Everyday Competence in Later Life: Current Status and Future Directions

Manfred Diehl, PhD

Although research on older adults' functional health has a long and rich history in gerontology (Katz, Ford, Moskowitz, Jackson, & Jaffe, 1963; Lawton, 1982; Lawton & Brody, 1969), recent years have witnessed an increased interest in elderly persons' everyday competence (M. Baltes, Mayr, Borchelt, Maas, & Wilms, 1993; Diehl, Willis, & Schaie, 1995; Duffy & MacDonald, 1990; Willis, 1991, 1996a, 1996b). This increased interest is not only a reaction to the historically unparalleled sociodemographic changes in our society's age structure (Bould, Sanborn, & Reif, 1989; Rice & Feldman, 1981; Siegel & Taeuber, 1986; U.S. Department of Commerce, 1997), but also a response to the new challenges that accompany the "greying of our society." One of these challenges is related to the well-known fact that, as a group, older adults are disproportionately heavy users of health care services (Soldo & Manton, 1985; Waldo & Lazenby, 1984). For example, in 1989, elderly Americans represented one eighth of the population, but they accounted for more than one third of the total health care expenditures (Department of Health and Human Services, 1990). Thus, gerontologists' inquiries into the antecedents, correlates, and consequences of older adults' ability to care for themselves, to manage their affairs, and to live independently in the community is not only of great importance to elderly persons themselves but to society as a whole.

The term "everyday competence" refers to a person's ability to perform, when necessary, a broad array of activities considered essential for independent living, even though in daily life the individual may not perform these tasks on a regular basis or may only perform a subset of these activities (see Lawton, 1982; Willis, 1991). Several aspects of this definition need to be emphasized. First, everyday competence refers to a person's potential or capability to perform certain tasks, not the actual daily behavior of the person (Grissio, 1986; Salthouse, 1990). This distinction between potential and actual performance has received particular attention from developmental (P. Baltes, 1987) and cognitive psychologists (Salthouse, 1990, 1996), and has become an important issue in the context of legal decision making concerning older adults (Eth & Leong, 1992; Sabatino, 1996; Smyer, Schaie, & Kapp, 1996).

Second, everyday competence involves multiple domains and multiple components. In terms of multiple domains, everyday competence involves a person's physical, psychological (i.e., cognitive and emotional), and social functioning, which interact in complex ways to produce the individual's day-to-day behavior. Similarly, a person's functioning in each of these domains involves multiple components. For example, an older adult's competence in the psychological domain does not only include this person's cognitive problem-solving abilities but also his or her beliefs of control, sense of self-efficacy and mastery, and styles of coping and affect regulation (see McAvay, Seeman, & Rodin, 1996; Mendes de Leon, Seeman, Baker, Richardson, & Tinetti, 1996). In the social domain, a person's everyday competence includes his or her social skills which may determine the amount and type of support provided by the social network (see Seeman, Bruce, & McAvay, 1996). Although in the past everyday competence generally has been defined in terms of functional health and assessed in terms of...
activities of daily living (ADLs; Katz et al., 1963) and instrumental activities of daily living (IADLs; Lawton & Brody, 1969), a more comprehensive conceptualization is needed which includes, at a minimum, the domains of physical, psychological, and social competence.

Third, when gerontologists talk about everyday competence, they need to be aware that competent behavior in everyday life does not exist in a vacuum, but is expressed and receives its validation in transactions with the physical and social environment. For example, the seven domains of the IADLs proposed by Lawton and Brody (1969) may involve somewhat different tasks or may be ordered in a different hierarchy in different cultures or subcultures. In a similar vein, rapid and pervasive technological changes, such as the computerization of everyday life (e.g., automatic teller machines, computerized phone-message systems), constantly challenge older adults’ established repertoire of everyday problem-solving skills and require the acquisition of new behaviors. Thus, researchers need to be sensitive to cultural and contextual variations in everyday competence and to the fact that it is best conceptualized as a transactional construct (Lawton, 1989; White, 1959). That is, an elderly person’s everyday competence should be seen as the result of the transactions between an active human individual and his or her physical and social environment.

A Conceptual Model

A conceptual model that incorporates most of the aforementioned aspects has been proposed by Willis (1991). This model is used as a heuristic framework to reflect critically on the current status and the future directions in research on elderly adults’ everyday competence (see Figure 1).

As can be seen in Figure 1, Willis (1991) distinguishes among antecedents, components, mechanisms, and outcomes of everyday competence. Antecedents are either individual (e.g., physical health, cognitive functioning) or sociocultural factors (e.g., cultural stereotypes of aging, social welfare policies, health care policies) that determine or are related to older adults’ everyday competence. Components of competence are concerned with particular domains of competence (e.g., physical, psychological, social, and emotional competence) and with specific tasks or activities within these domains. Different components (e.g., cognitive problem-solving ability or social support) may have different importance or may influence a person’s actual behavior differently depending on the domain and the overall contextual conditions. Mechanisms involve factors that moderate the actual expression of competence in the daily life of the individual, such as attributions, beliefs of control and self-efficacy, or regular practice of certain functional behaviors. Thus, mechanisms are either of a motivational nature (e.g., self-efficacy beliefs) or are related to the regular performance of everyday behaviors (e.g., medication-taking behavior). Finally, the model proposes that the major outcomes of everyday competence are physical and psychological well-being—two major components of successful aging (P. Baltes & M. Baltes, 1990).

