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# Slow Lawyering: Representing Seniors in Light of Cognitive Changes Accompanying Aging

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## Abstract

As an increasing number of lawyers represent clients who are elderly, it is imperative that lawyers become more knowledgeable about the aging process and how it impacts our clients. Although it is difficult to generalize, many seniors experience numerous and diverse cognitive changes that accompany the aging process. Existing literature offers various frameworks for addressing capacity issues and techniques for assessing diminished capacity. However, current legal scholarship provides little guidance for lawyers on how to accommodate these changes when they do not rise to the level of diminished capacity or dementia, and when the changes may, in fact, result in increased wisdom and “developmental intelligence.” This article seeks to fill that void. It summarizes selected cognitive developments that impact memory, outlining various types of memory and how they evolve during the aging process. This article also discusses current literature on decision-making capacity and different decision-making models and strategies that seniors may rely upon. The article concludes with recommendations on methods for enhancing communications with aging clients, while simultaneously acknowledging and accommodating cognitive changes and enabling seniors to play a prominent role in the representational process.

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#### INTRODUCTION

With the continued graying of America, a growing number of lawyers will be representing clients who are elderly. Additionally, our legal system will be increasingly challenged with resolving issues relative to this demographic change—e.g., issues ranging from additional efforts to prevent elder abuse and financial exploitation, the rights of seniors in long-term care facilities to express their sexuality, and the preparation for financial, medical, and other decision-making at the end of life. Lawyers who work with seniors will be assisting clients experiencing age-related memory and cognitive changes. These changes include positive developments due to brain plasticity, defined as the brain's ability to grow and change in response to learning and stimulation,<sup>1</sup> and increased developmental intelligence, described as “the maturing of cognition, emotional intelligence, judgment, social skills, life experience, and consciousness and their integration and synergy.”<sup>2</sup> They also include the consequences of declining episodic memory and working memory. Although these changes may not affect all individual

1. GENE D. COHEN, *THE MATURE MIND: THE POSITIVE POWER OF THE AGING BRAIN* 6-7 (2005).

2. COHEN, *supra* note 1, at 35.

seniors, “the phenomenon of cognitive aging is clearly evidenced at the group level.”<sup>3</sup>

The legal scholarship on seniors and cognition focuses almost exclusively on capacity issues, despite the fact that all seniors are presumed to have capacity and the fact that diminished capacity is far from inevitable. Existing literature in this field falls into two categories: (1) Basic guidance for lawyers that addresses environmental and situational factors designed to maximize capacity<sup>4</sup> and (2) discussions of capacity assessment.<sup>5</sup> Discussions for lawyers about diminished capacity fail to take into account what the cognitive psychology literature tells us about cognition and the aging process, and offer little assistance for representing seniors impacted by “normal,” age-related cognitive developments. Legal scholarship fails to address questions such as how age-associated memory impairment impacts clients’ abilities to recount events that happened in the past and their decision-making capacity. A corollary to each of these questions is what techniques lawyers might implement to maximize our clients’ abilities to communicate with us and vice versa. The goal of this article is to offer a better understanding of the ordinary cognitive changes that accompany aging and to suggest “best practices” to enable lawyers to more effectively assist our clients.

In contrast to these gaps in the literature addressing the representation of seniors, the literature regarding adolescents and the law takes into account the unique cognitive issues surrounding their maturation processes.<sup>6</sup> Furthermore, in a number of recent decisions, the U.S. Supreme Court has acknowledged research in psychology and the social sciences addressing the cognitive differences between adolescents and adults.<sup>7</sup> Relying on the findings that juveniles exhibit “immaturity, impetuosity, and [a] failure to appreciate risks and consequences,”<sup>8</sup> the Court is developing a new jurisprudence recognizing that these cognitive differences should influence how we evaluate the behavior of juveniles,

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3. TIMOTHY A. SALTHOUSE, MAJOR ISSUES IN COGNITIVE AGING 152 (2010).

4. *See infra* Part II.

5. *See infra* Part II.

6. *See, e.g.*, Laura Cohen & Randi Mandelbaum, *Kids Will be Kids: Creating a Framework for Interviewing and Counseling Adolescent Clients*, 79 TEMP. L. REV. 357 (2006).

7. *See, e.g.*, *Miller v. Alabama*, 132 S. Ct. 2455 (2012) (concluding that the Eighth Amendment forbids sentencing schemes that mandate life without the possibility of parole for juvenile offenders); *Graham v. Florida*, 130 S. Ct. 2011 (2010) (finding that the Eighth Amendment prohibits a sentence of life without the possibility of parole for juveniles convicted of non-homicide offenses); *Roper v. Simmons*, 543 U.S. 551 (2005) (prohibiting capital punishment for those under age 18).

8. *Miller*, 132 S. Ct. at 2468.

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their capacity for rational decision-making, and appropriate consequences for their behavior.<sup>9</sup>

The recent literature and court decisions serve as useful models for how elder law scholars and practitioners should similarly take into account the cognitive changes that accompany the aging process. Acknowledging the legal developments concerning adolescents is not meant to suggest a comparison between children and seniors, or that seniors become like children.<sup>10</sup> Rather, just as the law and lawyering take into account cognitive developments among children and adolescents, the law and lawyering should similarly take into account the cognitive changes that accompany the aging process. This work highlights selected research on cognitive changes that accompany the aging process to assist lawyers in working with clients who are elderly.

Any discussion of cognitive changes among seniors runs the risk of stereotyping and overgeneralizing. Not all seniors will experience the cognitive changes discussed here; even those who do will not necessarily experience them at the same time or in the same way, and the rate of change will vary from person to person.<sup>11</sup> Even the use of the terms “seniors” and “aging” can be problematic given the wide age range they encompass and the variability of changes within this expanse of years. At the same time, information that assists lawyers in better understanding developmental and environmental factors affecting our clients can be helpful. The challenge lies in using this guidance appropriately—neither assuming cognitive decline nor ignoring signs of changing cognitive skills—and treating each client as an individual. Lawyers representing seniors cannot avoid these inevitable tensions; hopefully, this additional information will assist us in navigating this landscape.

Part I of this article summarizes how social science research in other disciplines is impacting the law regarding adolescents and their representation. Part II addresses existing literature offering techniques for representing the elderly and the limitations of that scholarship, which

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9. *See id.*; *see also* J.D.B. v. North Carolina, 131 S. Ct. 2394, 2403-04 (2011); *Graham*, 130 S. Ct. at 2032; *Roper*, 543 U.S. at 572-73.

10. There are obvious differences between the two. All adolescents are still maturing cognitively and not all elders will experience cognitive decline. Cognitive changes in the elderly vary from person to person and do not necessarily follow any uniform trajectory. *See, e.g.*, WILLIAM J. HOYER & PAUL A. ROODIN, *ADULT DEVELOPMENT AND AGING* 7 (6th ed. 2009) (noting new studies showing “substantial diversity among adults [interindividual differences], as well as substantial variability within the same person across time [intraindividual change] and across tasks or situations [intraindividual differences]”).

11. *See, e.g.*, SALTHOUSE, *supra* note 3, at 152 (“Because of the enormous variability of performance within each age range, it is difficult to make predictions about the performance of any given individual.”).

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is helpful but basic, and which fails to inform lawyers of specific cognitive changes that impact their clients. Part III thus examines selected concepts in cognitive psychology addressing how aging may impact memory and decision-making.<sup>12</sup> The goal is to utilize this scientific knowledge to assist lawyers in navigating this challenging terrain, whether it is through facilitating clients' ability to remember critical facts or enhancing clients' decision-making capacity. In light of the science described in Part III, Part IV offers techniques to maximize communications between clients and lawyers given these physiological changes. These suggestions will supplement existing literature and assist lawyers in advancing the rights and wishes of our aging clients.<sup>13</sup>

#### I. DEVELOPMENTAL PSYCHOLOGY IN THE SUPREME COURT'S JURISPRUDENCE

Throughout the past decade, the U.S. Supreme Court has acknowledged research in psychology and the social sciences regarding the psychological differences between mentally impaired and healthy people, as well as between adolescents and adults.

First, in *Atkins v. Virginia*,<sup>14</sup> the Court looked closely at the factor of diminished mental capacity. The Court considered whether the death penalty imposed on a criminal offender who was mentally retarded constituted cruel and unusual punishment prohibited by the Eighth Amendment of the U.S. Constitution.<sup>15</sup> The Court reasoned that people with mental retardation have diminished capacities and that "there is abundant evidence that they often act on impulse rather than pursuant to a premeditated plan. . . ."<sup>16</sup> The Court concluded that these factors did diminish their culpability<sup>17</sup> and ruled that the death penalty was prohibited as excessive punishment under the Eighth Amendment.<sup>18</sup>

A few years later, in *Roper v. Simmons*, the Court addressed the issue of whether the Eighth and Fourteenth Amendments precluded

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12. This article focuses on just two components of cognition potentially impacted by the aging process: memory and decision-making. Other faculties that may change include learning, language, attention, and executive functions. Related topics include personality and emotional changes, the impact of culture and environment, and the topic of cognitive reserve.

13. Although beyond the scope of the article, this exploration of the literature on cognition also may assist judicial and other decision-makers, enabling them to rely on current science and research as legal issues affecting the elderly gain additional prominence amid changing demographics.

