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This article focuses on everyday cognitive competence as a critical aspect of functional health. Everyday cognitive competence is defined as the ability to perform adequately those cognitively complex tasks considered essential for living on one's own in this society. A major challenge for those involved in assessment and judgment of competence is to define the critical domains of functional abilities associated with living independently. Prior research on the instrumental activities of daily living (IADLs) may be particularly useful. Findings from our research on a measure assessing everyday cognitive competence within each of the IADL domains are presented. Elderly persons' performance on the measure of everyday cognition relate to behavioral observations of those subjects performing similar activities in their home and to self and spousal IADL ratings. Seven-year longitudinal data indicate that there is relatively modest decline in performance on cognitively complex everyday tasks during the 60s, but that steeper patterns of normative decline are found in the late 70s and 80s.
Key Words: Intelligence, Everyday problem solving, IADL, Competence, Functional abilities

Everyday Cognitive Competence in Elderly Persons: Conceptual Issues and Empirical Findings[1]

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A critical aspect of functional health is the maintenance of independence — the ability to care for oneself, to manage one's affairs, and to live independently in the community. Elderly persons' competence to live independently is a concern not only of those who are old, but of society as a whole. By 2030 every fifth American will be over the age of 65 (Siegel & Taeuber, 1986). Baby boomers will swell the ranks of those over 85 years old from 9 million in 2030 to 16 million in 2050.

Functional health has been conceptualized and assessed as a multidimensional phenomenon, involving physical, cognitive, and social factors (Fillenbaum, 1987a, 1987b). Indeed, a common indicator of functional health has been a summary score representing ratings of the elderly person's mobility, physical self-maintenance, and performance of everyday activities. Consideration of each of these multiple domains is essential for a comprehensive assessment of an individual's functional health status.

In this article, I will focus on only one aspect of functional health — *everyday cognitive competence*. For the past decade or so, there has been a new specialty in the study of cognitive aging that has focused on everyday competence or practical intelligence (Park, 1992; Poon, Rubin, & Wilson, 1989; Puckett & Reese, 1993; Sinnott, 1989). Everyday cognitive competence is defined as the ability to perform adequately those cognitively complex tasks of daily living considered essential for living on one's own in this society (Willis, 1991, 1996a, 1996b). In this article some of the conceptual issues related to everyday cognitive competence are discussed, and research findings on a measure of everyday cognitive competence developed in the laboratory are presented.

Salience of Everyday Cognitive Competence

Everyday cognitive competence has become a topic of increasing interest in the social and health sciences for several reasons. First, loss of the complex cognitive skills underlying everyday cognitive competence tends to occur relatively *early* both in the onset of dementia and in normative age-related decline. In fact, loss in competence in complex tasks of daily living is the hallmark feature of dementing illness (American Psychiatric Association, 1987). Mental impairment typically appears earlier in the progression of Alzheimer's disease than severe physical or motor debilitation. Earlier decline is often noted in performance of the cognitively higher order instrumental activities of daily living (i.e., IADLs) prior to decline in self-maintenance tasks, such as bathing, toileting, and dressing (Ashford, Hus, Becker, Kuman, & Bekian, 1986; Reisberg, Ferris, de Leon, & Crook, 1982). Many elderly persons in the early phase of dementia are community-dwelling, sometimes living alone and attempting to carry out many of the activities required in daily living. It is the person's inability to perform these cognitively demanding tasks, such as driving, taking medications,

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and managing financial affairs that frequently motivates spouses and adult children to seek assessment and diagnosis.

