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# Mapping the Future of Reminiscence: A Conceptual Guide for Research and Practice

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## Abstract

Nearly 50 years after Butler's seminal 1963 contribution, the field of reminiscence and life review is entering a more mature stage. Isolated examples of increasingly sophisticated studies have recently emerged that can serve as a sound, cumulative data base. However, the field lacks an overarching conceptual model describing emerging trends, neglected domains, and key linkages among component parts. In the present article, the authors selectively, yet critically, review prior limitations and promising developments and then describe a comprehensive, multifaceted conceptual model that can guide future research and practice. The authors initially situate their model within a particular theoretical orientation (i.e., life-span psychology). They then describe a heuristic model that identifies and discusses triggers, modes, contexts, moderators, functions, and outcomes. Finally, the authors illustrate how these interactive factors influence both theoretical and applied areas.

## Keywords

reminiscence, autobiographical memory, development, conceptual model, reminiscence functions

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Narrative approaches to understanding the human condition are gaining adherents in the social sciences, including personality (e.g., Hooker and McAdams 2003; McAdams and Pals 2006), mental health (e.g., Bohlmeijer et al. 2007), gerontology (e.g., Kenyon, Clark, and de Vries 2001; Ruth and Kenyon 1996), autobiographical memory (e.g., Bluck 2003; Habermas and Bluck 2000; Pasupathi, Weeks, and Rice 2006) self-development (e.g., Fivush and Haden 2003; McLean, Pasupathi, and Pals 2007; Pasupathi and Mansour 2006), and reminiscence (e.g., Webster 2001). Biographical approaches to gerontology are said to capture more subjective qualities of growing older, what some writers (e.g., Kenyon and Randall 1997) refer to as the “inside of aging,” thus complementing mainstream empirical perspectives that aim to capture “objective” features. One long-standing manifestation of this narrative perspective is reminiscence, defined here as the recall of personally experienced episodes from one’s past.

Reminiscence has continued to attract researchers and practitioners ever since Butler’s (1963) seminal article on the life review. Currently, reminiscence is investigated and/or applied by representatives from myriad disciplines, including nursing, recreational therapy, social work, education, theology, gerontology, and several divisions of psychology (e.g., developmental, cognitive, personality), to name only a few. As such, reminiscence theory, research, and practice are important multidisciplinary topics of relevance to many types of research and application issues. Unfortunately, the potential of reminiscence to inform workers across diverse areas has been jeopardized to some extent by earlier limitations in conceptualization and measurement.

Multiple reviews have noted the relative persistence of vexing problems in this domain (Bluck and Levine 1998; Haber 2006; Molinari and Reichlin 1985; Moody 1988; Puentes 2002; Romaniuk and Romaniuk 1981; Webster 2001; Webster and Cappeliez 1993), many of which continue to plague the field. Nevertheless, there are signs of an emerging sophistication and conceptual clarity in reminiscence work (Webster and Haight 2002), albeit in relatively isolated areas. Examples include more rigorous application of design controls in clinical trials (e.g., Bohlmeijer, Westerhof, and de Jong 2008); the use of more sophisticated statistical techniques, such as confirmatory factor analysis, in the refinement of psychometric instruments (e.g., Robitaille et al. 2010); greater attention to theory and model building (e.g., Cappeliez and O’Rourke 2006); and a more solid grounding of practical reminiscence applications in theory and research (e.g., Gibson 2004; Westerhof, Bohlmeijer, and Webster forthcoming). Our belief is that components of this positive trend can serve as beacons in the relatively murky waters of the reminiscence sea, but

only if they are organized in an integrative fashion. In this way, aspects of reminiscence work that have frequently been investigated in isolation (e.g., style and context, function and outcome) can now be integrated.