14. *Atkins v. Virginia*, 536 U.S. 304 (2002).

15. *See id.* at 307.

16. *Id.* at 317-18.

17. *Id.* at 318.

18. *See id.* at 321.

execution of a juvenile offender for a capital offense.<sup>19</sup> Citing a number of scientific studies, the Court considered cognitive differences between those under 18 and adults,<sup>20</sup> emphasizing that the lack of maturity and underdeveloped sense of responsibility found in juveniles often trigger ill-considered and reckless decisions and actions.<sup>21</sup> The Court also noted that “juveniles are more vulnerable or susceptible to negative influences and outside pressures”<sup>22</sup> and that “the character of a juvenile is not as well formed as that of an adult.”<sup>23</sup> The Court concluded that juveniles could advance a strong argument for failing to escape these negative influences.<sup>24</sup> Following the *Atkins* rationale,<sup>25</sup> the Court found that neither retribution nor deterrence were served by imposing capital punishment, and prohibited the imposition of the death penalty on those offenders who were under 18 at the time of the offense.<sup>26</sup>

Five years later, in *Graham v. Florida*,<sup>27</sup> the Court held that imposing life sentences without parole for non-homicide crimes on juvenile offenders was cruel and unusual punishment under the Eighth Amendment and, consequently, unconstitutional.<sup>28</sup> The Court relied on its reasoning in *Roper*, stating, “[D]evelopments in psychology and brain science continue to show fundamental differences between juvenile and adult minds.”<sup>29</sup> Because of these differences, the Court reasoned that the “penological” purposes of deterrence and retribution would not be served.<sup>30</sup>

Finally, in *Miller v. Alabama* and *Jackson v. Hobbs*—consolidated under the caption *Miller v. Alabama*<sup>31</sup>—the Court once again considered

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19. *Roper v. Simmons*, 543 U.S. 551, 555-56 (2005).

20. *See id.* at 569-70.

21. *See id.* at 569.

22. *Id.*

23. *Id.* at 570.

24. *See Roper*, 543 U.S. at 570 (2005) (citing *Stanford v. Kentucky*, 492 U.S. 361, 395 (1989) (Brennan, J., dissenting)). Moreover, there is a greater possibility that these deficiencies in the character of minors will be reformed. *See id.*

25. *See id.* at 571.

26. *See id.* at 578.

27. *Graham v. Florida*, 130 S. Ct. 2011 (2010).

28. *See id.* at 2034.

29. *See id.* at 2026 (citing *Roper*, 543 U.S. at 569-70).

30. *See Graham*, 130 S. Ct. at 2028 (citing *Roper*, 543 U.S. at 571-72; *Atkins v. Virginia*, 536 U.S. 304, 318-20 (2002)); *see also J.D.B. v. North Carolina*, 131 S. Ct. 2394, 2403 (2011) (in evaluating whether the age of a child subjected to questioning by law enforcement officials was relevant to the custody analysis of *Miranda v. Arizona*, the Court concluded that, because of the cognitive differences between juveniles and adults, “a reasonable child subjected to police questioning will sometimes feel pressured to submit when a reasonable adult would feel free to go” and, therefore, the child’s age should be taken into account).

31. *Miller v. Alabama*, 132 S. Ct. 2455 (2012).

cognitive psychology in adjudicating two similar legal issues. In *Miller*, the Court considered the constitutionality of a life without parole sentence imposed upon a juvenile; in *Jackson* the sentence was for a felony murder offense and in *Miller* for a capital murder offense.<sup>32</sup> The Court held that “mandatory life without parole for those under 18 at the time of their crimes violates the Eighth Amendment’s prohibition on ‘cruel and unusual punishments,’”<sup>33</sup> referencing studies indicating that children are “constitutionally different from adults.”<sup>34</sup>

In these decisions, the law accounts for cognitive changes. While there are indisputably differences in the role of cognitive development in adolescents and seniors, this case law represents a model for considering the role of such changes in the field of elder law and the representation of seniors.

## II. THE LIMITATIONS OF ELDER LAW SCHOLARSHIP IN THIS AREA

Although elder law has evolved substantially over the past few decades as both a legal discipline and a practice area,<sup>35</sup> little scholarship exists on how to represent aging clients who are experiencing cognitive changes due to the aging process. Instead, the majority of legal sources have concentrated on the topic of diminished capacity, omitting discussion of other cognitive effects of aging. Although current sources serve as a starting point for assisting attorneys in representing clients who experience cognitive changes as a result of “normal” aging, they are of limited assistance.<sup>36</sup>

Many of the suggestions for representing clients with potential cognitive decline focus on addressing environmental factors. For

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32. *See id.* at 2460.

33. *Id.*

34. *Id.* at 2464.

35. *See* Nina A. Kohn & Edward D. Spurgeon, *Elder Law Teaching and Scholarship: An Empirical Analysis of an Evolving Field*, 59 J. LEGAL EDUC. 414, 414 (2010) (stating that, “[a]lthough elder law is still a young field, today many American law schools offer elder law courses and attorneys across the country hold themselves out as elder law specialists”); Anthony J. Enea, *What Every Attorney Should Know About Elder Law: A Primer*, 28 WESTCHESTER B. J. 17, 17 (2001) (noting that “the practice of elder law has evolved in the last decade to encompass many diverse areas of law”).

36. Although most social scientists distinguish between dementia and the “normal” effects of aging, some suggest that these so-called “normal” effects are not normal, and are instead the early, asymptomatic developments of dementia. *See, e.g.*, Gwenith G. Fisher et al., *Assessing the Relationship of Cognitive Aging and Processes of Dementia*, in HANDBOOK OF COGNITIVE AGING: INTERDISCIPLINARY PERSPECTIVES 340, 340 (Scott M. Hofer & Duane F. Alwin eds., 2008) (noting evidence that it may not be possible to segregate “normal” from pathological aging processes); Robert S. Wilson, *Neurological Factors in Cognitive Aging*, in HANDBOOK OF COGNITIVE AGING, *supra*, at 298 (“[A]ge-related loss of cognition is not a normal developmental process or an inevitable outcome of old age.”).

example, the American Bar Association's publication *Assessment of Older Adults with Diminished Capacity: A Handbook for Lawyers* offers numerous practical suggestions for accommodating sensory decline in the elderly.<sup>37</sup> Among the suggestions are minimizing background noise, using a low-pitched voice, speaking slowly and distinctly, and using written materials.<sup>38</sup> Suggestions for accommodating cognitive changes include talking at a slower pace, asking simpler questions, and addressing one issue at a time.<sup>39</sup> William Adams and Rebecca Morgan offer a similar practical set of guidelines, suggesting that attorneys remain attentive to their clients' comprehension level at varying times of day and in different settings—e.g., office or courtroom—and be mindful of the impact of various external factors.<sup>40</sup>

Linda Smith offers an alternative approach called "gradual counseling" for those clients who are unable to provide clear direction to their attorneys due to potential capacity issues.<sup>41</sup> She recommends that the attorney should

engage in a process of 'gradual counseling' to assist the client in reaching a decision or to permit the attorney to infer a decision. During this process and any period of uncertainty about the client's competence, the attorney may make any necessary decisions on behalf of her client which maximize the client's options or which can be inferred from the client's values and goals. At the conclusion of the 'gradual counseling' process, the client should have made or the attorney inferred a decision.<sup>42</sup>

The steps of gradual counseling include identifying the client's goals; stating the problem (with feedback from the client); determining the client's values; describing, explaining, and comparing options; and giving the client feedback on potential choices.<sup>43</sup> Smith argues that gradual counseling—the principles of which are supported by

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37. See generally ABA COMM'N ON LAW & AGING & AM. PSYCHOLOGICAL ASS'N, *ASSESSMENT OF OLDER ADULTS WITH DIMINISHED CAPACITY: A HANDBOOK FOR LAWYERS* (2005), available at <http://bit.ly/cBsLZm> [hereinafter ABA HANDBOOK].

38. See *id.* at 28.

39. See *id.*

40. William E. Adams & Rebecca C. Morgan, *Representing the Client Who Is Older in the Law Office and in the Courtroom*, 2 *ELDER L.J.* 1, 22-28 (1994); see also ABA HANDBOOK, *supra* note 37, at 28-29.

41. See generally Linda F. Smith, *Representing the Elderly Client and Addressing the Question of Competence*, 14 *J. CONTEMP. L.* 61 (1988).

42. *Id.* at 82.

43. See ABA HANDBOOK, *supra* note 37, at 30 (discussing Smith, *supra* note 41, at 92-96).



psychological research—will assist some limited clients in reaching and expressing informed decisions to guide their attorneys' actions.<sup>44</sup>

The other extensive body of literature addressing cognitive changes in seniors focuses on capacity assessment. For decades, legal scholars have endeavored to develop a useful framework for capacity assessment.<sup>45</sup> Additionally, there is a plethora of materials designed to assist practitioners with the challenging process of capacity assessment.<sup>46</sup> One of the best tools for evaluating client capacity is the ABA Handbook, which proposes the use of the so-called “markers,” or indicators, which, “when considered together, may reflect diminished capacity.”<sup>47</sup> This assessment tool addresses the cognitive, emotional, and behavioral signs that together may indicate diminished capacity, and it compares the client's understanding in light of the legal definition of capacity for the particular transaction at issue.<sup>48</sup> The ABA Handbook also offers a worksheet to assist practitioners with this evaluation.<sup>49</sup>

The first category of literature described above offers useful and practical suggestions for working with aging clients, but limited techniques that take into account specific cognitive changes. The second category of scholarship is inapplicable to seniors without diminished capacity. This article seeks to fill some of this void, offering more specific communication strategies based on cognitive changes that impact memory and client decision-making.

