that particular capacity (Standard 9.02, Use of Assessments; APA, 2002). For example, evaluation of an individual's ability to manage his or her financial affairs should include measures of decision-making capacity (e.g., interview and executive functions task), as well as some functional measure of mathematical and everyday financial skills (e.g., bill paying, debt management; Kershaw & Webber, 2004; Webber, Reeve, Kershaw, & Charlton, 2002). This combined approach is especially important given that impaired financial competency may arise from distinctly different impairments. An individual with significantly impaired mathematical ability but intact executive functioning may be equally incapable of managing finances as a mathematical genius with impaired executive control skills. In addition, assessment of emotional processes may be warranted in financial competency evaluations as persons with intact intellectual and executive functions but poor emotional regulation demonstrate impaired financial decision-making skills (Bechara, Damasio, Damasio, & Anderson, 1995).

Compared to financial competency, selection of measures would differ considerably if competency to drive were being evaluated in an elderly individual after cerebrovascular accident. In this scenario, measures of attention, visuoperception, reaction time, motor control, and strength would be particularly important. Impairment in any one of these domains may be sufficient evidence to recommend suspension or revocation of driving privileges. However, one question that often arises is, what constitutes impairment? Comparison of performance to same-age peers provides relative impairment given expected age-related changes in the measured ability. However, is a 68-year-old stroke patient unimpaired if performance on driving-related measures is within the average range of his or her peers but falls in the borderline range compared to younger adults? Thus, at issue in all capacity evaluations is what constitutes the threshold for determining incapacity (Silberfield & Checkland, 1999). (See the article by Wong in this issue for further coverage of this point.)

Temporality of capacity determinations. Determination of incompetency in an elderly individual with dementia is generally permanent given that dementia is most often a progressive debilitating disease. Com-

petency determinations in individuals with congenital brain damage or mental retardation are also likely to be permanent. However, as described by Grisso and Appelbaum (1998), most determinations of incapacity are temporally limited. Delirium, acute intoxication, psychiatric disturbance, and the early stages of recovery from traumatic brain injury or stroke are characterized by marked and transient decline in cognitive functioning that improves with treatment over time. In consideration of an individual's right to act on his or her own behalf, there is an ethical imperative for evaluators to address the temporal limits of incapacity. Making global statements regarding a person's capacity without clear reference to the need for reassessment at certain intervals given the likelihood of change violates both legal and ethical standards of assessment. Likewise, examiners should specifically address the need for reassessment at a specified interval given the likelihood of change regardless of whether the change is a reflection of improved cognitive status or simply change in the social and environmental demands placed on the individual.

STANDARDS IN THE ASSESSMENT OF COMPETENCY

There is no consensus protocol for evaluating overall competency status (Moberg & Gibney, 2005). In fact, whether or not there should even be a standard of assessment remains a matter of debate. Although some feel that formal testing is unnecessary in competency evaluations (e.g., American Medical Directors Association, 2003), others argue in favor of establishing clinical practice parameters. Regardless of whether a standard exists, neuropsychologists are bound by the ethical obligations of practicing within their area of expertise, using empirically derived assessment instruments, and protecting the autonomy as well as the safety of their patients (Standards 2.01, Boundaries of Competence; 2.04, Bases for Scientific and Professional Judgments; 9.01, Bases for Assessments; and 9.02, Use of Assessments; and General Principle A, Beneficence and Nonmaleficence; APA, 2002). To fully meet these obligations, the ideal capacity evaluation would include the following:

1. Interview. A detailed interview of the individual and collateral informants (e.g., spouse, relative, hospital staff, treating physician, and coworkers) will provide a rich source of information regarding the person's mood, cognition, and functional abilities as well as provide information about medical, social, and environ-

mental limitations. The use of a structured interview scale is the optimal approach.

2. Neuropsychological testing. When possible, empirically validated tests that assess the cognitive constructs underlying specific capacities provide useful quantitative evidence of ability level.

3. Functional ability assessment. Assessment of capacity-specific abilities through observations of behavior or other measures is an essential part of the evaluation and may provide an ecologically valid representation of the individual's capacity.