Wills’ (1991) model was chosen as a heuristic framework because it can serve as a useful guide for future research on everyday competence. Two clarifying remarks, however, are necessary to prevent some possible misunderstandings. First, this model does not claim to address all of the intricacies of everyday competence research. Two clarifying remarks, however, are necessary to prevent some possible misunderstandings. First, this model does not claim to address all of the intricacies of everyday competence research. Rather it should be seen as a conceptual starting point and future research has to elaborate on the empirical and theoretical importance of its different components. Second, in Willis’ (1991)
model, physical health and aspects of psychological functioning are described as antecedents and as consequences of everyday competence. Although this may appear, at first glance, to be somewhat confusing, it hints at the dynamic and recursive nature of everyday competence (Willis, 1996a). This dynamic and recursive nature of everyday competence has also been highlighted by other theorists (M. Baltes et al., 1993) and is consistent with recent findings from basic research on the plasticity of older adults’ functioning (P. Baltes, 1993; Liu, Liang, Muramatsu, & Sugisawa, 1995).

Current Status

In this article, I will argue that gerontologists have established a reasonably sound knowledge base concerning the antecedents and consequences of everyday competence in later life. In comparison, relatively little is known about the components and mechanisms of elderly adults’ everyday competence. Thus, before some of the directions for future research are outlined, the currently available knowledge about the antecedents and consequences of older adults’ everyday competence will be reviewed.

Antecedents of Everyday Competence

Physical Health.—Numerous studies have found significant yet moderate associations between interviewer ratings or self-ratings of physical health and self-reported everyday competence (see Idler & Kasl, 1995). Fillenbaum (1985) reported the relationship between ratings of physical health and ratings of everyday competence to be on the order of .54. In a summary of several studies, Lawton (1986) reported associations between self-reports of everyday competence and physical health in the range of .30–.40. More recent studies have focused on specific medical conditions and their impact on older adults’ everyday competence. Using data from a multistage probability sample of all noninstitutionalized U.S. civilians age 70 or older, Boult, Kane, Louis, Boult, and McCaffrey (1994) reported that the best predictors of the development of functional limitations in ADLs and IADLs were cerebrovascular disease, arthritis, and coronary artery disease. Similar findings have been reported by Furner, Rudberg, and Cassel (1995), showing that medical conditions differentially affect the development of IADL disability.

Several studies have also focused on specific sensory impairments and their effect on elderly persons’ everyday competence. Branch, Horowitz, and Carr (1989) compared changes in self-reports of everyday competence over a 5-year period for a group of elderly adults with good vision and a group of elderly adults who reported a decline in vision. Elderly persons with vision problems reported lower levels of everyday competence; specifically, individuals with vision problems were twice as likely to report needing assistance with shopping and paying bills. They also were less likely than the nonimpaired elders to leave their residence and travel by car. Rudberg, Furner, Dunn, and Cassel (1993) used data from the Longitudinal Study of Aging to examine the relationship of visual and hearing impairments with ADL disability in adults aged 70 and older. Rudberg and colleagues (1993) found that persons with visual impairment were at an increased risk to develop functional disability in ADLs compared to individuals without visual impairment. In contrast, hearing impairment was not independently related to increased ADL disability.

Research by Willis and Marsiske (1991) has shown a significant but modest negative relationship between number of cardiac drugs and total number of drugs taken and performance on a paper-and-pencil test of everyday competence (i.e., the Basic Skills Assessment Test; Educational Testing Service, 1977). Similarly, Diehl and colleagues (1995) found significant relationships between general health, cardiovascular health, and hearing impairment and older adults’ performance on a set of Observed Tasks of Daily Living (OTDL). Interestingly, in this study, health factors did not affect older adults’ performance on the OTDL directly but indirectly via basic cognitive abilities such as speed of processing and memory.

In summary, older adults’ everyday competence is positively related to their general physical health and sensory functioning. Moreover, recent studies have shown that different medical conditions (e.g., stroke, arthritis, heart disease) affect the development of IADL disability differentially (Furner et al., 1995; Rudberg et al., 1993) and that deterioration of health will increase the likelihood that assistance with activities of daily living is needed (see also Greiner, Snowdon, & Greiner, 1996).

Cognitive Functioning.—Findings from large, representative samples of older adults have shown concurrent correlations between global everyday competence and general cognition scores on the order of .50–.60 (Fillenbaum, 1985). In general, functional assessment studies have found that elderly adults with cognitive impairment tend to have greater difficulties with IADLs and that lower mental functioning is particularly detrimental to the performance of more complex tasks of daily living, such as taking medications, using the telephone, or managing finances (see also Ashford, Kolm, Colliver, Bekian, & Hsu, 1989; Loewenstein et al., 1989).

Functional assessment studies and studies with cognitively impaired older adults have recently been complemented by studies on everyday problem solving in healthy, community-residing older adults. Willis and Marsiske (1991) found that over 50% of the variance in older adults’ performance on a test of everyday problem solving was accounted for by mental ability performance. Both fluid and crystallized abilities were found to account for everyday task performance, although a somewhat greater portion of the variance was accounted for by fluid abilities (see also Willis, 1996a). Diehl and colleagues (1995) showed that fluid intelligence was the strongest correlate of older adults’ performance on a set of behavioral tasks of daily living. Smaller yet significant associations between everyday problem solving and abstract mental abilities have also been reported by Camp, Doherty,
Moody-Thomas, and Denney (1989) and by Cornelius and Caspi (1987). Finally, a study by Cockburn and Smith (1991) showed that older adults' performance on a test of everyday memory was significantly affected by fluid intelligence as well as by age and participation in social and domestic activities.