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44. See Smith, *supra* note 41, at 82, 90.

45. See, e.g., Laura J. Whipple, *Navigating Mental Capacity Assessment*, 29 TEMP. J. SCI. TECH. & ENVTL. L. 369 (2010); Jonathan Herring, *Entering the Fog: On the Borderlines of Mental Capacity*, 83 IND. L.J. 1619 (2008); Nancy J. Knauer, *Defining Capacity: Balancing the Competing Interests of Autonomy and Need*, 12 TEMP. POL. & CIV. RTS. L. REV. 321 (2003); Marshall B. Kapp & Douglas Mossman, *Measuring Decisional Capacity: Cautions on the Construction of a Capacimeter*, 2 PSYCHOL. PUB. POL'Y & L. 73 (1996); Peter Margulies, *Access, Connection, and Voice: A Contextual Approach to Representing Senior Citizens of Questionable Capacity*, 62 FORDHAM L. REV. 1073 (1994).

46. See, e.g., LINDA S. ERSHOW-LEVENBERG, REPRESENTING CLIENTS WITH DIMINISHING CAPACITY: ASSESSMENT, ASSISTANCE AND ADVOCACY (2009), available at <http://bit.ly/110jnd8>; A. FRANK JOHNS & BERNARD A. KROOKS, ELDER CLIENTS WITH DIMINISHED CAPACITY: NAELA'S RESPONSE TO SPECIFIC CASE APPLICATIONS AND ITS DEVELOPMENT OF ASPIRATIONAL STANDARDS THAT MAY CROSS PROFESSIONAL ORGANIZATIONAL BOUNDARIES (2005), available at <http://bit.ly/ZgtbdZ>; Marshall B. Kapp, *Measuring Client Capacity: Not So Easy Not So Fast*, 13-SUM NAELA Q. 3 (2000).

47. See ABA HANDBOOK, *supra* note 37, at 13.

48. See *id.*

49. See *id.* at 14.

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### III. COGNITIVE CHANGES ACCOMPANYING THE AGING PROCESS

Although many changes accompany the aging process, two are particularly relevant to lawyers: changes in memory and changes in decision-making capacity. This section will address these areas as well as how the work of social scientists can improve our lawyering.

All scientists acknowledge that the brain and the mind change throughout life, including during the later years. It is acknowledged that there are varying degrees of change depending on the individual person and depending on the cognitive skill being assessed.<sup>50</sup> Recent research demonstrates that some of these changes coinciding with the aging process are positive.<sup>51</sup> In fact, sociologists have criticized the tendency of most research to focus on speed and memory at the expense of wisdom and judgment, which they describe as the “undernourished stepchildren in the field of human cognition.”<sup>52</sup> They suggest a need to focus on imagination, creativity, and innovation.<sup>53</sup> Other scholars suggest that distinctions between normal and abnormal cognitive aging are misplaced.<sup>54</sup> Finally, researchers are increasingly identifying techniques to both maintain and improve cognitive functioning throughout the aging process.<sup>55</sup>

Despite these developments, much of the literature continues to address the tendency for people to experience cognitive decline as they age. Some research addresses “normal” or “typical aging,” referencing individuals “likely to have some cognitive decline with increasing age but [who] are considered to be functioning in a reasonably normal fashion.”<sup>56</sup> Academic discussions in the legal field focus primarily on individuals with diminishing capacity, including those considered to have “mild cognitive impairment”<sup>57</sup> or dementia.<sup>58</sup> This article,

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50. See SALTHOUSE, *supra* note 3, at 10.

51. See generally COHEN, *supra* note 1; Dale Dannefer & Robin Shura Patterson, *The Missing Person: Some Limitations in the Contemporary Study of Cognitive Aging*, in HANDBOOK OF COGNITIVE AGING, *supra* note 36, at 105; see also HOYER & ROODIN, *supra* note 10, at 258.

52. Dannefer & Patterson, *supra* note 51, at 113.

53. See *id.*

54. See generally Wilson, *supra* note 36.

55. See, e.g., Denise C. Park et al., *Improving Cognitive Function in Older Adults: Nontraditional Approaches*, 62B J. GERONTOLOGY (SPECIAL ISSUE) 45 (2007); SALTHOUSE, *supra* note 3, at 149-67. See generally COHEN, *supra* note 1.

56. Ronald C. Petersen et al., *Aging, Memory and Mild Cognitive Impairment*, 9 INT’L PSYCHOGERIATRICS 65, 66 (1997). “Such patients often have comorbid conditions, but these illnesses and their treatment are considered not to significantly affect the patient’s condition.” *Id.*

57. “Mild cognitive impairment” has been defined as “a state in which a single cognitive function, usually memory, is impaired to an extent that is greater than would be anticipated for age, yet the patient does not meet the criteria for dementia.” *Id.* at 66.

alternatively, focuses only on “normal” age-related cognitive changes and how knowledge of them may improve lawyering techniques.

A. *Changes in Memory*

In the case of memory, this article addresses what has been characterized as the “so-called benign memory losses of healthy aging.”<sup>59</sup> These losses reflect “the interaction of external environmental stimuli and constraints with internal mental operations.”<sup>60</sup> In examining the impact of aging on memory, “it seems that it is the type of mental operation required that is crucial, not the memory system in which the processing takes place.”<sup>61</sup> Memory does not act alone; rather, a variety of cognitive processes are associated with one another, including sensation, attention, perception, and memory.<sup>62</sup>

Several theories have been posited to explain memory decline in the elderly.<sup>63</sup> Possible explanations include a slowing of cognitive operations, decline in attention, and a reduction in the efficiency of “inhibitory processes.”<sup>64</sup> Additionally, neurological testing demonstrates a relationship between impaired memory and “age-related decrements in activity in the brain networks required to perform the task.”<sup>65</sup>

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Many, but not all, of those diagnosed with mild cognitive impairment will advance to dementia. *See id.*

58. Literally, dementia refers to “loss (de-) of cognitive or mental (-mentia) abilities.” SALTHOUSE, *supra* note 3, at 128. A diagnosis of Alzheimer’s disease, the most common form of dementia, is “based on impairment of memory and disruption of at least one additional ability, such as aspects of language, identification of objects, control of motor actions, or abstract thinking and judgment.” *Id.* at 129. The Alzheimer’s Association describes dementia as “a general term for a decline in mental ability severe enough to interfere with daily life.” *What is Dementia?*, ALZHEIMER’S ASS’N, <http://bit.ly/QeW38q> (last visited Mar. 2, 2013).

59. *See* Fergus I.M. Craik, *Guest Editorial: Memory Changes in Normal and Pathological Aging*, 53 CAN. J. PSYCHIATRY 343, 343 (2008) [hereinafter Craik, *Normal and Pathological Aging*].

60. *Id.*

61. *Id.*

62. *See generally* Cheryl L. Grady & Fergus I. M. Craik, *Changes in Memory Processing with Age*, 10 CURRENT OPINION NEUROBIOLOGY 224 (2000); *see also* Craik, *Normal and Pathological Aging*, *supra* note 59, at 343-45.

63. For an interesting analysis of the types of forgetting, see generally Daniel L. Schacter, *The Seven Sins of Memory: Insights from Psychological and Cognitive Neuroscience*, 54 AM. PSYCHOLOGIST 182 (1999) (after describing the “seven sins of memory”—i.e., transience, absent-mindedness, blocking, misattribution, suggestibility, bias, and persistence—the author argues that these are but consequences of a generally adaptive system, enabling us to retain the information we are most likely to need).

64. Grady & Craik, *supra* note 62, at 224.

65. *Id.* at 228.

### 1. Types of Memory<sup>66</sup>

While many are familiar with the classic distinctions between short-term and long-term memory,<sup>67</sup> particularly as applied to seniors, few lawyers are familiar with the more subtle differences in types of memory and how they impact our clients. Familiarity with different types of memory can inform lawyering techniques that will enhance effective attorney-client communications. Psychologist L. G. Nilsson describes five “separate but interacting” memory systems. The first system, procedural memory, involves the “acquisition and use of various kinds of behavioral skills.”<sup>68</sup> The second memory system, the perceptual representation system (PRS), “operates at an automatic and unconscious level” and is used for identifying objects.<sup>69</sup> Semantic memory enables individuals “to acquire and retain general knowledge about the world at large.”<sup>70</sup> Short-term memory includes both the processing and storing of information and is often referred to as “working memory.”<sup>71</sup> It is “memory for the present,” enabling individuals “to hold and process information that is in the focus of consciousness[;] [s]torage is short-lived and temporary, and it operates fully at a conscious level.”<sup>72</sup> Finally, episodic memory “is used for the encoding of personal experiences and conscious recollection of events and episodes of one’s own past”<sup>73</sup> and “retrieval is explicit.”<sup>74</sup> Because episodic memory

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66. Interestingly, many seniors evaluate their memory as being worse than it is. *See* HOYER & ROODIN, *supra* note 10, at 178. Possible explanations of this phenomenon include confusing memory with other physical or mental health issues, ageist attitudes making them more sensitive to memory loss, self-reports that may really be more reflective of their psycho-social environment than their memory, and a general misunderstanding of memory. *See id.* at 178-79. Those who believe their memory is failing usually do not believe they can affect that loss and, therefore, are less likely to implement strategies to retain or prevent future memory loss. *See* Mark A. McDaniel et al., *New Considerations in Aging and Memory: The Glass May be Half Full*, in *THE HANDBOOK OF AGING AND COGNITION* 251, 255 (Fergus I. M. Craik & Timothy A. Salthouse eds., 3d ed. 2008) [hereinafter McDaniel, *Glass Half Full*].