Low functioning nondemented elderly persons, although not suffering from a neuropathology, may also be at risk with regard to the complex cognitive skills underlying everyday competence (Ganguli et al., 1991). Research findings from longitudinal studies indicate that those mental abilities shown to underlie many everyday cognitive competencies exhibit relatively early patterns of normative age-related decline beginning, on average in the mid-60s (Schaie, 1996). Abilities such as abstract reasoning, working memory, and spatial orientation show earlier onset of normative age-related decline, compared to abilities such as vocabulary, and also have been found to account for considerable variance in everyday problem-solving tasks (Denney, 1989; Diehl, Willis, & Schaie, 1995; Willis, Jay, Diehl, & Marsiske, 1992). Older adults who have been performing marginally on these abilities throughout adulthood as a result sociocultural disadvantages (e.g., lower educational or occupational status) may be particularly at risk when experiencing normative age-related decline on these abilities in their 60s or 70s. Even modest age-related declines on these abilities may seriously impact their competence in cognitively complex everyday activities. Low functioning nondemented elderly persons may, in fact, be at double jeopardy not only due to the relatively early onset of normative decline in those abilities most associated with everyday competence but also because some of these abilities (e.g., abstract reasoning) exhibit positive cohort trends; that is, current elderly cohorts performed at a lower level on these measures than more recent cohorts when at the same chronological age (Schaie, 1996).

I suggest, therefore, that it is important to consider *cognitively challenged* elderly persons, not solely *cognitively impaired* elderly individuals (Willis, 1996a). The term *cognitive impairment* often suggests that the disorder is pathological in etiology and considered irreversible. There are many elderly persons, however, who are cognitively challenged by tasks of daily living due to socioeconomic or cultural disadvantages throughout life, although they suffer from no diagnosed disorder. Given recent rapid technological advances and positive cohort trends in education, today's elderly persons are particularly likely to be challenged as a function of sociocultural change (Pifer & Bronte, 1986). The fastest growing segment of our population is the oldest old — those in their 80s and 90s (Bould, Sanborn, Reif, 1989; Suzman & Riley, 1985). They are most vulnerable to the effects of rapid sociocultural change, as well as to normative nonpathological age-related change in intellectual functioning (Schaie, 1996). Those elderly persons who are cognitively challenged for reasons other than mental disorders or pathologies must be given particular consideration in the study of everyday cognitive competence.

Limitations in competence to perform activities associated with independent living have been related to a number of negative indices of physical and mental well-being. Reduced competence in complex tasks of daily living is associated with greater health service utilization and institutionalization (Wolinsky, Callahan, Fitzgerald, & Johnson, 1992). Studies in the United States and in Japan have shown significantly higher death rates among elderly persons suffering from limitations in instrumental activities associated with everyday competence. One-year follow-up data from the Cleveland survey of older adults indicated that the overall death rate was 5%; however, of those unable to perform unaided any of the five IADLs studied, 27% had died (Fillenbaum, 1985). A Japanese study examined in more detail the mortality rate of able versus disabled elderly persons with respect to each of the seven instrumental activity domains. Even for the physically less demanding but cognitively more demanding domain of financial management, significant differences in mortality rates were found for able men and women versus men and women with disabilities.

For many older adults, the stress and discomfort associated with loss of everyday competence is largely psychological in nature. Findings from both my research and that of my colleagues indicate that inability to solve everyday cognitive tasks was associated with lower self-efficacy beliefs seven years later (Willis et al., 1992). Lawton (1987) examined findings from five separate studies conducted at the Philadelphia Geriatric Center regarding the multivariate relationship between elderly persons' ability to function independently and their psychological well-being. In four of the five studies, the level of everyday competence was found to have a significant and direct effect on psychological well-being.

Characteristics of Everyday Cognitive Competence

Functional Abilities. — Everyday cognitive competence is concerned with functional abilities — the individual's knowledge, skills, and beliefs related to functioning competently in the everyday environment. In what domains must an individual exhibit functional competence in order to live independently in our society? Two broad domains have been identified: (a) the ability to care for oneself, and (b) the ability to manage one's affairs and property (Katz, Ford, Moskowitz, Jackson, & Jaffee, 1963; Lawton & Brody, 1969). In functional health assessments, care of oneself is represented by the activities of daily living (ADLs) and management of one's affairs and property is represented by the IADLs.