The purpose of the present article, therefore, is to identify critical aspects of a relatively comprehensive model of reminiscence and to develop a heuristic framework to guide future research and application. At the outset, we note that although this is a comprehensive review, it is not exhaustive. In a field relevant to, and investigated by, researchers and clinicians from domains as diverse as theology, psychotherapy, anthropology, medicine, social work, psychology, nursing, sociology, and hospice, we cannot adequately cover all possible issues. Some potentially important topics (e.g., neuropsychology) are omitted in our present treatment.

In this endeavor, we attempt to balance comprehensiveness and parsimony. The conceptual framework we introduce is meant to be a description of fundamental elements rather than a rigid prescription for research and practice. Nevertheless, we encourage future researchers and practitioners to be cognizant of the interrelationship among the components during planning phases of projects and to explicitly link multiple elements during the execution and subsequent description of their work. We will accomplish our goal in two parts.

First, in a circumscribed yet critical review of the literature, we identify those pressing theoretical, methodological, and measurement issues that previous reviewers have identified as serious limitations in this area. However, we also note recent improvements in several areas of research; the latter will serve as foundations around which we develop a conceptual framework. Second, these specific elements are elaborated and interconnected in an overall model. Implications for research and application are then illustrated.

## Critical Review

Butler (1963) was the first to underscore the importance of reminiscence and life review in successful adaptation of older adults. Butler wrote about his clinical observation of an increase of reminiscence—the act or process of recalling the past—in older people and postulated that this was due to the universal occurrence of an inner experience or mental process of reviewing one's life. He conceived of life review as a spontaneously or naturally occurring process that is “characterized by the progressive return to consciousness of past experiences, and, particularly, the resurgence of unresolved conflicts” (p. 66). He hypothesized that it is caused by the “realization of approaching dissolution and death, and the inability to maintain one's sense of personal

invulnerability” (p. 67). Although he recognized that people of all ages review their past from time to time and that any crisis may prompt life review, Butler stressed that life review is more intensive and observed more frequently in (early) old age. Later, the concept of life review as a therapeutic intervention was introduced (Butler 1974). Taking an extensive autobiography could help older adults with the developmental task “to clarify, deepen and find use of what one has already obtained in a lifetime of learning and adapting” (p. 531).

Initiated by Butler’s (1963) concept of life review, reminiscence increasingly became the object of scientific research. The relationship between reminiscing and measures of adaptation was further explored (e.g., Boylin, Gordon, and Nehrke 1976; Coleman 1974; Havighurst and Glasser 1972; Lewis 1971; Lowenthal, Thurnher, and Chiriboga 1975; McMahon and Rhudick 1964). In addition, life review was applied as a therapeutic intervention, and the effects on depression, self-esteem, and life satisfaction were studied (e.g., Lappe 1987; Perrotta and Meacham 1981), often with mixed results.

Many reviews of reminiscence research and practice (e.g., Bluck and Levine 1998; Bohlmeijer, Smit, and Cuijpers 2003; Coleman 1986; Haber 2006; Haight 1991; Kovach 1990; Molinari and Reichlin 1985; Romaniuk and Romaniuk 1981; Thornton and Brotchie 1987; Webster 2001; Webster and Cappeliez 1993) have been completed and generally agree on the main limitations in the field. These include (1) a lack of conceptual clarity (e.g., simple vs. evaluative reminiscence, differentiating reminiscence from life review), (2) the lack of evidence for some basic assumptions regarding life review (e.g., that it is universal, that it is biologically triggered by forthcoming death, and that it mainly has an intrapsychic function), (3) the conflicting evidence of the supposed therapeutic effects of reminiscence and life review, (4) a relative paucity of psychometrically sound instruments, (5) poor experimental design (e.g., lack of appropriate control groups, inclusion of potential confounding variables, homogeneous participant characteristics), and (6) unarticulated, or weak, theoretical connections, all of which attenuate any conclusions drawn from empirical evidence. On the basis of these serious limitations, we now turn to a more detailed identification of those factors that must be taken into account in future reminiscence research if we wish to provide a means of producing an empirically sound and cumulative data base.