In summary, findings from three major areas of research have shown that older adults' everyday competence is related to their cognitive functioning and that declines in cognitive functioning are associated with poorer performance on tasks of daily living and everyday memory. In particular, impaired cognitive functioning has been shown to affect elderly persons' performance on the more complex IADLs (Fitzgerald, Smith, Martin, Freedman, & Wolinsky, 1993; Wolinsky & Johnson, 1991). These findings have to be seen in the context of longitudinal studies which have shown that the more abstract intellectual abilities that underlie many everyday competencies exhibit relatively early patterns of normative age-related decline (Schia, 1996). Willis (1996b) has therefore suggested that gerontologists should not only focus on the everyday competence of cognitively impaired elderly adults (Gill, Richardson, & Tinetti, 1995), but should also study the everyday competence of elderly persons who, due to lifelong socioeconomic or cultural disadvantages, can be considered cognitively challenged.

Consequences of Everyday Competence

Physical Well-Being.—Numerous studies in the United States have shown that older adults' declining ability to perform ADLs or IADLs is associated with greater use of home health care services (Evashwick, Rowe, Diehr, & Branch, 1984; Wolinsky et al., 1983), a greater risk of becoming hospitalized or institutionalized (Branch & Jette, 1982; Wolinsky, Callahan, Fitzgerald, & Johnson, 1993), and increased mortality (Bernard et al., 1997; Fillenbaum, 1985; Keller & Potter, 1994; Manton, 1988; Wolinsky et al., 1983). In a recent study, Bernard and colleagues (1997) found, for elderly persons in the National Survey of Self-Care and Aging, that individuals who rated themselves as "not at all able" to care for themselves incurred a tenfold increase in their risk of death during the 2.5-year follow-up period compared to those who rated themselves as "completely able" to care for themselves (see also Greiner, Snowdon, & Greiner, 1996; Keller & Potter, 1994). These findings have been replicated mostly by representative studies in Japan (Koyano et al., 1988; Liu et al., 1995) and Italy (Ferrucci et al., 1991) that show that the odds of mortality are dramatically increased for individuals with deficits in functional status and tasks of daily living. For example, in a prospective study in Florence, Italy, Ferrucci and colleagues (1991) found that lower everyday competence was associated with higher mortality over a 7-year period. Moreover, the effect of lower functional ability was independent of age and indicators of physical health in predicting mortality.

Psychological Well-Being.—Willis (1991, 1996a) has argued that the stress and discomfort associated with a decline in everyday competence is more psychological than physical in nature. Willis based this argument on findings from several studies that were conducted prior to her model. For example, Kuriansky, Gurland, Fleiss, and Cowan (1976) reported that feelings of dependency affected older adults' self-esteem and life satisfaction more than physical pain or social isolation. Similarly, Lawton (1986) reported findings from five separate studies indicating that the level of everyday competence had a significant and direct effect on older adults' psychological well-being (assessed in terms of morale and life satisfaction). In addition, Lawton (1986) found in three of the five studies that everyday competence also had indirect effects on older adults' psychological well-being via the mediating variable of time use. That is, elderly persons with higher levels of everyday competence spent more time in diverse leisure and social activities which, in turn, resulted in greater psychological well-being. This latter finding is of particular interest because it suggests that everyday competence not only affects older adults' well-being directly, but also indirectly via other lifestyle variables, such as social activity. Similar findings have been reported by M. Baltes, Wahl, and Schmid-Furstoss (1990) for a German sample of elderly individuals. In this cross-sectional study, the relative frequency of daily activities and functional health status accounted for 42% of the variance of individuals' personal control beliefs. Using longitudinal data, Willis, Jay, Diehl, and Marsiske (1992) examined the direction of effects between everyday competence and self-efficacy beliefs. This study showed that elderly adults' inability to solve cognitive everyday tasks (as assessed by the Basic Skills Assessment Test; Educational Testing Service, 1977) was more likely to determine lower self-efficacy beliefs seven years later than vice versa. Thus, this study provided additional support in favor of Willis' (1991) argument regarding the psychological effects of declining everyday competence.

In summary, there is considerable evidence that older adults' functional status is related both to their sense of psychological well-being as well as their physical well-being. In general, lower everyday competence is associated with lower self-esteem and life satisfaction and with greater use of home health care services, greater risk of hospitalization and institutionalization, and higher mortality.

Future Directions

Although the conceptualization of everyday competence in terms of ADLs and IADLs is limited by the very nature of the employed assessment procedures, the preceding literature review nevertheless shows that there is a substantial and well-replicated body of knowledge with regard to the antecedents and consequences of everyday competence in old age. However, studies that focus on the components and mechanisms of elderly persons' everyday competence are missing. Thus, in the following pages I will focus on five key issues that need to be addressed in the years to come. The first key issue focuses on some methodological and assessment problems and argues
for a multimethod approach. The second key issue focuses on older adults’ deficit awareness and on compensatory efforts as important and, so far, neglected components of everyday competence. The third key issue discusses motivational factors as moderating influences (i.e., mechanisms) on older adults’ everyday competence, whereas the fourth key issue raises the question of whether interventions can be designed to enhance older adults’ everyday competence. Finally, several arguments are brought forward in favor of a transactional perspective on everyday competence and several propositions for future research are made. In discussing these key issues and outlining directions for future research, I do not claim that my suggestions represent an exhaustive list of topics. Rather, these suggestions are brought forward as an attempt to stimulate new research and to contribute to the larger discussion on everyday competence in old age.