Multidimensionality of Competence. — Everyday competence is multidimensional, involving functional abilities in multiple domains. The ADLs include activities such as bathing, toileting and basic mobility. Seven activity domains have been associated with the IADLs, including the ability to (a) manage one's finances, (b) take one's medications, (c) use the telephone, (d) shop for necessities, (e) prepare meals, (f) carry out basic housekeeping chores, and (g) transport oneself to locations outside the

home. In assessment of independent living, the IADLs have been considered particularly salient because individuals may be able to perform basic self-care functions and yet be unable to perform activities necessary for living on their own (Fillenbaum, 1985).

Competence is of concern not only for those in the social and health sciences, but is also an area of growing interest for those in the legal profession (Appelbaum & Grisso, 1988; Grisso, 1986; Kapp, 1992). Kapp stated "a legal finding of incompetence signifies that a person, because of a lack of the capacity to contemplate choices rationally, cannot care adequately for person or property" (p. 114). Psychological definitions are framed in terms of the attributes of a competent person, whereas legal definitions focus on incapacity or impairment. Nevertheless, there are similarities in the definitions. First, in both psychological and legal definitions, there is an emphasis on *cognition* and *decision-making* capacity. Second, the focus is on *functional tasks* that are important or essential for daily living. The concern, then, is not with cognition as traditionally studied in the laboratory but with applied cognition or practical intelligence — the adult's ability to use cognitive abilities in carrying out everyday activities. In addition, both psychological and legal definitions are concerned with the same two broad functional domains. In legal judgments, *guardianship* is concerned with the care of the person or with activities commonly associated with activities (bathing, toileting, dressing) of daily living (ADLs). *Conservatorship*, on the other hand, is concerned with management of an individual's affairs and property, activities commonly associated with IADLs (Grisso, 1986; Sabatino, 1996).

Multidimensional and Hierarchical Relationships Among Functional Abilities. — The question arises whether ADLs vary in their cognitive demands or cognitive complexity. Wolinsky and colleagues (Wolinsky and Johnson, 1991; Wolinsky, Johnson, & Fitzgerald, 1992) have hypothesized and shown that the ADLs and IADLs may be tapping three conceptually and statistically distinct dimensions that are differentially aligned with cognitive capacity. These dimensions and their relationship with cognitive functioning have been replicated in several populations (Fitzgerald, Smith, Martin, Freedman, & Wolinsky, 1993). The first dimension, known as the basic ADLs, consists of traditional ADLs such as bathing, dressing, mobility, and toileting. The second dimension, called the household ADLs, includes IADLs involving housekeeping, shopping, and meal preparation. The third dimension, known as the advanced ADLs, is related to competence in use of the telephone, managing money, eating, and taking medications appropriately. Of particular interest and salience for the present discussion is their finding that only the advanced ADLs are predictive of standard assessments of cognitive function and thus tap activities more directly related to cognitive capacity. From a hierarchical perspective with regard to cognitive demands, the advanced ADLs appear to represent more cognitively complex activities that may require higher order cognitive abilities. Cognitive aging research indicates that higher order cognitive abilities exhibit earlier age-related decline in normal aging and also show some of the earliest deficits in pathological aging, such as dementia (Ashford, Kolm, Colliver, Bekian, & Hsu, 1989; Schaie, 1996). To the extent that the advanced ADLs tap higher order cognition, activities in these domains may exhibit earlier age-related decline or the first signs of deficits associated with pathologies.

Competence as Potential. — Everyday competence represents the *potential* or *capability* of the individual to perform certain tasks, not the actual daily behaviors of the individual (Grisso, 1986; Salthouse, 1990). It is important to differentiate between competence and the behaviors the adult regularly performs in daily life. Competence represents the ability to carry out, when necessary, a broad array of activities considered essential for independent living, even though in daily life the adult may perform only a subset of these activities. Terms such as *competence* or *potential* denote constructs. Constructs are hypothesized conditions or states that cannot be observed directly; only their behavioral signs or reflections can be observed. This distinction is evident in the major batteries that have been used to assess functional competence (Fillenbaum, 1987a, 1987b; Lawton & Brody, 1969). Functional assessment has traditionally addressed the question "*Can* the individual perform an activity?" rather than "*Does* the individual perform the activity on a regular basis?"