4. Review of legal standards. Although important in every case, the review of relevant legal standards is particularly important in civil and criminal competency evaluations in which presentation of evidence must be relevant to legal standards of determination.

The evaluator is also responsible for identifying and recommending needed adaptations and environmental supports that may enable compromised persons to perform the task at issue. For example, although a severe memory deficit may impair decision-making ability, written cues and other environmental manipulations may enable the person to successfully make certain decisions. Because interventions may require a trial period to establish efficacy, final decisions regarding capacity may need to be deferred until interventions are tested.

PRACTICING WITHIN THE SCOPE OF EXPERTISE

Although most capacity evaluations arise within the context of standard clinical assessments, there are a number of scenarios in which the findings of a neuropsychological evaluation are relevant in competency determinations by the court. Neuropsychologists practicing in hospital inpatient and rehabilitation settings may be called on to evaluate individuals' abilities to act as guardians of themselves and of their estates. Practitioners may also be summoned to present information related to competency or decision-making status when families are unable to manage an individual's behavior, as in cases of patients with dementia who refuse to give up the right or in cases of psychotic patients who pose a threat to themselves or others. Given the likelihood that assessment findings will be used in court determinations of competency, it is important for neuropsychologists to appreciate the legal standards of competency (Standard 2.01, Boundaries of Competence, subsection (f); APA, 2002). Mental health ex-

perts have been criticized on several levels for ignorance and irrelevance in the courtroom, insufficiency and incredibility of information provided to courts, and intrusion into legal matters (Grisso, 1986). However, knowledge of legal standards for different domains of competency and adherence to ethical standards governing assessment and practicing within one's domain of expertise will protect practitioners from fault and unnecessary criticism.

Even if practitioners educate themselves about the legal requirements of competency evaluations, there are no agreed on clinical guidelines. Standard 2.01(e) (APA, 2002) recognizes that there are not always established methods of practice, but nonetheless charges practitioners with the duty to "take reasonable steps to ensure the competence of their work ... " (p. 5). This is particularly difficult, though, when there is little empirical evidence as to the ecological validity of standardized neuropsychological assessments and when there is alarming variability even among experts in our field as to what constitutes a "competent" assessment of competency. At present, the primary way of attaining expertise in competency evaluations is to perform them, preferably under supervision. Although there is no real standard of preparatory training in this area of practice, practitioners are advised to seek information on the topic and obtain supervision by a colleague experienced in performing such evaluations.

SUMMARY

The ethical evaluation of competency requires a multipronged approach to assessment. There is no single capacitor or determinant of an individual's overall capacity, and, as a result, the clinician needs to utilize a variety of standardized measures and approaches to ensure adequate coverage of the skills and attitudes necessary for a competent person to function in day-to-day life. Although observation of patients in their natural environments would be the best approach, there are obvious practical limitations to such an endeavor. Review of the extant literature reveals that the field needs to make more progress concerning the translation of findings on standardized neuropsychological measures of cognitive function into real-life situations. Although some gains have been made in the development of more ecologically valid neuropsychological measures and competence-specific clinical measures, there still is a need to integrate all of these approaches into a comprehensive competence assessment strategy. An ethical approach to these assessments demands the use of reliable

and valid assessment strategies that cover the broad domains of cognitive, decisional-capacity, psychiatric and emotional factors, and functional capacity. As can be seen in Table 1, there are reliable, valid, and specific competency measures available to clinicians, although these scales are not widely known among most practitioners. Similarly, our informal survey of neuropsychologists revealed variability among approaches and beliefs to the assessment of competency. These disparities can be resolved through further research and education of neuropsychologists on this topic.