**Assessment of Everyday Competence: Self-Report Versus Objective Performance**

To date, the overwhelming majority of studies, both survey research and clinical studies, have relied on older adults’ self-reports with regard to their everyday competence. Direct observation of older adults’ performance on tasks of daily living has only rarely been used, although more and more performance-based measures of everyday competence have been developed over the last two decades (see Diehl et al., 1995; Kuriansky & Gurland, 1976; Loewenstein et al., 1989; Mahurin, DeBettignies, & Pirozzolo, 1991; Williams et al., 1991) and have been requested by advocates in the legal domain (Grillo, 1986; Kapp, 1990; Sabatino, 1996). Although several studies have shown statistically significant yet substantively modest correlations between self-ratings of everyday competence and behavioral measures or clinician ratings (Fillenbaum, 1985; Ford et al., 1988; Kuriansky et al., 1976), self-report assessments have been criticized for several reasons. First, older adults’ self-reported performance in different domains of daily living is usually assessed by a single item per domain. From a psychometric perspective, reliance on a single item with a restricted range of response options is considered inadequate for assessing a person’s level of competence in a specific domain, because single items are known to have inadequate reliability. Second, several studies have shown that older adults have difficulty in evaluating their everyday competence accurately (Rubenstein, Schairer, Wieland, & Kane, 1984). These studies have shown that healthy community-residing elderly and older adults in the early stages of dementia tend to overestimate their functional ability (Rogers & Holm, 1990; Rubenstein et al., 1984), whereas older adults with depressive symptomatology are more likely to underestimate their everyday competence (Kiyak, Teri, & Borson, 1994; Kuriansky et al., 1976). Third, self-report assessment of everyday competence is also of limited usefulness because it provides little or no information with regard to the real or perceived causes of an older adult’s incapacity to perform specific tasks of daily living (Willis, 1991).

In response to these dilemmas, investigators have suggested that proxy reports (i.e., spouse, family members, caregivers) may be used to circumvent the response biases often inherent in self-reports. Although proxy reports have been found, in general, to show a stronger association with older adults’ actual performance than self-reports (Kiyak et al., 1994), they are also less than perfect (Zanetti et al., 1995). For example, one study showed that as the task complexity increased, the discrepancy between both proxy and self-reports and actual performance scores also increased (Rogers & Holm, 1990). Even more puzzling, a study on 50 patients with mild and moderate Alzheimer’s disease revealed small to moderate inverse relations between proxy (i.e., primary caregiver) and self-reported functional ability (Zanetti et al., 1995). Thus, although there is some indication that proxy reports may be more objective than self-reports, they also have problems of their own. For example, in an early study, Rubenstein and colleagues (1984) found that significant others systematically understated the functional competence of elderly adults, and more recent studies (Bookwalta, Klepac, Ditto, Danks, & Schmucker, 1996) have shown that proxies’ competence ratings are affected by the quality of the relationship they have with the elderly person.

Other researchers have suggested that the use of objective, performance-based assessments could provide more accurate information with regard to older persons’ everyday competence (Diehl et al., 1995; Guralnik, Seeman, Tinetti, Nevitt, & Berkman, 1994; Kuriansky & Gurland, 1976; Rogers & Holm, 1990). Although this argument may, in principle, be correct, currently there is no widely accepted performance-based measure that would equally well assess the range of functioning in healthy community-residing elderly persons and the levels of functioning of cognitively impaired older adults (see Guralnik et al., 1994). Thus, researchers in the area of everyday competence are faced with a new dilemma. On one hand, measures that have been developed for specific subgroups of older adults (cf. Direct Assessment of Functional Status—DAFS, Loewenstein et al., 1989; Structured Assessment of Independent Living Skills—SAILS, Mahurin et al., 1991; Assessment of Living Skills and Resources—ALSAR, Williams et al., 1991) contain tasks that are too easy for healthy community-residing elders. On the other hand, measures such as the Observed Tasks of Daily Living (OTDL; Diehl et al., 1995), which have been developed for use with healthy older adults, are too difficult for use in clinical settings. Thus, the currently existing measures make comparisons across studies and populations extremely difficult, if not impossible.

In addition, performance-based measures of everyday competence have been criticized because of the amount of time that is required for their administration (Willis, 1996a) and the amount of training that is needed to train testers to administer these measures properly. Another issue that has been raised in the context of performance-based assessments is the issue of criterion validity. As Willis (1996a) has pointed out, the examination of criterion validity is a great challenge because there is no commonly accepted “gold
standard" for assessing everyday competence in older adults. Thus, Willis (1996a) has suggested using the seven IADL domains as a starting point for the development of objective behavioral tasks of daily living and to relate older adults' objective performance to data from other sources, including their self-reports, proxy reports, and clinicians' ratings.