The distinction between competence and actual daily behavior is important because psychological research indicates that different factors may be involved in determining (explaining) whether an individual has the requisite functional competence or ability versus whether the individual actually carries out an activity when it is required or needed. For example, factors such as cognitive abilities or organic brain syndromes are often cited as major explanatory factors in the study of competence. The individual lacks cognitive capability due to pathologies or genetic or sociocultural factors. The nondemented individual, however, may be capable of carrying out a daily task but does not do so due to factors such as self-efficacy beliefs or depression (Blazer, George, & Landerman, 1986; Lachman & Leff, 1989).

Measuring Cognitive Competence: The Everyday Problems Test

In our research at the Pennsylvania State University my colleagues and I have focused on the cognitive demands involved in IADL-type activities while acknowledging that functional competence is a multidimensional phenomenon involving physical health and social relationships as well as cognitive ability. Employing a measure known as the Everyday Problems Test (EPT), we have studied older adults' ability to solve tasks of daily living that involved printed material associated with each of the IADL

domains (Diehl et al., 1995; Marsiske & Willis, 1995; Willis & Marsiske, 1993). Older adults are presented with 42 stimuli, including 6 stimuli for each of the seven IADL domains. Subjects are asked to solve two problems related to each stimuli, resulting in a total of 84 items. Examples of tasks for each IADL domain are shown in Table 1. All stimuli are actual materials that elderly persons might encounter in their daily lives, rather than abstract versions created in a laboratory. For example, the older adult is shown a listing of emergency telephone numbers and asked which number should be dialed in a particular emergency situation. The older adult is shown the label for an over-the-counter cough medicine and asked the maximum number of teaspoons to be taken in a 24-hour period.

Psychometric Properties. — The Everyday Problems Test (EPT) was developed on a sample of 417 nondemented elderly persons, stratified by age and educational level to be representative of older adults in the United States (mean age = 74.6 years; age range = 60–95 years; mean education = 12.0 years; educational range = 4–20 years). Cronbach's alpha was .94; and test–retest reliability over a two-month interval was .94 (Willis & Marsiske, 1993). The readability level of the measure is at the eighth grade level, within the median educational level of the average older adult. To examine the item difficulty level independently of sample characteristics, one- and two-parameter models of item analyses were performed. The mean item difficulty was –.646, suggesting the measure is a moderately difficult scale.

Validity Issues. — Examination of criterion validity issues with regard to functional competence is a challenge in that there is no existing adequate "gold standard" for assessing everyday competence in old age by which to evaluate new measures. The traditional and most widely used measures of everyday competence (Fillenbaum, 1987a) consist of subjects' self-rating of competence for each of the IADL domains on a single-item ordinal scale involving three or four points (e.g., can do without help; can do with some help; completely unable to perform). The aim of the EPT was to provide an objective behavioral measure of everyday cognitive problem solving, involving multiple items for each IADL domain. The compromise procedure for examining validity issues was to consider the relationship between EPT performance and multiple "not so gold" measures: (a) direct observation of performance of everyday tasks in subjects' homes, (b) performance on a test of functional literacy developed for young adults (Educational Testing Service, 1977), (c) spousal ratings of limitations in everyday competence, and (d) self-ratings of limitations in everyday competence.

Significant relationships between EPT performance and all four criteria were found. With regard to direct observation of task performance, elderly persons were observed in their homes performing everyday tasks related to three activity domains (medication, phone, meal preparation). The correlation between the EPT and performance of activities in the home was .67. In addition, a confirmatory factor analysis performed to examine convergent validity between the EPT and in-home performance indicated that scales measuring the same constructs were found to load on the same common factor (Diehl, et al., 1995).