## Theoretical Orientation

Birren and Bengtson (1988) stated that gerontology is data rich but theory poor. Webster (1999) suggested that the same holds true for reminiscence research. He claimed that

reminiscence researchers have paid scant attention to theory and instead have compiled a loose composite of empirical findings which have, to date, defied theoretical integration. It is rare that research in this area tests specific hypotheses derived explicitly from a particular theory. (p. 30)

Theories not only serve as interpretive templates to help explain inductively generated findings; they also serve to shape the interests and questions deemed appropriate to ask in the first place.

Consider the powerful influence of Butler's (1963) original contention that life review is essentially old age specific and triggered by thoughts of impending mortality. If this is the lens through which researchers and practitioners operate, then questions about alternative instigators of reminiscence, as well as earlier developmental stages, might not even be entertained. Such limited conceptualizations of reminiscence, as we show in this article, are no longer defensible. We believe it is vital, therefore, to place the framework we present within a set of general theoretical parameters.

In our view, a life-span perspective (Baltes 1987) provides the most efficient orientation through which to view reminiscence behavior. Briefly, this "family of propositions" states that development (1) is lifelong (growth can occur throughout the life span); (2) is multicausal (biopsychosocial conditions reciprocally influence development); (3) is multidirectional (behaviors can change in their direction, rate, and frequency); (4) is best understood in a multidisciplinary fashion; (5) involves plasticity (the notion of reserve capacity); (6) involves both gains and losses in differing proportions over adulthood; and (7) is embedded in hierarchic, mutually interactive contexts (individual, historical, cultural).

Briefly elaborating these propositions in relation to reminiscence is instructive. Webster (1999) argued that reminiscence can occur across the life span and is multicausal (intrinsic psychological motivations interact with social prompts), consistent with propositions 1 and 2. Certainly, reminiscence behaviors can change in frequency and duration depending on situations, consistent with proposition 3. Proposition 4 is strongly supported by the multiple disciplines that invest resources in reminiscence research. Clinical evidence concerning dementia, consistent with propositions 5 and 6, shows that even during late stages of this disorder, lucid episodes of meaningful reminiscence can still, albeit briefly, appear. Finally, as we detail in this article, reminiscence processes and outcomes may look different depending on cultural and historical contexts, consistent with proposition 7.

Consistent with such propositions, some general orienting questions about reminiscence arise. Under what conditions, contexts, and times is reminiscence

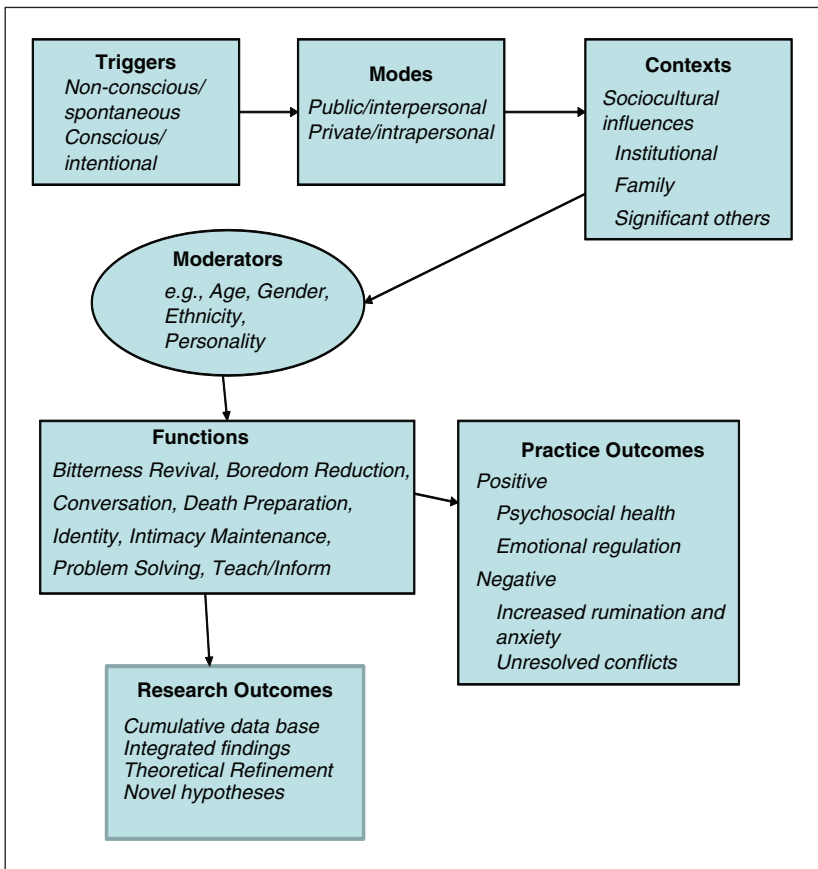
most likely to occur? What are some of the developmental milestones in the use of reminiscence over the life span? Who engages in this process most frequently, and for what purposes or functions? How do individual difference variables such as gender, personality, and culture moderate or otherwise influence the manifestation of reminiscence outcomes? What are the cognitive and underlying neuropsychological processes involved? How do history and cohort effects complicate our interpretations of reminiscence behavior? Given emerging evidence in the field, it is clear that reminiscence behavior is much more broad, complex, and organic than originally thought. Life-span propositions neatly capture much of this diversity and increased sophistication, and we invite researchers to interpret their findings with a life-span perspective in mind.