67. *See, e.g.*, Lars-Göran Nilsson, *Memory Function in Normal Aging*, 107 *ACTA NEUROLOGICA SCANDINAVICA* 7, 7 (2003) (describing the classification of memory into short-term and long-term as reflecting the “old way” of dividing memory; a similarly “crude” distinction was between declarative and non-declarative memory).

68. *Id.* at 7-8.

69. *Id.* at 8.

70. *Id.*

71. *Id.* Working memory has also been defined as “performing tasks that entail the active and simultaneous processing and storing of information.” HOYER & ROODIN, *supra* note 10, at 184.

72. Nilsson, *supra* note 67, at 8.

73. *Id.*

74. *See id.*

requires one to go backwards in time, the individual must rely on contextual cues to access the information.<sup>75</sup>

## 2. Impact of Age on Different Types of Memory

Not all memory systems are impacted by advancing age. For example, procedural memory apparently does not decline with age.<sup>76</sup> Seniors tend to retain their habits, and their cognitive performance relies heavily on their accustomed ways of thinking and doing.<sup>77</sup> Studies show that verbal knowledge remains flat<sup>78</sup> or improves with age,<sup>79</sup> and they demonstrate only a slight decline in short-term memory span tasks.<sup>80</sup> The ability to remember prospectively, defined as “memory for activities to be performed in the future,”<sup>81</sup> remains intact with aging under certain circumstances.<sup>82</sup>

Prospective memory requires remembering both that an activity is to be performed and that it needs to be performed at a given time.<sup>83</sup> It often involves the use of a target or environmental event to trigger the action.<sup>84</sup> Psychologists posit that retrieval of the task in these contexts is spontaneous, “in which no attempt is made to voluntarily retrieve the

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75. *See id.* Because episodic memory operates backwards in time, it is sometimes referred to as retrospective memory. *See* Gilles O. Einstein & Mark A. McDaniel, *Normal Aging and Prospective Memory*, 16 J. EXPERIMENTAL PSYCHOL.: LEARNING, MEMORY & COGNITION 717, 717-26 (1990) [hereinafter Einstein & McDaniel, *Prospective Memory*].

76. *See* Fergus I. M. Craik, *Age-Related Changes in Human Memory*, in COGNITIVE AGING: A PRIMER 75, 78 (D. Park & N. Schwarz eds., 2000) [hereinafter Craik, *Age-Related Changes*] (stating that “procedural memory processes apparently are unaffected by aging”).

77. *See* Grady & Craik, *supra* note 62, at 224.

78. *See* HOYER & ROODIN, *supra* note 10, at 179-80.

79. *See* Safa A. Elgamal et al., *Age and Verbal Fluency: The Mediating Effect of Speed of Processing*, 14 CAN. GERIATRICS J. 66, 69-71 (2011) (finding that, in some aspects of verbal knowledge analyses, such as category fluency and processing speed, young people perform better than people of old age; however, the elderly perform better on tests of letter fluency, for example); *see also* Craik, *Age-Related Changes*, *supra* note 76, at 76 (stating that seniors may be superior to younger adults in “word priming, recognition memory, and knowledge of work meanings”).

80. *See* Grady & Craik, *supra* note 62, at 224.

81. Einstein & McDaniel, *Prospective Memory*, *supra* note 75, at 717.

82. *See generally* Mark A. McDaniel & Gilles O. Einstein, *Prospective Memory and Aging: Old Issues and New Questions*, in HANDBOOK OF COGNITIVE AGING, *supra* note 36, at 168 [hereinafter McDaniel & Einstein, *Old Issues*]. Early research on prospective memory suggested that it generally remained intact when “subject-based cues” were used. *See generally* Einstein & McDaniel, *Prospective Memory*, *supra* note 75. However, studies that are more current describe a more nuanced picture. *See generally* McDaniel & Einstein, *Old Issues*, *supra*.

83. *See* McDaniel & Einstein, *Old Issues*, *supra* note 82, at 168.

84. *See* Einstein & McDaniel, *Prospective Memory*, *supra* note 75, at 722; McDaniel & Einstein, *Old Issues*, *supra* note 82, at 170.

intention at the moment that the target event occurs.”<sup>85</sup> Prospective memory is maximized in seniors when the target cue is considered to be a focal cue, one that overlaps with the information relevant to the prospective memory task to be performed.<sup>86</sup> When the cue is non-focal—i.e., “present in the environment but not part of the information being considered by the person”—there are dramatic age differences in prospective memory.<sup>87</sup> Although results differ between studies conducted in laboratories and those conducted in naturalistic settings, in naturalistic studies “there is a significant positive relation between age and prospective memory performance.”<sup>88</sup>

Episodic memory, on the other hand, is likely to decline with age.<sup>89</sup> Although episodic memory involves both familiarity and recollection, these two tasks appear to operate independently.<sup>90</sup> Recollection, which involves “searching one’s memory for contextual details surrounding an event,” is a controlled process, which shows age-related decline.<sup>91</sup> Memory of context, often described as “source memory,” is often impaired in seniors, resulting in challenges remembering past events.<sup>92</sup> “Familiarity, on the other hand, is a more automatic process that requires no active search of memory for contextual information,”<sup>93</sup> and is believed to remain intact throughout the aging process. Studies show that although older adults may have difficulty recalling events and their contexts, they are not limited in their ability to recognize familiar objects or people.<sup>94</sup>

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85. McDaniel & Einstein, *Old Issues*, *supra* note 82, at 170.

86. *Id.* at 172. A good example implementing a focal cue is recommending that a senior needing medication in the morning think of taking the medication while having juice with breakfast. *See id.* at 173.

87. *Id.* at 172.

88. *Id.* at 170.

89. *See* Nilsson, *supra* note 67, at 10. Interestingly, the decline is less predominant in women up to age 70, at which time the gender differences seem to decline. *See id.*

90. *See generally* Emily C. Edmonds et al., *Cognitive Mechanisms of False Facial Recognition in Older Adults*, 27 *PSYCHOL. & AGING* 54 (2012).

91. *Id.* at 54. The term “context” is defined broadly, and more research is recommended on what specific types of contextual information are helpful. *See id.* at 58, 59.

92. Grady & Craik, *supra* note 62, at 227-28.

93. *See* Edmonds et al., *supra* note 90, at 54.

94. *See* Grady & Craik, *supra* note 62, at 224. Increasing reliance on familiarity when faced with the challenges of recollecting can result in seniors being particularly vulnerable to false recollections. *See id.* at 229; *see also* Edmonds et al., *supra* note 90, at 59.

Retrieval is one of the essential components of episodic memory.<sup>95</sup> Grady and Craik describe the retrieval process as follows:

Adequate recollection of an event involves retrieval of some aspects of its original context (e.g. where and when the event took place) and adequate recollection of factual information involves retrieval of the source of the fact (e.g. whether learned in casual conversation or from an authoritative source).<sup>96</sup>

Age also impacts certain aspects of working memory, with more decline as the tasks become more complex.<sup>97</sup> For example, the ability to recall a list of items, often referred to as primary memory, is generally unaffected by age.<sup>98</sup> This is true for tasks that “merely reflect the maintenance of information in mind in a relatively untransformed way for a brief period of time.”<sup>99</sup> This memory is typically measured by the “memory span,” the “longest sequence that the person can repeat back without error.”<sup>100</sup> Cognitive psychologists postulate that this memory technique remains active in seniors because it involves relatively low-level cognitive processes.<sup>101</sup> In contrast, if the task is rendered more complex by virtue of interference, the need to manipulate the information, or the addition of more information, its performance is more likely to decline with age.<sup>102</sup> Tasks that are more complex include comprehension, reasoning, planning, and learning.<sup>103</sup> In a review correlating studies that evaluate changes in memory with neuroimaging experiments, Grady and Craik describe the following findings of some of the studies on working memory:

[T]he difference in performance on primary memory and WM [working memory] tasks is attributable to differences in the complexity of the operations carried out on the information maintained. . . . The results suggest[] that older adults are more susceptible to such interference effects, and that this greater

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95. See, e.g., Yee Lee Shing et al., *Episodic Memory Across the Lifespan: The Contributions of Associative and Strategic Components*, 34 *NEUROSCIENCE & BIOBEHAVIORAL REVS.* 1080, 1081 (2010).