Elderly persons' self-ratings of IADL limitations were significantly related to EPT performance ($r = -.23, p < .05$). Spousal ratings of subjects' IADL limitations were also related to EPT performance ($r = -.24$, $p < .05$; Marsiske, 1992). Scores on the EPT were also significantly correlated with a measure of functional literacy (Educational Testing Service, 1977; $r = .87, p < .001$).

Self-Report and Objective Assessment. — Our research, as well as that of others, finds a statistically significant but modest correlation between self-ratings of functional competence and more objective measures, such as behavioral measures or clinician ratings (Fillenbaum, 1978; Ford et al., 1988; Kuriansky, Gurland, Fleiss, & Cowan, 1976). There are a number of factors contributing to this modest relationship. Self-ratings are single items and involve a three- or four-point scale, reducing the range of

Table 1. Instrumental Activities of Daily Living

Domain	Exemplar Task
Managing medications	Determining how many doses of cough medicine can be taken in 24-hour period Completing a patient medical history form
Shopping for necessities	Ordering merchandise from a catalog Comparison of brands of a product
Managing one's finances	Comparison of Medigap Insurance Plans Completing tax return for income tax form
Using transportation	Computing taxi rates Interpreting driver's right-of-way laws
Using the telephone	Determining amount to pay from phone bill Determining emergency phone information
Maintaining one's household	Following instructions for operating a household appliance Comprehending appliance warrantee
Meal preparation and nutrition	Evaluating nutritional information on food label Following recipe directions

variability. Second, the majority of elderly participants in large survey studies (Fillenbaum, 1985; Fitzgerald et al., 1993), as well as in our own research, rate themselves as having no limitations, also resulting in restriction of range. In our study, over 80% of participants rated themselves as having no limitations in five of the seven IADL domains examined. Older adults have been found in their self-ratings to overestimate their level of competence when compared with ratings of professionals, of spouses, or behavioral measures (Ford et al., 1988; Kuriansky et al., 1976). Although overestimation of functional competence is more common in healthy, community-dwelling samples of elderly people, the etiology of the disorder in impaired populations affects whether competence is overestimated or underestimated. Adults with diagnosed organic disorders are more likely to overestimate their capability, whereas those with a functional disorder were more likely to underestimate performance.

Self-ratings alone provide little information on what factors (physical, mental, or environmental) elderly persons are taking into account in reporting limitations in functioning, although other sections of comprehensive assessment instruments such as the Older Adults Resources and Services (OARS) do assess these factors (Duke University Center for the Study of Aging, 1978). Physical or environmental factors that limit functioning may be more apparent and salient to many elderly persons than their cognitive failings, and thus influence their ratings of function more than cognitive deficits. These physical or environmental variables may have less impact on the elderly person's performance on a cognitive measure of everyday competence, such as the EPT, hence resulting in only modest correlations between self-rating and objective measures.

Alternatively, elderly persons may be considering different types of tasks of daily living in judging their competence than those represented on measures such as the EPT. They may be considering primarily tasks that are part of well-established daily routines (e.g., using the telephone to call a few family members; preparing the same breakfast meal over many years), whereas measures such as the EPT examine performance on a wide range of tasks in a standardized manner. Utilization of well characterized tasks involving standardized assessment procedures is, of course, critical in order to examine issues such as individual differences and to examine change in performance over time. These concerns are reflected in measurement issues such as reliability, stability, and factorial invariance.