Despite these obstacles, several researchers have tackled the task of measurement development. Measures have been developed for the assessment of elderly adults who are suspected to show early signs of dementia (e.g., DAFS, Loewenstein et al., 1989; SAILS, Mahurin et al., 1991; ALSAR, Williams et al., 1991) and for healthy community-residing older adults (Diehl et al., 1995; Guralnik et al., 1994; Willis & Marsiske, 1993). Although most of these assessment procedures require further psychometric work and refinement, they represent an important development and will probably become more accepted among researchers and practitioners in the years to come.

One specific domain in which performance-based assessment has already become more and more important for the objective evaluation of elderly persons' competence is driving (see Ball & Owsley, 1991; Odenheimer et al., 1994). For example, Odenheimer and colleagues (1994) developed a systematic performance-based road test for measuring the driving skills of elderly drivers and found that elderly drivers' performance on this test and their cognitive test scores were significantly correlated with their actual driving behavior. Similarly, Owsley, Ball, Sloane, Roenker, and Bruni (1991) have applied the concept of the Useful Field of View (UFOW) to assess visual and cognitive correlates of vehicle accidents in older drivers. They found that the best predictors of accident frequency were early visual attention (UFOW) and mental status, which together accounted for 20% of the variance of accident frequency. Given the general statistics with regard to older drivers (National Highway Traffic Safety Administration, 1989), extensions of these approaches (e.g., computerized driving simulations) hold great promise for a more objective and fair assessment of older adults' driving skills.

In summary, because each of the discussed assessment approaches has its own limitations, it is suggested that researchers in the area of everyday competence adopt a triangulation-of-method approach. This approach adopts the logic of the multitrait-multimethod matrix originally proposed by Campbell and Fiske (1959) in the context of construct validation, and uses older adults' actual performance on tasks of daily living in combination with self-reports and evaluations from others (e.g., spouse, caregiver, or clinician ratings) to assess their everyday competence comprehensively (Galanos, Fillenbaum, Cohen, & Burchett, 1994). If the findings from different data sources converge, then researchers and practitioners can be reasonably confident that their data are not due to method artifacts. In contrast, if the data from different data sources diverge, then they have sufficient reason to request additional information before any conclusive statements regarding a person's everyday competence can be made.

In general, deficits in an older person's independent living skills do not occur suddenly. Like the general aging process, deficits usually develop in a gradual manner, first affecting more complex competencies and more difficult tasks, then increasingly essential and basic living skills (M. Baltes et al., 1993; Willis, 1996a). This process challenges the adaptive competence of an older person and is usually noticed by the aging individual. As a matter of fact, it is reasonable to assume that it is normative on the part of older adults to engage in adaptive and compensatory behaviors to react to gradual declines and losses in competence (P. Baltes & M. Baltes, 1990). Moreover, a cognitively well-functioning elderly person will very likely develop a keen awareness of his or her deficits and will use this awareness to cope with a declining skill in one way or another. A good example of older adults' compensatory behavior has been documented in an experiment by Salthouse (1984). In this study, Salthouse examined the performance of younger and older expert typists. He found that tapping speed, a component skill involved in typing, was significantly slower in older typists compared to younger typists. Some older typists, however, showed superior typing performance. How did they achieve this superior typing performance? Salthouse showed that the older typists compensated for the decline in tapping speed by reading farther ahead in the text to be typed, thus maintaining their overall high level of typing performance.

Another relevant example describing older adults' compensatory efforts in response to a declining ability is the increased use of external memory aids by older adults (Park, 1992). Because elderly persons usually have some awareness that their memory has declined, they may adopt specific behaviors (e.g., writing information down) or may rely on specific external cues (e.g., calendar, timer, reminder notes) that help them remember when to engage in the required behavior (Park, Morrell, Frieske, Blackburn, & Birchmore, 1991). The important point here is that although there is plenty of evidence suggesting that older adults develop an awareness of their declining abilities, currently there is little systematic research that could inform us in what ways this awareness serves as a motivator for compensatory behaviors (Bäckman & Dixon, 1992; Berg, Klaczynski, Calderone, & Strough, 1993), how it affects older adults' actual performance on tasks of daily living (Kwon, 1996), and how it affects their self-esteem and psychological well-being.

Some empirical evidence for the importance of deficit awareness has been provided by Caron (1996) in a study examining the role of cognition, depression, and deficit awareness in predicting rehabilitation patients' ADL and IADL performance. In a sample of 50 geriatric rehabilitation patients, Caron (1996) found that greater awareness of ADL and IADL impairment was significantly correlated (r = .69) with higher scores on the Structured Assessment of Independent Living.
focused on beliefs of control and self-efficacy (M.
Marty and efficacy is an extremely strong motivational
tivated human behavior. In particular, White (1959)
that research on the motivational foundation of older
adults' everyday competence has primarily
proposed that humans' tendency to test their skills or
ability to manage losses and promoting gains associ-
ated with the aging process. In this model, selection
refers to individuals' efforts of concentrating on "those
domains that are of high priority and involve a con-
vergence of environmental demands and individual
motivations, skills, and biological capacity" (P. Baltes
& M. Baltes, 1990, pp. 21–22). Optimization refers to
persons' efforts of maintaining optimal levels of per-
formance in the chosen domains, whereas compensa-
tion is related to those behaviors that individuals
engage in when their performance in a particular
domain has fallen below a certain criterion level for
adequate functioning (see also Salthouse, 1995). Al-
though P. Baltes and M. Baltes (1990) suggest that
selective optimization with compensation is a general
process of adaptation that individuals engage in through-
out life, they also propose that these processes be-
come more important in later life because of the
restrictions of individuals' living environment to fewer
domains of functioning. Support for this latter sugges-
tion has been provided with regard to older adults'
cognitive (P. Baltes & M. Baltes, 1990; Marsiske et al.,
1995) and social-emotional functioning (Lang & Car-
stensen, 1994; Marsiske et al., 1995), and with regard
to the dependency behavior of nursing home residents
(M. Baltes & Reisizenz, 1986; M. Baltes & Wahl,