Although the ability to consent to treatment is routinely addressed in the psychotherapeutic context, there has been considerably less attention in the arena of neuropsychological assessment. The ethical approach to the assessment of competence demands that the patient be told the scope and nature of the assessment, terms of confidentiality, and how feedback and dissemination of information will be handled. Persons with questionable capacity require additional safeguards, beginning with special consideration of their ability to consent to assessment (Standards 9.03, Informed Consent in Assessments, subsection (b) and 3.10, Informed Consent, subsection (b); APA, 2002). Although most clinicians cover this dissemination of information in an informal way prior to testing, there is now an explicit mandate to formally engage and inform patients about the assessment process and provide them with information and reassurances if needed. For example, in the case of a court-ordered assessment to see if a patient is competent to make a decision to undergo medical treatment for a serious medical illness, the neuropsychologist would be exempt under the APA Ethical Standards from obtaining formal consent (Standard 9.03, subsections a1 and a3) because the evaluation was (a) ordered by the court (9.03 a1) and (b) designed to assess competence to undergo treatment (9.03 a3; APA, 2002). Regardless, the attainment of consent (or at least assent) in this type of situation would still be the most desirable option as it establishes respect for the patient's rights and dignity and concern for his or her well-being (General Principles A and E).

Central to an ethical approach to competence assessment is the concept of respect for the autonomy of persons. That is, the judgment of capacity or competence must always be balanced by the needs and values of the patient. For example, although a neuropsychologist may disagree with a patient's decision to not pursue a life-saving medical procedure, if the clinician's assessment reveals intact reasoning and decision-making skills, the absence of any significant psychiatric or

emotional barriers, and relatively sound neuropsychological functions, the patient's desire to not pursue such treatment must be respected. It is often difficult for clinicians to distance themselves from their own personal beliefs and biases, but to perform an objective assessment, neuropsychologists must also immerse themselves in the patients' perspectives and belief systems. By doing so, clinicians avoid imposing their own beliefs, opinions, and value systems on patients in the competence assessment process.

There currently is no clear standard of evaluation in the competency assessment process. If all issues of competency were considered reliant on simple decision-making ability, then it would be easy to determine which neuropsychological measures tap decision-making capacity and to delineate a standard of assessment and criteria for determining impaired capacity. However, the ethical evaluation of competency status is a fluid and complex process that requires a tailored approach to assessment. Other cognitive; functional; and, notably, emotional processes that have an impact on competency need to be taken into account. For example, although a depressed patient may show the necessary cognitive and functional skills to be declared competent, his or her emotional state may be a barrier to adequate functioning (i.e., the patient can clearly state the pros and cons of a necessary life-saving medical procedure but simply "doesn't care" whether he or she lives or dies).

Neuropsychologists are bound by the ethical obligations of practicing within their areas of expertise, using empirically derived assessment instruments, and protecting the autonomy as well as the safety of their patients. To fully meet these obligations, the ideal capacity evaluation would include (a) a detailed (and preferably structured) interview with the individual and collateral informants (e.g., spouse, relative, hospital staff, treating physician, and coworkers); (b) a neuropsychological testing battery that, when possible, uses empirically validated tests that assess the cognitive constructs underlying specific capacities and provides useful quantitative evidence of ability level; (c) assessment of capacity-specific abilities through observations of behavior or other type of functional assessment that may help provide an ecologically valid representation of the individual's capacity; and (d) review of the relevant legal standards to ensure the approach taken by the clinician meets the needs of both the patient within the legal arena. Although there have been important gains made in this area, much more research needs to be done to dovetail clinical competency assessments with the legal definition and scope of competency.

Within the stated limitations, neuropsychologists have an important set of skills that allow them to be in one of the best positions to determine competency. First, neuropsychologists have a detailed understanding of cognitive constructs and the underlying brain structures and functions that underlie the constructs. Second, the interplay between cognition and mental health factors such as depression or psychosis, is also an area in which neuropsychologists receive considerable training. Third, and perhaps most importantly, clinical neuropsychologists have at their disposal a wide variety of standardized, reliable, valid, and precise measures of cognition and behavior that allow for a comprehensive and objective examination of an individual's competence in a given area or areas. Although it is difficult to completely remove subjective aspects of the competency assessment process, by utilizing standardized measures that are specific to the task at hand, the evaluator and the other health care and legal professionals involved in this process can feel more confident that an objective review of a given patient's circumstances has been performed. Lastly, given the scope and depth of the typical neuropsychological evaluation, the neuropsychologist is able to spend more time in the assessment process than are other health care professionals. This additional time allows for a broader sampling of the patient's behavior, including responses to stress and complexity, and an extended observation of the patient's reasoning and approach to given cognitive and behavioral tasks. This is an especially important point, because many clinicians can relate instances in which patients with considerable cognitive and functional impairment have "held it together" for a typical clinical interview or relatively preserved social skills and are able to "talk around" or deflect direct probes of their deficits. In a comprehensive neuropsychological evaluation, it is very hard for a patient to "bluff their way through" the direct questioning and behavioral probes of their cognitive and functional function.