Defining the specific tasks within IADL domains in which adequate performance is considered essential in order to live independently is an important issue. The professionals and social service providers who work directly with elderly persons are on the "front line" and make decisions regarding whether the elderly persons are competent to live alone. In a study conducted in our laboratory, we asked three different groups of providers working with elderly persons (occupational therapists, managers of housing for elderly persons, senior citizen center directors) and elderly persons themselves to rate 75 tasks, many of which are included on the EPT, according to how essential competence in these tasks would be for independent living (Diehl, Willis, & Schaie, 1990). The tasks represented five IADL domains. There was considerable consensus among the different groups regarding the relative importance of the IADL domains. Tasks related to management of finances and taking of medications were rated as the two most important by all three service provider groups and also by elderly persons. Tasks related to shopping for necessities was rated as the least essential. It is noteworthy that financial management and medication compliance are among the advanced ADLs identified by Wolinsky and colleagues as most directly related to cognitive capability (Wolinsky & Johnson, 1991).

Everyday Competence: A Recursive and Dynamic Process

Laboratory studies of everyday problem solving have typically characterized problem solving as a one-shot, short-term phenomenon. Dealing with tasks of daily living, however, is often recursive and extends over days, months, and years (Willis & Schaie, 1993, 1994). The individual may exercise through aspects of a task multiple times before reaching a final solution. In addition, a problem may appear to be "solved" at one point in time only to reoccur, requiring further problem solving. The context may also change, requiring a new solution to a recurring problem. For example, elderly persons must repeatedly make financial decisions regarding health care insurance as both the health care system changes and the individual's health care needs change with advancing age. With each new episode of problem solving, there may be shifts in the individual's cognitive competence to resolve the problem adequately.

Of particular importance are questions about the rate and pattern of age-related normative change in everyday cognitive competence. We have examined seven-year change in performance on tasks associated with everyday cognitive competence in a relatively healthy community-dwelling sample of older adults (Schaie, 1996). The tasks were very similar in nature to those presented in the EPT. Figure 1 presents seven-year longitudinal change data for four age-cohorts: (a) 60-year-olds retested at age 67; (b) 67-year-olds retested at age 74; (c) 74-year-olds retested at age 81; and (d) 81-year-olds retested at age 88. Note that there is relatively little mean level change in the 60s; however, the rate of decline, on average, increases in the 70s and into the 80s. Education, as well as age, is an important factor in studying level of performance and rate of change. Elders with less education function at a lower level at all ages. Rate of decline becomes particularly steep for less well-educated older adults in their 80s.

Discussion

In this article we have considered the geropsycho-

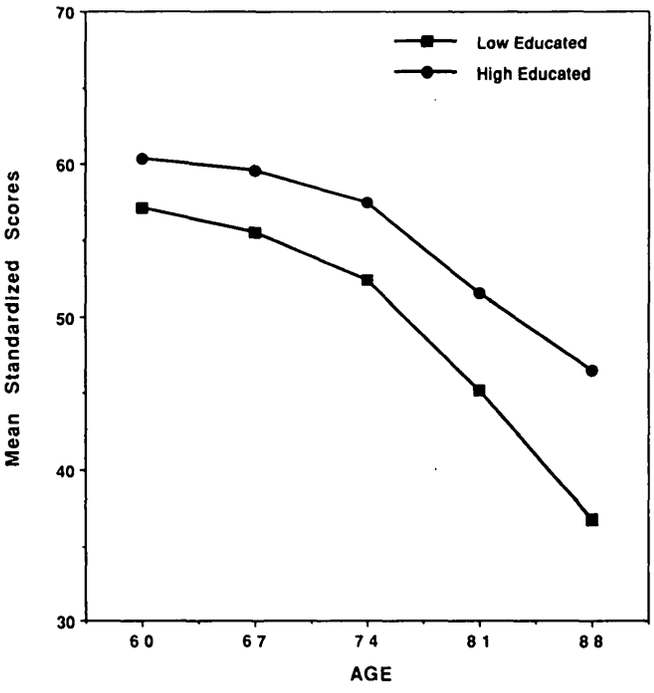

Figure 1. Seven-year longitudinal change in everyday cognitive tasks.

logical literature related to several characteristics of competence. We have emphasized a focus on functional abilities, multidimensionality of competence, and potential or capacity rather than routine behaviors. A major challenge for those involved in assessment and judgment of competence is to define the domains of functional abilities associated with living independently in this society. We suggest that prior research on the IADLs may be particularly useful.