On the basis of this skeletal outline, we can now attempt to flesh out some of the most important components of a heuristic model. Figure 1 presents the basic model that informs the discussion to follow. Arrows merely indicate the sequence in which the components are discussed rather than a strict theoretical statement about the order and/or importance of the components. We discuss the interactive nature of the components in later sections.

## A Heuristic Model of Reminiscence

Humans have a capacity, perhaps even a need (e.g., Blinder 2007; Bruner 2002; Freeman 1993; Kenyon et al. 2001), to retrieve, articulate, and disseminate self-narratives. Memories can be seen as the building blocks of these narratives (Bluck 2003). Some factor must initiate this process, a component we call *triggers*. Once memories are primed, we work with them at a private or public level, a distinction we refer to as *modes*. Memories do not occur in a vacuum but rather are situated in various social *contexts*, the third category in our model. These elicited and situated memories are filtered through a series of individual differences variables that have the power to *moderate* many important characteristics. Next, reminiscences serve a purpose beyond simple recall; that is, they operate to allow a person to achieve some psychosocial goal. In other words, reminiscence serves particular *functions*. Finally, remembering our pasts for a specific reason (i.e., function) produces an *outcome*, such as bolstering a person's sense of mastery or self-esteem. As Butler (1963) speculated, and subsequent research verified, these outcomes can be both positive and negative.

We discuss these components in the order just described for didactic purposes and issues of clarity, recognizing full well that no such strict sequential ordering necessarily occurs in real life. In fact, we maintain that each component is dynamically related to all others in some reciprocal fashion, such that



**Figure 1** A heuristic model of reminiscence components

components described near the end of the model influence elements near the beginning and middle, and vice versa. Examples of such reciprocal interaction are described later. We turn now to those factors that initiate the reminiscence process.

### Triggers

Proust’s (1934) evocative depiction of the cascade of images, emotions, and cognitions subsequent to smelling the “petite madeines” illustrates one potent trigger of reminiscence:

But when from a long-distant past nothing subsists, after the people are dead, after the things are broken and scattered, still, alone, more fragile, but with more vitality, more unsubstantial, more persistent, more faithful, the smell and taste of things remain poised a long time, like souls, ready to remind us, waiting, and hoping for their moment, amid the ruins of all the rest; and bear unfalteringly, in the tiny and almost impalpable drop of their essence, the vast structure of recollection. (p. 36)