Motivation to Maintain Everyday
Competence as a Moderating Influence

In 1959, when White introduced the term "com-
petence" into the psychological literature, he did
so because he thought the predominant theories of
human motivation focused too narrowly on drives and
instincts and failed to recognize other sources of mo-
tivated human behavior. In particular, White (1959)
proposed that humans' tendency to test their skills or
to seek experiences that reassure their sense of mas-
tery and efficacy is an extremely strong motivational
force, and he suggested that the concept of com-
petence addresses exactly this aspect of human
behavior. This reference to White's notion of com-
petence is quite deliberate; I would like to suggest
that research on the motivational foundation of older
adults' everyday competence has been narrow and
is in need of conceptual and empirical extension.

To date, research on the motivational components
of older adults' everyday competence has primarily
focused on beliefs of control and self-efficacy (M.
Baltes & P. Baltes, 1986; Lachman, 1986). M. Baltes
and colleagues (1990), for example, reported a sig-
nificant positive relationship between self-efficacy be-
liefs and perceived level of everyday competence. Duffy
and MacDonald (1990) reported that elderly persons'
beliefs regarding health locus of control were associ-
ated with self-reported level of everyday competence.
That is, older adults who believed that their health
was determined by factors beyond their control (e.g.,
chance or powerful others) reported needing more
assistance with everyday activities than individuals
who believed that their health was in their own con-
tral. As previously mentioned, Willis and colleagues
(1992) showed that older adults who performed more
competently on everyday tasks had higher self-efficacy
beliefs seven years later. Because Willis and colleagues
(1992) used longitudinal data, they were able to show
that older adults used their performance on everyday
tasks as the criterion for their self-efficacy beliefs. Thus,
indirectly, this study provided some support for the
deficit awareness hypothesis described earlier, because
older adults seemed to be aware of changes in their
level of everyday competence and adjusted their self-
efficacy beliefs accordingly.

Although these studies are commendable attempts
to elaborate motivational components of everyday
competence in later life, they only provide us with a
narrow view of the motivational forces that underlie
older adults' everyday competence. In order to ob-
tain a more comprehensive picture of older adults'
motivations for maintaining a high level of competence,
it is important to understand a host of other aspects
of their behavior. First, from a basic as well as an ap-
plied perspective it is important to know more about
the instrumental and emotional reinforcement value
of specific behaviors and competencies with regard to
older adults' independent living. For example, when
an older person who had a hip fracture and subse-
quent surgery is enrolled in a physical rehabilitation
program it is not only important to work on the physical
side of the problem but also to gain an understanding
of what it means psychologically for the person to re-
gain the ability to walk. Does the prospect of living at
home have a high instrumental reinforcement value
for the person? Does the ability to ambulate have a
high intrinsic and emotional reinforcement value for
the person, and will the achievement of this goal in
itself enhance the person's sense of mastery and self-
efficacy? Knowing the answers to these questions is
vital for those clinicians who are involved in geriat-
ric rehabilitation programs, and knowledge about
the instrumental and emotional reinforcement value
of specific competencies can, for example, be used in
the custom design of training schedules for older adults
undergoing geriatric rehabilitation.

Second, more needs to be known about elderly
persons' expectancies about the success or failure of
their own behavior. There is some data supporting the
notion that with increasing age individuals' sense of
personal control declines (M. Baltes & P. Baltes, 1986).
This information needs to be complemented with re-
search that focuses on how a decline in beliefs of per-
sonal control affects older adults' behavioral expecta-
tions in the domains of everyday life. For example, is
the decline in beliefs of personal control also accompanied by a decline in behaviors that once were important to a person? Moreover, it is important to compare individuals who show a decline in control beliefs with individuals who do not exhibit such a decline and to examine whether and how this difference is expressed in domains of everyday competence (e.g., activity level, range of interests).

Third, more needs to be known about elderly persons’ standards of performance evaluation (Kwon, 1996) and their strategies of social comparison (Taylor & Lobel, 1989), and how these strategies influence processes of self-regulation and self-control. Finally, more needs to be known about the short- and long-term goals that guide elderly adults’ behavior and whether certain styles of goal pursuit (e.g., flexible goal adjustment) are of particular adaptive value (Brandstätter & Renner, 1990).

This rather unsystematic listing of motivational influences shows that gerontologists, so far, have relatively little information concerning the motivational basis of everyday competence. Moreover, gerontologists need to be aware of research that suggests that older adults may deliberately engage in independent rather than dependent behavior (M. Baltes, 1996; M. Baltes & Reisenzin, 1986; M. Baltes & Wahl, 1992). For example, if dependent behavior is associated with certain rewards such as attention and affection from others with whom the older adult enjoys interacting (e.g., family members, home health nurse, nursing staff), then it may become extremely difficult to alter this “social script” and motivate independent behavior (M. Baltes & Wahl, 1992). In summary, more needs to be learned about the motivational foundation of older adults’ everyday competence (or incompetence) so that this knowledge can be used in applied settings and in interventions with elderly individuals.