96. Grady & Craik, *supra* note 62, at 227.

97. *Id.* at 226.

98. See Nilsson, *supra* note 67, at 10.

99. *Id.* at 10-11; see also Grady & Craik, *supra* note 62, at 225.

100. Grady & Craik, *supra* note 62, at 225.

101. See *id.*

102. See *id.* at 225-26; see also HOYER & ROODIN, *supra* note 10, at 179-84.

103. See Linda K. McEvoy et al., *Neurophysiological Signals of Working Memory in Normal Aging*, 11 *COGNITIVE BRAIN RES.* 363, 363 (2001).

vulnerability is one of the major reasons for poorer WM in the elderly.<sup>104</sup>

Some of what may appear to be memory deficits are in fact processing deficits, which relate to the encoding, storage, and retrieval components of memory.<sup>105</sup> This “reduction in processing resources”<sup>106</sup> results in more time required to process information.<sup>107</sup> Moreover, the ability to quickly scan one’s memory declines with age.<sup>108</sup> Although studies show that repetition enhances recollection and familiarity, “older people require more time at retrieval to take advantage of the beneficial effects of repetition.”<sup>109</sup> As Hoyer and Roodin write, “[A]ny legitimate theory of cognitive aging must address the centrality of age-related changes in the speed of basic processing and how age changes in processing speed affect higher-order cognitive processes.”<sup>110</sup>

Working memory requires the ability to sustain attention even in the face of distractions<sup>111</sup>—a task known to be difficult for older adults.<sup>112</sup> If a person’s attention is divided, her ability to recall is further diminished.<sup>113</sup> In one study, multi-tasking did not reduce the accuracy of the seniors’ memory, but it did reduce their reaction time.<sup>114</sup> This reduction in reaction time occurred even if the second activity was as innocuous as walking, which was found to channel resources away from memory-encoding processes.<sup>115</sup> Therefore, it is particularly challenging for some elderly people to engage in two tasks simultaneously. Another study measuring working memory found that, although aging adults were only slightly less accurate than younger adults when handling “high memory load tasks,” their reaction time was dramatically slower than that of younger adults and diminished in proportion to the difficulty of the memory load.<sup>116</sup> “Reflecting working memory,” which involves

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104. Grady & Craik, *supra* note 62, at 226.

105. Hoyer and Roodin describe these processes as follows: “Encoding refers to the registration or pickup of information. Storage refers to the retention of information in memory, and retrieval refers to finding or using information in memory.” HOYER & ROODIN, *supra* note 10, at 202.

106. Grady & Craik, *supra* note 62, at 227.

107. *See* HOYER & ROODIN, *supra* note 10, at 187.

108. *See id.*

109. Grady & Craik, *supra* note 62, at 226.

110. HOYER & ROODIN, *supra* note 10, at 225-26.

111. *See* McEvoy et al., *supra* note 103, at 363.

112. *See id.* at 364.

113. *See* Grady & Craik, *supra* note 62, at 226.

114. *See id.* at 228 (describing U. Lindenberger et al., *Memorizing While Walking: Increase in Dual-Task Costs from Young Adulthood to Old Age*, 15 *PSYCHOL. & AGING* 417 (2000)).

115. Grady & Craik, *supra* note 62, at 228.

116. McEvoy et al., *supra* note 103, at 371.



“storage, active processing, and often updating the material held,” is particularly vulnerable to the effects of aging.<sup>117</sup>

Some social scientists suggest that memory deficits are integrally related to sensory deficits and may arise when seniors shift cognitive resources to compensate for sensory deficits.<sup>118</sup> In describing their “effortfulness hypothesis,” McDaniel and colleagues write that people with hearing loss, for example, use some of their processing resources to compensate for the diminished sensory function.<sup>119</sup> “With this extra effort devoted to perceptual processing, however, there will be fewer resources available for rehearsing, elaborating and/or organizing the information, and thus this information will be less memorable.”<sup>120</sup>

Other researchers have identified a different relationship between cognition and sensory loss, suggesting that changes appearing to be memory-related may in fact be sensory changes in disguise.<sup>121</sup> Research demonstrates that sensory and intellectual functioning among seniors decline at similar rates.<sup>122</sup> Similarly, motor functions, such as gait, balance, and grip strength, also correlate highly with intellectual functioning, suggesting that “sensory acuity is simply one indication of the physiological integrity of the aging brain—the ‘common cause’ hypothesis.”<sup>123</sup> A study of younger adults found that they were unable to remember items presented in a noisy background, further supporting this relationship between sensory loss and memory loss.<sup>124</sup>

Advances in neuroimaging enable scientists to better understand the biological changes in the brain that accompany aging and how these developments impact cognition. The decline in specific memory systems is related to physiological changes in the parts of the brain used for various tasks. The cerebral cortex—the largest part of the brain—includes both prefrontal lobes and temporal lobes.<sup>125</sup> The prefrontal lobes perform memory, planning, and other cognitive functions, whereas the temporal lobes consolidate long-term memories, assign emotions, and process auditory signals.<sup>126</sup> This prefrontal cortex shrinks with age and

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117. See Fergus I. M. Craik, *Memory Changes in Normal Aging*, 3 CURRENT DIRECTIONS PSYCHOL. SCI. 155, 155 (1994) [hereinafter Craik, *Normal Aging*].

118. See, e.g., McDaniel, *Glass Half Full*, *supra* note 66.

119. *Id.* at 253.

120. *Id.*

121. See Grady & Craik, *supra* note 62, at 225.

122. See *id.*

123. *Id.*

124. See *id.* at 225 (citing Dana R. Murphy et al., *Comparing the Effects of Aging and Background Noise on Short-Term Memory Performance*, 15 PSYCHOL. & AGING 323 (2000)).

125. See HOYER & ROODIN, *supra* note 10, at 79.

126. See *id.* at 79-80.

can also become damaged.<sup>127</sup> “Age-related brain changes both in structure and in function are well-documented, with declining efficiency of frontal and media-temporal regions being particularly relevant.”<sup>128</sup> Additionally, “there are age-related deficits in the functioning of the pathways or connections between the hippocampus and the prefrontal cortex that cause age-related deficits in memory.”<sup>129</sup> Older adults tend to exhibit “different patterns of frontal involvement in cognitive tasks.”<sup>130</sup> Tasks that in young adults are associated with activation of the right-frontal lobes are associated with both the right and left frontal lobes in older adults.<sup>131</sup> Some studies suggest that “attentional demands are greater for the elderly and lead to recruitment of additional areas [of the brain] for task performance.”<sup>132</sup> Consequently, “[B]rain activity is less lateralized and less localized in older adults than in younger adults.”<sup>133</sup> The result is “a more effortful, controlled strategy”<sup>134</sup> for remembering.

This summary of the impact of age on the various memory systems illustrates that the aging process impacts the various types of memory in different ways. It also suggests that certain techniques will enable lawyers to communicate more effectively with our aging clients, as will be discussed in Part IV.

### *B. Changes in Decision-Making Capacity*

Scholars continue to debate the impact of age on decision-making capacity. A small but recent study of healthy persons age 50 to 79 found “no significant differences in the logical consistency of older and younger individuals.”<sup>135</sup> Other scholars reach similar conclusions, suggesting that seniors are adaptive in choosing decision-making strategies and, therefore, remain able to make appropriate decisions.<sup>136</sup>

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127. *See id.* at 80-81.

128. Craik, *Normal and Pathological Aging*, *supra* note 59, at 344.

129. HOYER & ROODIN, *supra* note 10, at 79.

130. McEvoy et al., *supra* note 103, at 373.

131. *See* Craik, *Normal and Pathological Aging*, *supra* note 59, at 344.

132. Grady & Craik, *supra* note 62, at 229.

133. HOYER & ROODIN, *supra* note 10, at 83-84.

134. McEvoy et al., *supra* note 103, at 373.

135. UNIV. TEX. AT DALLAS CTR. FOR BRAIN HEALTH & METLIFE MATURE MKT. INST., *HEALTHY BRAIN, HEALTHY DECISIONS: THE METLIFE STUDY OF DECISION-MAKING POTENTIAL* 8 (2012) [hereinafter *HEALTHY BRAIN, HEALTHY DECISIONS*], available at <http://bit.ly/YJjmW0>.

136. *See, e.g.,* Darrell A. Worthy et al., *With Age Comes Wisdom: Decision-Making in Younger and Older Adults*, 22 *PSYCHOL. SCI.* 1375, 1379 (2011) (noting different approaches to decision-making by younger and older adults and concluding that, “[a]lthough aging may lead to some cognitive declines, it may also lead to gains in the insight and wisdom needed to make the best decisions”); Stephanie Kovalchik et al., *Aging and Decision Making: A Comparison Between Neurologically Healthy Elderly and*

Some scholars suggest that people actually make better decisions as they age,<sup>137</sup> while others suggest the cognitive changes that accompany the aging process result in worse decisions as people age.<sup>138</sup> Although a full discussion of this research is beyond the scope of this article, there is a consensus that, in many realms, seniors often make decisions differently than younger adults.<sup>139</sup> Knowledge of these alternative decision-making strategies will enable attorneys to better adapt their lawyering to the needs of their aging clients.