*Nonconscious or Spontaneous Triggers.* Research has empirically supported the eloquent, yet anecdotal, writing of Proust (1934). For instance, olfaction and memory have been shown to be intimately and powerfully linked (e.g., Herz 2004). But the sense of smell is but one of a virtually unlimited number of prompts to recall our past. Any sense modality (the touch of a hand, the sight of a sailboat, the sound of a train whistle, the smell of popcorn) has this potential. Practitioners of reminiscence interventions with older adults have implicitly taken advantage of certain prompts to memory to stimulate recall; some of the more common and effective triggers in this context have now been identified (e.g., Bender, Bauckham, and Norris 1999; Burnside 1995; Gibson 2004). In addition, internal processes (e.g., fleeting images, emotions, daydreams) can also engender specific autobiographical recall. An intriguing recent study by Cappeliez (2008) illustrated that dreams reflecting identity concerns conform to the well-known reminiscence bump phenomenon (i.e., a disproportionate recall of memories from the time when respondents were between the ages of 10 and 30 years).

These classes of prompts (i.e., nonconscious or spontaneous) may share certain general features. For instance, they may be more passive, less goal focused, and less effortful. Limited research (e.g., Berntsen 1998) exists examining the qualities of such reveries. Given their spontaneous nature, and lack of evaluative analysis, reminiscences evoked nonintentionally may differ in emotional intensity and valence relative to memories triggered for particular purposes. For instance, Schlagman, Kvavilashvili, and Schulz (2007) recently reported that involuntary (i.e., spontaneous) autobiographical memories are more specific, less rehearsed, and more positive than voluntary (i.e., intentional) autobiographical memories.

*Conscious or Intentional Triggers.* In contrast, we can be directly asked to share some earlier adventure, story, or personally amusing anecdote with others. Or we may intentionally engage in reflecting on past experiences for a particular reason, such as remembering a past success. This class of triggers (i.e., conscious or intentional) seems to include more active, effortful, and deliberate search processes (e.g., Conway and Pleydell-Pearce 2000; Reiser, Black, and



Kalamarides 1986). Recall is a means to an end rather than an end in itself. For instance, successfully retrieving a memory of a prior argument with a coworker helps prepare one for future interactions with this individual; the goal here is not just to recall specific episodic content but to use this information as part of a present, or anticipated future, coping strategy.

In summary, there must be some elicitor of reminiscence, an initial trigger that starts the recall process. Because virtually any external or internal prompt can serve this function, it is understood that the triggers of reminiscence are legion. We can begin to parse the possibilities by nominating and investigating relevant dimensions. Both theoretical conjectures and limited empirical evidence suggest that one broad dimension is the one between conscious or intentional and nonconscious or spontaneous (e.g., Cappeliez and Webster under review). Within each category, facets such as memory specificity, emotional valence, frequency of recall, temporal distribution, and personal salience could provide important insights into reminiscence content and process. Once memories are triggered, how do we deal with such resurrected information? This question is addressed below.

## *Modes*

What happens to memories once they are triggered? In terms of modes, there are only two possibilities. Individuals either share, via storytelling, such memories in an interpersonal style, or they reflect privately on retrieved episodes in an intrapersonal style. Such a division immediately prompts questions concerning possible differences in the dimensions of told versus untold reminiscences. For instance, frequency of recall, elaboration, personal salience, triggers, and emotional valence are only some of the potentially important differences. Work with veterans, for instance (e.g., Shaw and Westwood 2002) has shown how the horrific experiences of war remain unspeakable for years after their occurrence. For many veterans, these images continue to be raw and ragged reminders of the nadir of their existence and hence remain ineffable. This of course presents a research conundrum; if we seek to elicit private, heretofore untold memories, they then become by definition told. It is possible, therefore, that truly private, intrapersonal reminiscences differ in fundamental ways from socially transmitted memories. This limitation may be attenuated somewhat by two factors. First, people actually do divulge incredibly intimate, profoundly personal narratives of both positive and negative natures. Second, as Pasupathi (2007) noted, the majority of memories are in fact shared eventually, although this statement needs to be further substantiated (e.g., Alea 2010). Recent evidence (e.g., Pasupathi, McLean, and

Weeks 2009), for instance, has shown that what is, and is not, disclosed concerns emotionality and whether recalled events are perceived as transgressions or not.