Can Interventions Enhance Older Adults’ Everyday Competence?

Extensive longitudinal studies on adults’ intellectual development (Cunningham & Owens, 1983; Schaie, 1996) have documented the normative patterns of age-related changes in intelligence, including the normative patterns of decline. Similarly, training studies in the domain of intelligence (P. Baltes & Willis, 1981; Hayslip, Maloy, & Kohl, 1995; Labouvie-Vief & Gonda, 1976) and memory (P. Baltes & Kliegl, 1992; Neely & Bäckman, 1995; Rebok & Balcerak, 1989; Scogin &Bienias, 1988; Yesavage, Lapp, & Sheikh, 1989) have documented the range of plasticity in intelligence and memory in older adults. In particular, it has been shown that older adults can considerably improve their cognitive functioning through systematic training (P. Baltes & Willis, 1981; Hayslip et al., 1995; Labouvie-Vief & Gonda, 1976; Neely & Bäckman, 1995) and even through repeated practice (Hofland, Willis, & P. Baltes, 1981). Moreover, it has been shown that in healthy, community-residing older adults normal age-related declines in intellectual functioning can be reversed through systematic training (Schaie & Willis, 1986). Thus, there is a great deal of research documenting the plasticity/modifiability of older adults’ cognitive functioning (P. Baltes, 1993). The major question that arises from this research is whether similar intervention programs can be effective in enhancing elderly adults’ everyday competence.

To address this question, the National Institute on Aging (NIA) and the National Institute of Nursing Research (NINR) are currently sponsoring studies at six different research sites within the United States to examine systematically whether and to what extent laboratory-based intervention procedures can also be applied successfully to prevent declines in older adults’ everyday competence and to extend the period of independent living in healthy older adults. These studies, which are collectively called “Advanced Cognitive Training for Independent and Vital Elderly” (ACTIVE), use principles of clinical trials and address both basic as well as applied questions. With regard to the basic questions, the sponsored studies address such issues as (a) the most effective focus for interventions (e.g., perceptual training vs intelligence training vs memory training); (b) the type and structure of the most effective training strategies; (c) the observable ranges of plasticity (reserve capacities) with regard to the different domains of everyday competence; and (d) the magnitude and duration of the obtained training effects. Applied questions are related to (a) the appropriate context for implementing successful training programs; (b) the transfer/generalization of acquired skills to the home environment; and (c) the short- and long-term benefits of successful training programs with regard to health and health care use (e.g., savings in health care costs). Of particular importance in this context is that older adults are studied with regard to their everyday competence and that the major outcome measures have been selected to provide a comprehensive profile of the study participants’ everyday competence, including performance-based measures of daily living, functional status assessments, and assessments of social and emotional functioning.

As this brief description shows, although laboratory-based research has been successful in documenting the plasticity of older adults’ cognitive functioning, the “road test” for the established procedures has just begun. The future will have to show whether the effects of laboratory-based intervention procedures also can be implemented successfully in real-life contexts and used to enhance older adults’ everyday competence.

A Transactional View of Everyday Competence

Older adults’ everyday competence does not exist in a vacuum but involves their active adaptation to a variety of environmental conditions. As a matter of fact, elderly persons’ everyday negotiations with their environment become increasingly important in a time of rapid technological change and should be seen as a dynamic and recursive process (Willis, 1996a). Such
a view of everyday competence is compatible with a transactional perspective of person and environment, a perspective that has a long history in psychology (Bronfenbrenner, 1979; Lazarus & Launier, 1978; Lewin, 1951; Sansone & Berg, 1993) and gerontology (Kleemeier, 1959; Lawton, 1983). Already Kleemeier (1959) advocated such a transactional perspective in a handbook chapter entitled "Behavior and the organization of the body and the external environment" and other gerontologists who have followed in his footsteps have emphasized that older adults' everyday competence always needs to be conceptualized and studied in relation to their day-to-day environments (Lawton & Nahemow, 1973).

Despite these early calls for a transactional approach to older adults' everyday competence, a critical review of the literature reveals a large discrepancy between theorizing and actual research. In particular, discrepancies with regard to several fundamental research issues are noteworthy. First, most current research on elderly adults' everyday competence adopts an interactional rather than a transactional perspective. That is, most research focuses either on the older individual or on certain characteristics of the environment but not on their reciprocal exchanges and interlinkages. However, it is exactly the element of reciprocity and mutual recursive influence that distinguishes the transactional perspective from an interactional one. To move to the level of a transactional approach, it is suggested, for example, that gerontologists should use new data collection methods, such as in situ videography or laboratory simulation devices (e.g., driving simulators), in order to study behavior under real-life conditions. These methodologies and their application in field studies have the potential to gain new insight into behavior that older adults develop in their day-to-day exchanges with their environment (e.g., use of prosthetic devices such as specific external aids, use of equipment for cooking and housework) in order to maintain their independence. Moreover, data from such an approach can also be made useful in the context of intervention programs which focus on the mechanisms of older adults' everyday competence maintenance.