### 1. What is Decision-Making Capacity?

There is no consensus on a definition of decision-making capacity. One scholar describes decision-making capacity as involving the following functions: “the ability to (1) express a choice, (2) understand information presented that pertains to the decisions to be made, (3) appreciate the significance of this information with regard to one’s current circumstances, and (4) rationally manipulate the information (reason).”<sup>140</sup> Another team of scholars defines decision-making as “the

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*Young Individuals*, 58 J. ECON. BEHAV. & ORG. 79, 90 (2005) (evaluating the results of a study of economic decision-making and concluding that “decision behavior is robust for at least a subset of the healthy elderly population”); SALTHOUSE, *supra* note 3, at 156 (noting that, despite the low levels of performance on cognitive tests, “age-related declines do not necessarily have a large impact on an individual’s functioning in daily life”).

137. See COHEN, *supra* note 1, at 4 (“Healthy older brains are often as good as or better than younger brains in a wide variety of tasks.”). Cohen argues that “older brains have learned more than younger brains” and “that learning actually causes physical changes in the brain.” *Id.* at 5; see also Worthy et al., *supra* note 136, at 1379 (in choice-dependent decisions, older adults outperformed younger adults); SALTHOUSE, *supra* note 3, at 150 (many seniors “are probably functioning at high levels in their everyday activities despite some declines in basic abilities”); JAMES E. SPAR & ASENATH LA RUE, CLINICAL MANUAL GERIATRIC PSYCHIATRY 32 (2006) (noting a study in which older adults provided more practical solutions to problems than did younger adults, identifying interpersonal problem-solving as a strength for seniors).

138. See, e.g., SUMIT AGARWAL ET AL., BOSTON COLL. CTR. FOR RET. RESEARCH, WHAT IS THE AGE OF REASON? (2010), available at <http://bit.ly/10pwfqM>; Debra E. Henninger et al., *Processing Speed and Memory Mediate Age-Related Differences in Decision-Making*, 25 PSYCHOL. & AGING 262, 267 (2010) (changes in cognitive abilities affects how seniors make decisions and results in impaired decision quality).

139. See, e.g., Melissa L. Finucane et al., *Aging and Decision-Making Competence: An Analysis of Comprehension and Consistency Skills in Older Versus Younger Adults Considering Health-plan Options*, 15 J. BEHAV. DECISION-MAKING 142, 142-43 (2002) (concluding, for example, that older adults seek less information, tend to be more interpretive, depend less on analytical reasoning, and rely more on heuristics).

140. Barry Edelstein, *Challenges in the Assessment of Decision-Making Capacity*, 14 J. AGING STUD. 423, 425 (2000); see also Jason Karlawish, *Measuring Decision-Making Capacity in Cognitively Impaired Individuals*, 16 NEURO SIGNALS 91, 96 (2008).

selection of an action with the aim of producing satisfying outcomes.”<sup>141</sup> They further characterize decision-making as having subjective value and often involving uncertainty, two characteristics that make it difficult to assess.<sup>142</sup> Other scholars discuss “everyday decision making (ACED),”<sup>143</sup> which addresses the capacity to perform tasks such as managing finances, managing medications, and preparing meals.<sup>144</sup>

## 2. Theories about Age-Related Changes in Decision-Making Capacity

A predominant view among scholars is that all individuals select decision-making strategies based upon their cognitive resources and the environment in which the task arises, factors that are intricately intertwined.<sup>145</sup> More specifically, because fluid intelligence<sup>146</sup> declines with age,<sup>147</sup> aging decision-makers are less likely to rely on strategies that involve its components, such as working memory and speed.<sup>148</sup> Instead, they select simpler strategies that require fewer cognitive resources and less information.<sup>149</sup> This theory posits that seniors rely more on “crystallized intelligence,”<sup>150</sup> which does not decline with age.<sup>151</sup> These researchers concluded that “[o]lder adults’ increased

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141. J. Frank Yates & Andrea L. Patalano, *Decision Making and Aging*, in *PROCESSING OF MEDICAL INFORMATION IN AGING PATIENTS: COGNITIVE AND HUMAN FACTORS PERSPECTIVES* 31, 32 (D. Park, R. Morrell & K. Shifren eds., 1999).

142. *See id.* at 32. The authors identify these factors as contributing to the difficulty in developing a decision-making capacity instrument. *See id.* at 32-33.

143. Karlawish, *supra* note 140, at 96.

144. *See id.* The author simplifies the components of this task to include understanding, appreciation, choice, and reasoning. *See id.* at 93.

145. *See* Rui Mata et al., *The Aging Decision Maker: Cognitive Aging and the Adaptive Selection of Decision Strategies*, 22 *PSYCHOL. & AGING* 796, 807 (2007).

146. Fluid abilities refer to “those functions that reflect the capacities for insight into complex problem-solving tasks, independent of sensory modalities and cultural settings.” Duane F. Alwin & Scott M. Hofer, *Opportunities and Challenges for Interdisciplinary Research*, in *HANDBOOK OF COGNITIVE AGING*, *supra* note 36, at 2, 4; *see also* SALTHOUSE, *supra* note 3, at 10 (describing fluid abilities as diffuse “in that they can flow into many different tasks or activities”); COHEN, *supra* note 1, at 111 (describing fluid intelligence as “on the spot reasoning” and “a kind of raw mental agility that doesn’t depend completely on reasoning”).

147. *See* Mata et al., *supra* note 145, at 797.

148. *See id.*

149. *See id.*

150. Crystallized abilities refer to “those functions that result from the investment of fluid abilities in experience and culturally defined tasks.” Alwin & Hofer, *supra* note 146, at 4; *see also* SALTHOUSE, *supra* note 3, at 10 (describing crystallized abilities as “the somewhat stable residue of prior interactions of one’s fluid ability with his or her environment”); COHEN, *supra* note 1, at 112.

151. Mata et al., *supra* note 145, at 797.

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reliance on less cognitively demanding strategies may not always be a drawback, as these simpler strategies may fit particular environments.”<sup>152</sup>

Another well-known scholar, Timothy Salthouse, asks why, given what we know about the cognitive changes that accompany the aging process, there are not greater negative consequences for seniors.<sup>153</sup> Salthouse posits a number of possible theories. First, he suggests that, although cognitive tests evaluate maximal performance, everyday tasks do not require maximal performance.<sup>154</sup> Second, the impact of age-related changes varies depending on the tasks at hand: For those activities that are new and involve “high demands for controlled or deliberative processing,” there will likely be negative age-related effects; “[h]owever, smaller even positive age effects might be expected with familiar activities because as experience increases, performance can be assumed to become less dependent on novel problem solving and more dependent on acquired skills and knowledge.”<sup>155</sup> Salthouse emphasizes that experience assists in several ways. First, through time, individuals develop habitual ways of responding to specific situations, which results in more automatic responses.<sup>156</sup> Automatic responses do not require the individual to utilize working memory or other cognitive functions that may decline with age.<sup>157</sup> Salthouse’s research demonstrated that seniors performed as well as those in other age groups in tasks relying on knowledge, such as crossword puzzles, but less well on tasks relying on analytical reasoning.<sup>158</sup> Additionally, in some situations, greater experience may offset some of the cognitive changes accompanying aging.<sup>159</sup>

Salthouse also argues that most situations in life are familiar and, therefore, seniors rarely need to rely on complicated processing

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152. *Id.* at 807; see also Thorsten Pachur et al., *Cognitive Aging and the Adaptive Use of Recognition in Decision Making*, 24 *PSYCHOL. & AGING* 901, 907 (2009) (finding that, “in spite of age-related deficits in episodic recognition memory[,] the recognition knowledge that people acquired in natural environments is robust in old age and enables the aging decision maker to make similarly good decisions as those made by young adults”).

153. See SALTHOUSE, *supra* note 3, at 150. Salthouse notes that the negative consequences of the aging process identified in laboratories often are not observed outside those laboratories. See *id.*

154. See *id.*

155. *Id.* at 150-51.

156. See SALTHOUSE, *supra* note 3, at 152.

157. See *id.*

158. See *id.* at 153-54.

159. SALTHOUSE, *supra* note 3, at 153. Importantly, although there are certain patterns of cognitive changes that accompany aging, those changes are “not necessarily apparent in every individual.” *Id.* at 152.

functions.<sup>160</sup> Additionally, few tasks in life require only cognitive abilities, which are the abilities most often tested in laboratories.<sup>161</sup> Successful functioning also requires qualities such as “the ability to persuade and control people; traits such as dependability, cooperativeness, energy, promptness, and ambition; and attributes such as energy, physical and mental health, and physical appearance.”<sup>162</sup>

Other scholars agree with these general ideas, some framing the differences in the context of decision-making modes. For example, scholars have described three common decision-making modes: analytic, rule-based, and automatic.<sup>163</sup> They hypothesize that decision modes evolve from analytic to rule-based to automatic, until ultimately the decision-maker develops a habit.<sup>164</sup> When addressing a particular issue, the decision maker will start with the automatic decision-making mode, moving backwards to rule-based and analytic as needed.<sup>165</sup> Each mode requires progressively more analytical skill, and it is hypothesized that seniors will begin with the least demanding process cognitively—the automatic mode.<sup>166</sup>

The benefits of experience in decision-making are further supported in a study concluding that older adults have superior “choice-dependent” decision-making skills compared to younger adults.<sup>167</sup> These researchers hypothesize that most studies measuring decision-making capacity are biased in favor of younger adults.<sup>168</sup> However, they suggest that “older adults’ abilities may be better suited for situations that require higher-order processing of relational dependencies between the sequence of recent choices and the rewards immediately available in the environment.”<sup>169</sup> When choosing options where the optimal result depended on previous choices, older adults outperformed younger adults.<sup>170</sup> The older adults were better able to analyze the rewards structure, enabling them to adapt and respond better to the environment.<sup>171</sup> Noting that choice-dependent decision-making is more

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160. *See id.* at 151.