## Contexts

*Sociocultural Influences.* Reminiscence does not occur in a vacuum; rather, our memories are triggered, negotiated, and situated within particular contextual parameters. From creation myths, legends, and folk tales to autobiographies and reminiscences, culture provides the parameters within which narratives are germinated, developed, and socially enacted. Sociocultural norms and values provide overriding scripts that serve as templates for individual life stories. McAdams (2006), for instance, suggested that a particularly American script is one of generativity in which redemption plays a vital role.

McAdams and Adler (forthcoming) noted,

Different cultures allow for varying degrees of innovation in the construction of a narrative identity, but all cultures place limits on what can be told. More importantly, cultures set the full storytelling agenda for lives. They specify the very parameters of story coherence and comprehensibility. (p. xx)

What, then, are the psychosocial consequences of different memory patterns for various ethnic groups? Are there associated differences in mental health or sense of identity as a consequence of cultural practices? Does a particular process or function that produces a “negative” outcome within one culture necessarily produce the same within a different culture? Are there reminiscence “universals”?

*Institutional.* In addition to possible ethnic differences, institutional aspects of culture such as religious and geopolitical contexts can strongly influence reminiscence processes and outcomes via their sanctioning functions. For instance, Halbertal and Koren (2006) illustrated how conflicting narratives of Orthodox Judaism and gay/lesbianism jeopardized identity formation. At the extreme, collective memories of entire groups can be silenced (e.g., Lev-Aladgem 2006; Marks 2007).

Particular canonical narratives linked to specific mores help determine the types of memories deemed appropriate. Keller (1997), for instance, discussed the difficulties many older Germans had with remembering elements of Nazi Germany during World War II. Thus, it appears evident that individual life stories and their reminiscence building blocks are shaped by many interacting levels of influence, with culture being the most expansive.

*Family.* Even within the more intimate “institution” of the family, certain dynamics operate to give privileged place to some memories, but not others. Family collusion, power plays, and implicit rules influence which version of a memory gets to be told. As Thorne and Nam (2007) asserted, important others “challenge the meaning and perhaps the veracity of our stories; they guilt-load us and silence us” (p. 122).

Webster (2002) developed the Family Memories Index to assess the variation among families in the value they placed on shared reminiscences. Results confirmed that wide latitude exists in this important family practice and that this group process is related to individual uses of reminiscence. As one example, he reported a positive correlation between the Family Memories Index and the Reminiscence Functions Scale (RFS; see “Functions” below for a full description of the RFS) factors of Conversation, Identity, Intimacy Maintenance, and Teach/Inform, findings that have subsequently been replicated (Webster 2007). Recently, Bohanek, Marin, and Fivush (2008) found that emotional expression and explanation of shared family reminiscences by mothers (but not fathers) contributed to the development of positive self-esteem and adjustment in preadolescent children two years later.

*Significant others.* Even the influence of a single individual is powerful enough to modify shared personal memories. This is clearly illustrated in the research on parent-child reminiscing (e.g., Fivush, Haden, and Reese 2006; Reese and Newcombe 2007), in which parents act as “scaffolds” for the emerging autobiographical memory-telling skills of their children. Other factors, such as listener characteristics, as well as speaker goals and abilities, reciprocally interact to shape reminiscence outcomes (e.g., Marsh and Tversky 2004). Work by Pasupathi and Carstensen (2003) on joint marital reminiscing and conceptual work by Bluck and Alea (2002) attest to the importance and widespread manifestation of co-constructing narratives. It is apparent from this work that we may restrict some types of memories to specific individuals (e.g., confidantes, spouses, spiritual leaders) and retrieve different memories to share with others. The who, what, and why types of questions these results stimulate are important areas for future research.