Second, a transactional view of everyday competence requires research that examines the conditions and consequences of everyday behavior at different levels that may correspond to different levels of their everyday ecology (Bronfenbrenner, 1979). At the micro-level, for example, time-budget studies (M. Baltes et al., 1990; Moss & Lawton, 1982) or observational studies in older adults' own home environment have already provided some interesting insights into older adults' activity patterns and the distribution of their activities over specific time periods. Similarly, behavioral studies on older adults' coping with different kinds of sensory impairment (Tesch-Römer, 1997; Wahl, Oswald, & Zimprich, 1997) have provided much needed information about the adaptive efforts of elderly persons to maintain the highest possible level of everyday competence. Future research needs to build upon these existing studies and needs to focus on specific activities/processes such as decision making or compensatory behavior in different IADL domains. For example, existing research in the domain of financial planning (Hershey, Walsh, Read, & Chulef, 1990) or in the domain of consumer behavior (Johnson, 1990) has provided valuable insights into older adults' decision-making processes which could possibly be implemented in real-life training programs.

At the level of the mesosystem, gerontologists need to examine how different Microsystems are interlocked and how older adults use resources from the different Microsystems (e.g., family, neighborhood, community) to optimize their well-being. For example, research on the coordination and use of formal and informal support services for older adults' independent living meets these criteria. Finally, gerontologists need to investigate the effects of macro-level changes on older adults' everyday competence and well-being to understand the impact of larger sociocultural changes and the dynamic qualities of the sociocultural environment. For example, the introduction of new technologies (e.g., on-line banking, personal computers) and new forms of communication (e.g., special phone services, electronic mail) may not only result in a redefinition of the specific skills required to act competently in real life, but may also have serious consequences on older adults' overall quality of life and their access to societal resources that are crucial for their well-being. Thus, as this society and its members move into the twenty-first century, gerontologists will be challenged to re-examine and reevaluate the existing taxonomy of tasks of daily living to make sure that they adequately capture the day-to-day life of older adults.

Third, a transactional view also implies that older adults' competencies and their application in different settings is seen as a dynamic and recursive process (Willis, 1996a). In terms of Willis' (1991) model, this notion suggests several conceptual extensions that may stimulate future research. A first extension of the model would need to focus on the mutual influences between psychological and physical outcomes. In the current version of the model, these outcomes are not linked with each other. However, there is ample evidence that physical and psychological well-being are intricately linked with each other (e.g., Lachman, Ziff, & Spiro, 1994; Rodin & Timko, 1992; Schulz, 1976; Seeman et al., 1995), in the same way individual behavior is always linked with sociocultural factors (Dannefer & Perlmutter, 1990; Estes & Rundall, 1992). Moreover, physical and psychological outcomes at one point in time may also feed back into behaviors that then may become the antecedents for future functioning. Thus, behavioral processes that follow the notion of cybernetic feedback loops (Klir, 1967; Wiener, 1961) need to be incorporated into any comprehensive model of everyday competence.

Another major implication resulting from this perspective is that older adults' everyday competence needs to be conceptualized as a developmental phenomenon and needs to be studied over time. In particular, longitudinal studies that document the rate and pattern of normative change in older adults' everyday competence in specific domains vis-à-vis normative changes in cognition (Schaie, 1996) and
physical health (Liu et al., 1995) are needed to understand the nature and interconnectedness of everyday functioning more fully. Research on transitions in functional health and active life expectancy, for example, has shown that changes in functional health do not necessarily follow a linear downward trajectory for all older adults. In contrast, several studies (Liu et al., 1995; Rogers, Rogers, & Belanger, 1992) have shown that a considerable number of elderly persons can regain their functional ability after a previous downward transition, suggesting that transitions in functional health are dynamic and possibly reversible (see also Schaie & Willis, 1986).

Conceptualizing older adults’ everyday competence as a dynamic and recursive process also implies that investigations of person-environment relations over time are needed to document how aging individuals adapt to changes in their environment and how, in turn, specific forms of adaptation result in changes or reactions in the physical and/or social environment (Wahl et al., 1997). Findings from such studies, for example, may tell gerontologists whether older adults’ problem-solving strategies and adaptive efforts become more efficient as they continue to meet the same or similar situations over and over again. Similarly, such studies may inform aging researchers about the impact of older adults’ responses on the immediate and remote environment. In general, studies that adopt such an approach need to conceptualize everyday competence as a dynamic and recursive process and have the potential to provide researchers and practitioners with a better understanding of its transactional nature.

Concluding Remarks

The purpose of this article was to review the literature on older adults’ everyday competence with regard to the existing knowledge base. One of the main arguments brought forward was that, within the boundaries of the current assessment procedures, a fairly solid knowledge base exists with regard to the antecedents and consequences of older adults’ everyday competence. An equally solid knowledge base, however, still needs to be built with regard to the components and mechanisms of everyday competence. Subsequently, five key issues (i.e., methods of assessment; deficit awareness and compensatory efforts; moderating motivational influences; feasibility of intervention programs; transactional approach) were identified and discussed in terms of future directions. In discussing each issue, it was emphasized that older adults should be viewed as proactive in managing the losses and promoting the gains associated with the aging process. It was also emphasized that gerontologists need to pay attention to and study aspects of the changing environment that are likely to affect older adults’ everyday competence. These positions are consistent with a transactional view of everyday competence, and it was argued that this transactional view has great potential to enrich researchers’ and practitioners’ understandings of the components and mechanisms of everyday competence in later life.

References


Salthe, T. A. (1990). Refining the concept of psychological compen-