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APPENDIX
Relevant Portions of the Ethical Principles
and Code of Conduct Pertaining to Capacity Evaluations

Ethical Principles of Psychologists and Code of Conduct

Principle A: BENEFICIENCE AND NONMALEFICENCE

Psychologists strive to benefit those with whom they work and take care to do no harm. In their professional actions, psychologists seek to safeguard the welfare and rights of those with whom they interact professionally and other affected persons...

Principle E: RESPECT FOR PEOPLE'S RIGHTS AND DIGNITY

Psychologists respect the dignity and worth of all people, and the rights of individuals to privacy, confidentiality, and self-determination. Psychologists are aware that special safeguards may be necessary to protect the rights and welfare of persons or communities whose vulnerabilities impair autonomous decision making....

2. COMPETENCE

2.01 Boundaries of Competence

(e) In those emerging areas in which generally recognized standards for preparatory training do not yet exist, psychologists nevertheless take reasonable steps to ensure the competence of their work and to protect clients/patients, students, supervisees, research participants, organizational clients, and others from harm.

(f) When assuming forensic roles, psychologists are or become reasonably familiar with the judicial or administrative rules governing their roles.

2.04 Bases for Scientific and Professional Judgments

Psychologists' work is based upon established scientific and professional knowledge of the discipline. (See also Standards 2.01e, Boundaries of Competence, and 10.01b, Informed Consent to Therapy.)

3. HUMAN RELATIONS

3.10 Informed Consent

(b) For persons who are legally incapable of giving informed consent, psychologists nevertheless (1) provide an appropriate explanation, (2) seek the individual's assent, (3) consider such persons' preferences and best interests, and (4) obtain appropriate permission from a legally authorized person, if such substitute consent is permitted or required by law. When consent by a legally authorized person is not permitted or required by law, psychologists take reasonable steps to protect the individual's rights and welfare.

9. Assessment

9.01 Bases for Assessments

(a) Psychologists base the opinions contained in their recommendations, reports, and diagnostic or evaluative statements, including forensic testimony, on information and techniques sufficient to substantiate their findings. (See also Standard 2.04, Bases for Scientific and Professional Judgments.)

9.02 Use of Assessments

(a) Psychologists administer, adapt, score, interpret, or use assessment techniques, interviews, tests, or instruments in a manner and for purposes that are appropriate in light of the research on or evidence of the usefulness and proper application of the techniques.

(b) Psychologists use assessment instruments whose validity and reliability have been established for use with members of the population tested. When such validity or reliability has not been established, psychologists describe the strengths and limitations of test results and interpretation.

9.03 Informed Consent in Assessments

(a) Psychologists obtain informed consent for assessments, evaluations, or diagnostic services, as described in Standard 3.10, Informed Consent, except when (1) testing is mandated by law or governmental regulations; (2) informed consent is implied because testing is conducted as a routine educational, institutional, or organizational activity (e.g., when participants voluntarily agree to assessment when applying for a job); or (3) one purpose of the testing is to evaluate decisional capacity. Informed consent includes an explanation of the nature and purpose of the assessment, fees, involvement of third parties, and limits of confidentiality and sufficient opportunity for the client/patient to ask questions and receive answers.

(b) Psychologists inform persons with questionable capacity to consent or for whom testing is mandated by law or governmental regulations about the nature and purpose of the proposed assessment services, using language that is reasonably understandable to the person being assessed.

9.06 Interpreting Assessment Results

When interpreting assessment results, including automated interpretations, psychologists take into account the purpose of the assessment as well as the various test factors, test-taking abilities, and other characteristics of the person being assessed, such as situational, personal, linguistic, and cultural differences, that might affect psychologists' judgments or reduce the accuracy of their interpretations. They indicate any significant limitations of their interpretations. (See also Standards 2.01b and c, Boundaries of Competence, and 3.01, Unfair Discrimination.)

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