Competence represents older adults' potential or capacity for making decisions necessary for care of themselves and maintenance of their property. As such, competence is not necessarily reflected in the older adult's everyday behavior. That is, competence addresses what the individual *can* do, not what he or she actually does. Likewise, competence focuses heavily on the older adult's mental ability to make critical *decisions* regarding care of self and management of property. Competence does not necessarily require that the older adult be physically able to carry out the required tasks of daily living. Given this perspective on functional competence, multiple components may be involved in decision making. Basic mental abilities and domain-specific knowledge bases are necessary components in decision making, but are not sufficient for generation of adequate problem solutions. There must also be consideration of elderly persons' perception of the social and physical environment and their beliefs and preferences regarding alternative problem solutions.

Assessment of competence or functional ability is of concern both in the social sciences and in legal decision making regarding elderly individuals. Currently there is no gold standard for measuring functional ability. Traditionally, functional ability has been assessed by self-reports of elderly persons or their caregivers; prior research suggests these ratings are not always congruent with clinician ratings. There have been recent efforts to develop objective or behavioral measures of functional ability. We present data on one objective measure, the Everyday Problems Test, that assesses the elderly person's ability to solve everyday problems involving printed material. More recently in our research, Diehl has developed an in-home observational measure of everyday task performance; the EPT and the observational task were found to measure the same constructs (Diehl, Willis, & Schaie, 1994). Each type of measure has relative strengths and limitations. The in-home observational measure has considerable face validity. On the other hand, administration of such a performance measure takes considerable time, and the number of tasks that can be observed is limited. A measure such as the EPT has less face validity but may be more efficient in that it permits assessment of a larger number of instances of problem solving in a given time period. An observational measure may be particularly useful if the concern is with the elderly person's ability to perform a limited set of specific tasks. If the concern, however, is with a more general assessment of competence representing many different activity domains (e.g., finances, medications), then the EPT may be a more efficient and useful measure.

We presented data on longitudinal change in problem-solving performance for elderly persons with no known pathologies. Data on normative change in decision-making competence can serve as a baseline for assessment and for decisions regarding elderly persons who suffer from mental disorders. Although age-related decline in the young-old age group (60–75 years) is modest, the rate of average decline increases in the old-old age group (75+ years). At all chronological ages, elderly persons with below average educational level function at a lower level. Our research suggests that educationally disadvantaged elderly persons in very old age (in their 80s and 90s) are increasingly likely to need assistance in everyday decision making, even though they do not suffer from a specific mental disorder.

It may be argued that the presence of a mental disorder in combination with functional deficits should be sufficient grounds for guardianship decisions. However, the functional deficit may have predated the organic condition, highlighting the importance of determining the premorbid functional competence of the older adult. Given the significant relationship between education and functional competence, elderly persons of low socioeconomic status may have functioned marginally even prior to diagnosis of an organic impairment. There is also increased risk of misdiagnosis for dementia in less educated elderly persons, a concern in competency judgments.

There has been a focus on aspects of competence that reside within the individual. Elderly persons, however, do not live in a vacuum, and thus competence cannot be considered without taking into account the environment in which they function. Both

the physical and social environment need to be considered in determining which functional abilities are most salient for independent living. An important issue is what criteria to use in determining the functional abilities considered most salient in a given context. Family members, clinicians, social workers, legal professionals, and elderly persons themselves may disagree regarding the most salient functional domains for defining competence.

In summary, competency is a construct that is of concern in many fields, including the legal and geropsychological domains, and each field has much to contribute. The shifting age structure of our society makes the need for interdisciplinary exchange all the more imperative. Functional competence in old age is the foremost concern of elderly persons themselves and will become an increasing societal concern as the baby boomers reach old age early in the next century. A multidisciplinary effort will be needed to meet the challenge.

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