### *Moderators*

There is a whole class of variables that can potentially influence reminiscence occurrence, process, and outcome. These individual difference variables include those that either change slowly and predictably (e.g., age), are stable (e.g., personality), or are fixed (e.g., gender and ethnicity). Typically, these factors have been neglected in previous reminiscence research. Nevertheless,

there is a trend for contemporary studies to include one or more of these important factors.

*Age.* For instance, it is now well established that reminiscence is a life-span process not restricted to elderly adults. Decoupling reminiscence from earlier Eriksonian perspectives and Butler's (1963) contention that reminiscence and life review are prompted by concerns of death at the end of life has opened the door to investigate reminiscence over the entire life span. Investigating reminiscence outside of exclusively older adult samples, however, is still unfortunately infrequent. Instead, there are two literatures that focus on opposite ends of the age span, with very little cross-referencing.

For instance, there is a robust area of research in childhood reminiscence. These studies (e.g., Fivush et al. 2006; Nelson and Fivush 2004; Reese and Newcombe 2007; Q. Wang 2007) have demonstrated how reminiscence in young children (typically three years of age at the start of studies) is related to a host of important developmental milestones concerning language skills, sense of identity, narrative abilities, autobiographical memory skills, and socioemotional development, to name only a few. This body of research is typically both conceptually and methodologically sophisticated and can therefore serve as a model for future research. Unfortunately, rarely, if ever, does this corpus of work reference reminiscence research from the adult literature. This limits the generalizability of the findings and misses opportunities to link this literature with earlier work on reminiscence in older adulthood. These isolated archipelagos of empirical data need to be joined; clearly, reminiscence does not emerge full blown in later life, and neither does reminiscence initiated in the second and third years of life wither away to nothing after childhood. It is imperative if we are to develop a complete understanding of reminiscence that both the childhood antecedents and adult sequelae are integrated into a comprehensive model.

To illustrate, how does the relatively global, undifferentiated social reminiscence (e.g., Nelson 1993) seen in three-year-olds gradually differentiate into the myriad types of reminiscence seen in adulthood? When do children start to internalize social reminiscence and use their autobiographical memories to support intrapersonal functions such as problem solving and sense of identity? At what point do children begin to engage in a type of reminiscence function noted in the adult literature called bitterness revival, a type of rumination with potentially negative psychosocial consequences?

From the other end of the chronological spectrum, investigators need to be aware that reminiscence patterns, frequency, and adaptiveness seen in elderly adults have emerged over time, and have been refined, reinforced, and shaped

over an entire life course. Perhaps older adults who reminisce frequently had childhoods in which reminiscence was modeled, rewarded, and strengthened by the types of complex interaction patterns and didactic practices illustrated in the childhood reminiscence studies reviewed above.

Other studies have focused on the role of reminiscence in the identity formation of adolescents (e.g. Habermas and Bluck 2000; McLean and Thorne 2003). McLean and Thorne (2003) found that the formation of identity in adolescents was related to important memories of the relationship of their parents. Habermas and Bluck (2000) reviewed how the formations of different types of coherence in the life stories of adolescents are related to social-cognitive developments.

We know from limited, yet consistent, findings from adult life-span studies (e.g., Cappeliez, Lavalley, and O'Rourke 2001; Webster 1993, 2002, 2003; Webster and Gould 2007; Webster and McCall 1999) that young, middle-aged, and older adults differ in the frequency of reminiscing for particular purposes, with older adults, for instance, reminiscing more for teaching, intimacy maintenance, and death preparation purposes relative to younger adults. In contrast, young adults tend to reminisce more for bitterness revival, problem solving, and identity relative to older adults. It appears that, bearing in mind the limitations of the cross-sectional nature of these findings, private, intrapersonal functions dominate in younger adulthood, while public, interpersonal functions progressively take over in later life. Continued investigation needs to determine why this occurs. Most likely there are several reasons. One possibility, for example, is that "social reminiscing may thus represent a powerful emotion regulation strategy for meeting the emotional goals of later life" (Pasupathi and Carstensen 2003:431).