161. *See id.* at 152.

162. *Id.* Salthouse also posits that individuals make accommodations for the decline in some cognitive functions, enabling them to function just as well as younger people. *See id.* at 155-56.

163. *See* Yates & Patalano, *supra* note 141, at 35-38.

164. *See id.* at 36.

165. *See id.*

166. *See id.*

167. *See generally* Worthy et al., *supra* note 136.

168. *See id.* at 1375-76.

169. *Id.* at 1376.

170. *See id.* at 1379.

171. *See id.*

typical of everyday life decisions, Darrell Worthy and his colleagues concluded that seniors generally develop decision-making expertise. They write, “[A]lthough aging may lead to some cognitive declines, it may also lead to gains in the insight and wisdom needed to make the best decisions.”<sup>172</sup>

#### IV. COGNITIVE CHANGES IN SENIORS AND LAWYERING TECHNIQUES

Just as lawyers assume capacity,<sup>173</sup> we should similarly assume that aging clients retain the cognitive strategies necessary to function and to make both significant and everyday decisions. Simultaneously, substantial research demonstrates that cognitive changes often accompany the aging process, affecting memory and decision-making, among other cognitive functions.<sup>174</sup> Although scholars debate the impact of these changes, all agree that these developmental changes may result in seniors processing information and decisions differently when compared to younger people. This brief synopsis of selected cognitive changes suggests that certain techniques will enhance our lawyering when working with elderly clients whose presentation indicates they may be experiencing these changes.

This information is particularly relevant for the interviewing and counseling process and is most readily discussed in the following categories: (1) Gathering information from clients; (2) providing information to clients; and (3) assisting clients in the decision-making process. Implementing these techniques is time consuming and may feel uncomfortable, particularly given the profession’s complex relationship between time and money, but nonetheless may be critical for enhancing our clients’ role in the representational process.

##### A. *Gathering Information*

Successful lawyering is dependent on effective fact gathering. In providing relevant facts, clients must rely on their episodic and semantic memory systems. Episodic memory requires encoding, retrieval, and recall<sup>175</sup>—activities impacted by slower processing speeds.<sup>176</sup> When interviewing elderly clients, lawyers should be particularly cognizant of

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172. Worthy et al., *supra* note 136, at 1379.

173. See ABA HANDBOOK, *supra* note 37, at 5.

174. See *supra* Part III.

175. See, e.g., Susan R. Old & Moshe Naveh-Benjamin, *Age-Related Changes in Memory: Experimental Approaches*, in HANDBOOK OF COGNITIVE AGING, *supra* note 36, at 151, 154-58 [hereinafter Old & Naveh-Benjamin, *Changes in Memory*].

176. See Grady & Craik, *supra* note 62, at 227-28.

the impact of interference and divided attention on episodic memory.<sup>177</sup> Additionally, when material must be manipulated or a person must process new information while continuing to consider older information, “age-related decrements are typically found.”<sup>178</sup> Because of the negative impact of interference and divided attention,<sup>179</sup> lawyers and clients would benefit from a methodical interviewing process. Avoiding abrupt transitions would facilitate the seniors’ ability to recall past events. When shifting topics, the lawyer should use verbal cues and allow ample time for the client to adjust. Additionally, the lawyer should avoid combining topics and interrelating issues, particularly when it is unnecessary or where the connection between them is not apparent.

The lawyer’s ability to accomplish these goals may be facilitated by proper planning for the meeting in light of this knowledge. Additionally, conducting the interview at a time and place that minimizes distractions helps foster more focused attention and thus facilitates enhanced working memory processes. While some elder law attorneys travel to clients’ homes, anticipating that will be less stressful for clients and, therefore, more likely to enhance capacity,<sup>180</sup> these considerations should be weighed in light of potential distractions existing in the home itself.

As described above, seniors often rely heavily on familiarity rather than recollection when recalling people or past events, due at least in part to the challenge of retrieving the contextual details required for recollection.<sup>181</sup> Many seniors will find it easier to notice people or remember experiences that are familiar to them than to actually recollect a person or an event.<sup>182</sup> Consequently, lawyers should encourage their clients’ reliance on familiarity but supplement this process with recall cues. Additionally, providing extra time may facilitate their clients’ abilities to recollect past events.<sup>183</sup>

Lawyers may ask clients to rely on their prospective memory, i.e., the ability to remember to do something in the future,<sup>184</sup> during the fact gathering process. Although lawyers can collect some critical facts from alternative sources, clients may be the only source of certain information. Additionally, clients provide their own perspectives, analyses, and

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177. See *supra* notes 102-04 and accompanying text.

178. Grady & Craik, *supra* note 62, at 225-26.

179. See *id.* at 227-28.

180. See, e.g., ABA HANDBOOK, *supra* note 37, at 29 (recommending interviews in clients’ homes when possible).

181. See *supra* notes 90-94 and accompanying text.

182. See Grady & Craik, *supra* note 62, at 226.

183. See *id.* (noting that, although non-distinctive encoding assisted younger subjects in recalling events, this was not true for older subjects “unless they had unlimited time to make their retrieval responses”).

184. See *supra* notes 83-88 and accompanying text.



conclusions, all of which are important for lawyers to learn. Lawyers often send letters to clients requesting additional information, ask clients to complete questionnaires, and ask them to bring specific information to subsequent meetings. Responding to requests for additional information requires clients to rely on prospective memory. Early research suggested that both the young and old have difficulty with this task, with both having only a 61 percent success rate in remembering.<sup>185</sup>

Even a limited knowledge of prospective memory enables lawyers to better tailor their requests to clients for additional information. In one study, the use of external aids enhanced prospective memory for both the young and old.<sup>186</sup> Thus, lawyers should encourage clients to rely on external aids and, potentially, create them for their clients. Additionally, research shows that the prospective memory of seniors can be maximized by using event-based, focal cues—i.e., cues related to the prospective memory task to be accomplished.<sup>187</sup> Therefore, lawyers should frame requests for future conduct, such as providing additional factual information or documents, in an “event-based context.” For example, rather than request that a client send in documents by a selected date, the lawyer might ask the client to send the papers in after she has spoken with her daughter about them. The conversation with the daughter functions as the focal cue designed to trigger the spontaneous retrieval process, thereby functioning as a reminder to send in the documents.

Undoubtedly, lawyers representing seniors should monitor their clients’ abilities to hear conversations and to see relevant events and documents; existing literature offers suggestions for maximizing clients’ sensory abilities.<sup>188</sup> These efforts become more critical in light of the possible relationship between sensory deficits and memory. Building on cognitive psychologists’ perspectives that sensation, perception, attention, memory, and cognitive processes are intertwined, some researchers have theorized that sensory deficits “steal” cognitive resources otherwise available for other tasks.<sup>189</sup> This results in memory problems that might not exist but for the sensory decline. The message for lawyers is that accommodations to enhance vision and hearing may serve multiple purposes, including assisting seniors with cognitive processes.

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185. See Einstein & McDaniel, *Prospective Memory*, *supra* note 75, at 724.

186. See *id.* at 720.

187. See McDaniel & Einstein, *Old Issues*, *supra* note 82, at 172-73. Prospective memory is more complicated than depicted here, and researchers believe that different types of prospective memory tasks utilize different cognitive processes. See *id.* at 178.

188. See, e.g., ABA HANDBOOK, *supra* note 37, at 28.

189. See McDaniel, *Glass Half Full*, *supra* note 66, at 253.

*B. Providing Information*

In providing information to elderly clients, lawyers need to be mindful of their clients' abilities to retain the information. Research indicates that older adults have more difficulty recalling "intentionally" learned material—i.e., material required to be used at a later time—than "incidentally" learned material—i.e., material learned without expectation of needing to recall it.<sup>190</sup> One hypothesis is that this relates to ineffective encoding and retrieval processing.<sup>191</sup> Several studies suggest that the length of retention matters.<sup>192</sup> When subjects were asked to retain information for 48 hours, no age-related differences were found; however, when longer retention intervals were used, older adults showed diminished ability to remember.<sup>193</sup> Other studies measure recognition, free recall, and cue recall. The greatest age-related differences were in the free recall study, where study participants were asked to write down names they recalled from a list.<sup>194</sup> There were also large age-related differences in cued recall studies, where participants were presented with "phrase" and "target word" pairs and later provided with one word and asked to recall the cued phrase.<sup>195</sup> In recognition tests, individuals were asked to recall whether a particular name had been on a list they viewed earlier; no significant age-related differences were found in these tests.<sup>196</sup> One explanation of this phenomenon is that the more self-initiated processing required, the harder it is for seniors to accomplish the task.<sup>197</sup>

In light of this discussion, how can lawyers provide information to clients in a manner that facilitates their use of the material? As suggested in the existing literature, providing information in multiple formats, such as verbal and written communications, is helpful.<sup>198</sup> Additionally, although counter-intuitive, avoiding over-emphasis on issues or items to be remembered may in fact enhance recall, in light of the demonstrated better recall for "incidentally" learned material.<sup>199</sup> This strategy may be particularly helpful when combined with memory aids.

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190. Old & Naveh-Benjamin, *Changes in Memory*, *supra* note 175, at 151, 152. *See generally* Barbara L. Chalfonte & Marci K. Johnson, *Feature Memory and Binding in Young and Old Adults*, 24 *MEMORY & COGNITION* 403 (1996).

191. Old & Naveh-Benjamin, *Changes in Memory*, *supra* note 175, at 154.

192. *Id.* at 154-55 (citing studies that illustrate the impact of varying time frames on forgetting).

193. *Id.* at 154-55.

194. *Id.* at 155.

195. *Id.*

196. *Id.*

197. *See* Craik, *Normal Aging*, *supra* note 117, at 155, 156; *see also* Old & Naveh-Benjamin, *Changes in Memory*, *supra* note 175, at 155.

198. *See, e.g.*, ABA HANDBOOK, *supra* note 37, at 28.

199. Old & Naveh-Benjamin, *Changes in Memory*, *supra* note 175, at 151-52.

Offering environmental and other cues may assist clients in their recall.<sup>200</sup> Frequent reminders also may assist, given that the ability to recall diminishes as the retention time increases.<sup>201</sup> Some seniors can readily recall individual items but have increased difficulty when “associative information” is presented.<sup>202</sup> “Associative information . . . involves the binding together of two or more items (e.g., a name and a face) and contexts, or an item and its context. . . .”<sup>203</sup> This inability to bind associated information may explain seniors’ challenges with remembering context,<sup>204</sup> and may be related to inefficient coding and retrieval of information. As suggested above, cued recall may assist clients in these situations and enable us to work with clients to create a “coherent representation.”<sup>205</sup>

### C. *Facilitating Client Decision-Making*

The above discussion of decision-making strategies that seniors often employ also suggests lawyering techniques that can assist aging clients in achieving their goals. This research informs us that seniors are adaptive in their strategy selection, often relying on simpler strategies that use fewer working memory resources.<sup>206</sup> Psychologists hypothesize that, instead, seniors rely on their crystallized intelligence and the less frequently studied cognitive skills of wisdom and judgment.<sup>207</sup>

One important take-away from this knowledge is that aging clients may need less information than other clients to make decisions.<sup>208</sup> Seniors’ ability to make adequate decisions with less information rather than more has profound implications for the lawyers’ counseling function. Contemporary texts on the counseling process emphasize “client centered counseling,” and encourage the attorney to assist the client in identifying the legal and non-legal consequences, both positive

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200. See Craik, *Normal Aging*, *supra* note 117, at 157 (stating that “task support can compensate for the negative effects of aging, to some extent at least”).

201. This is in contrast to a technique used when clients have diminishing capacity. That technique invites the client to explain to the lawyer the information or advice the lawyer has just provided.

202. Old & Naveh-Benjamin, *Changes in Memory*, *supra* note 175, at 156.

203. See *id.*; accord Grady & Craik, *supra* note 62, at 224.

204. See Chalfonte & Johnson, *supra* note 190, at 415.

205. Grady & Craik, *supra* note 62, at 224 (citing Chalfonte & Johnson, *supra* note 190).

206. See *supra* notes 145-52 and accompanying text.

207. See Dannefer & Patterson, *supra* note 51, at 113.

208. See Finucane et al., *supra* note 139, at 143; see also Mata et al., *supra* note 145, at 797.

and negative, of each decision.<sup>209</sup> While, in most contexts, elucidating all of the potential consequences assists the client in the decision-making process, when representing seniors, it may be instructive to limit the consequences discussed. As one team of scholars has written, “[A]nalytical processing such as comparing the strengths and weaknesses of alternative solutions places heavy demand on working memory.”<sup>210</sup> Instead, lawyers should focus the analysis on only the most relevant consequences, information that can be gleaned from the issues the client raises and the client’s values, as revealed in the interviewing and counseling process.<sup>211</sup> Additionally, lawyers should continue to be mindful of the negative impact of interference and distracting ideas on aging clients,<sup>212</sup> and attempt to focus the counseling conversation on the most salient factors without the interference of extraneous issues.

Typical decision-making strategies adopted by seniors also require that they have more time to process the information that is presented than may be required by younger adults.<sup>213</sup> Although seniors are more likely to choose the more adaptive strategy of relying on crystallized intelligence, to the extent seniors rely on working memory, those processes often operate more slowly in them than in younger individuals.<sup>214</sup>

Studies of decision-making modes among seniors also suggest that it matters how lawyers present information or legal concepts to their aging clients.<sup>215</sup> In a study demonstrating variability in seniors’ decision-making preferences, the authors concluded that

older adults’ decisions may be highly sensitive to task context (i.e., how decision information is represented). Changes in the presentation of information—to enable heuristic strategies that reduce processing or memory demands—may in turn ameliorate age-related declines in adaptive decision making.<sup>216</sup>

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209. See generally BINDER ET AL., *LAWYERS AS COUNSELORS: A CLIENT-CENTERED APPROACH* (3d ed. 2011).

210. Finucane et al., *supra* note 139, at 143.

211. See generally Smith, *supra* note 41 (discussing how to assist aging clients in making decisions consistent with their values).

212. See *supra* notes 102-04 and accompanying text.

213. See, e.g., Mata et al., *supra* note 145, at 797 (reporting on research suggesting that, although seniors use less information for decision-making, they “view it longer when making a decision”); see also DAVID SOLIE, *HOW TO SAY IT TO SENIORS: CLOSING THE COMMUNICATION GAP WITH OUR ELDERS* 62-66 (2004) (outlining practical strategies to accommodate many seniors’ lack of urgency that develops from their enhanced perspectives).

214. See generally Henninger et al., *supra* note 138, at 262.

215. *Id.* at 268.

216. *Id.*

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In light of these studies, when lawyers present information in a decision-making context, they should consider a simple presentation, which enables their aging clients to rely on crystallized intelligence without the need for more cognitively taxing challenges. The above ideas are consistent with other research on aging decision-makers, finding that the approach seniors adopt often begins with an automatic mode of deciding and moves to rule-based and then to analytical modes of deciding.<sup>217</sup>

Lawyers representing seniors should not be alarmed when our clients' decision-making styles do not conform to the analytical models to which we are accustomed. Some seniors rely more on the "interpersonal and experiential components of a problem rather than the propositional content."<sup>218</sup> Henninger and her colleagues see this characteristic as contributing to poor decisions.<sup>219</sup> However, others suggest just the opposite: Seniors' tendency to rely less on "traditional" cognitive skills and more on wisdom and judgment<sup>220</sup>—with wisdom defined as "the rich integration of knowledge and vast experiences that serve to guide sound judgment, choices and actions"<sup>221</sup>—results in better decision-making. Sociologists Dale Dannefer and Robin Patterson describe the role of imagination, creativity, and innovation as follows:

These are not esoteric or occasionally occurring characteristics, and they are not the exclusive province of successful innovators and artists. The use of imagination and creativity and the devising of innovation are integral to human activity in everyday life, occurring routinely in ordinary mundane situations that require practical everyday problem solving.<sup>222</sup>

These concepts suggest that lawyers should encourage their aging clients to rely on these unique dimensions that arise from their life experiences, and lawyers should resist imposing more traditional and analytical decision-making styles on them. Valuing clients' wisdom and judgment, even in the face of seemingly irrational decisions, enhances our clients' autonomy and further supports their values.

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217. See *supra* notes 163-66 and accompanying text.

218. Finucane et al., *supra* note 139, at 143.

219. See Henninger et al., *supra* note 138, at 268.

220. Dannefer & Patterson, *supra* note 51, at 113.

221. HEALTHY BRAIN, HEALTHY DECISIONS, *supra* note 135, at 16.

222. Dannefer & Patterson, *supra* note 51, at 113.

## CONCLUSION

Representing clients who are seniors is both rewarding and challenging. They bring their rich array of life experiences, crystallized intelligence, developmental intelligence, and wisdom to the representation and to their lawyers' lives. Sometimes aging clients experience cognitive changes that make it difficult for them to share their concerns, express their wishes, and make choices. One of the attorneys' roles is to assist aging clients in relying on their cognitive strengths and in minimizing the impact of potential cognitive declines. The cognitive changes outlined above and the related recommended lawyering techniques will hopefully facilitate this process.

Acknowledging that the effects of aging are not reversible, cognitive psychologist Fergus I. M. Craik wrote some years ago:

[T]he negative effects of aging can be somewhat ameliorated by the provision of appropriate environmental support. The challenge therefore is to restructure the older person's environment so that such support is available, and to let older people know what they are capable of accomplishing so that they are not inhibited from helping themselves.<sup>223</sup>

While it is highly unlikely that Craik had lawyers in mind when crafting these statements, we are well-advised to heed his sage advice.

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223. Craik, *Normal Aging*, *supra* note 117, at 158.