**Gender.** The relationship between gender and reminiscence behavior is complex, with some studies finding differences between men and women while others do not. Nevertheless, whenever gender differences do emerge, they typically arise as a result of women's scoring higher on measured variables. For instance, studies have (1) found a marginally significant trend for women to report a greater number of significant life events than men (de Vries, Blando, and Walker 1995), (2) shown that women score higher on the RFS factors of Identity, Problem Solving, Conversation, and Intimacy Maintenance (Webster 1995) or higher on Identity and lower on Bitterness Revival (Webster and McCall 1999), and (3) demonstrated greater specificity in, and higher valuing of, purposeful reminiscence, specifically the RFS factors of Identity and Intimacy Maintenance (Pillemer et al. 2003). In contrast, Webster (2002) failed to find gender differences on the RFS, and Pasupathi and

Mansour (2006) found no gender differences in autobiographical reasoning. This inconsistency can be explained in part by differences in methods, measures, and study hypotheses. Moreover, gender effects may be attenuated or disguised by other more powerful variables included in studies (e.g., age, personality).

One area in which gender differences in reminiscence are less ambiguous and more consistent is the childhood reminiscence area. Children begin social reminiscing as soon as language skills support this process. The relevance of this for understanding gender differences is that several studies (e.g., Peterson et al. 2007; Reese and Newcombe 2007) have shown that parents act as scaffolds for reminiscence behavior by eliciting, editing, and reinforcing autobiographical recall in structured ways. Particularly germane is the finding that parents (primarily mothers) engage their male and female children differently when reminiscing (e.g., Fivush et al. 2003, 2006; Reese et al. 1993). Girls are encouraged and rewarded for elaborative reminiscences, providing rich and detailed recall of personally important past events. Mothers model to their daughters an enjoyment of reminiscence and the importance of weaving autobiographical details into an emerging life story.

*Ethnicity.* There has been very little attention paid to the potential effects of race in the adult reminiscence literature. This is unfortunate, because “memory sharing may be dramatically different in cultures that emphasize human individuality and uniqueness rather than collectivity and interpersonal enmeshment” (Pillemer 1998:177). The vast majority of early studies were conducted primarily with Caucasian participants, and when multiple ethnic groups were included in the sample, no analyses were performed examining possible differences between, or among, ethnic groups. This is unfortunate, because we know that culture and ethnicity produce, or at least influence, several important outcome variables in many domains (Leichtman, Wang, and Pillemer 2003; Markus and Kitayama 1991).

In an early study, Merriam (1993) examined nearly 300 older adults from the Georgia Centenarian Study on various uses of reminiscence. Relative to whites, blacks scored higher on all 9 of the 17 items that showed statistically significant differences, such as using reminiscence to understand themselves and to teach others about their past. Norman, Harris, and Webster (2001) found similar results, reporting that blacks scored higher on the RFS factors of Identity and Teach/Inform. This consistency, despite different measures of reminiscence, suggests a real difference in the frequency with which these two cultural and ethnic groups engage in reminiscing for particular purposes.

Why this may be so remains an open question, although one interesting possibility concerns the ostensibly stronger oral tradition of African Americans. A second intriguing hypothesis, suggested by work reviewed by Ochs and Capps (2001), is that African American children from working-class backgrounds “are encouraged to tell interesting personal narratives that amuse or otherwise impress an audience” (p. 77). Other ethnic groups (e.g., Hispanic) are also considered to have strong oral traditions, and further work needs to directly compare reminiscence behaviors among multiple groups.

Webster (2002) found that Chinese Canadians scored higher on the RFS functions of Teach/Inform, Death Preparation, Conversation, Boredom Reduction, and Bitterness Revival, relative to white Canadians, but was unable to offer a compelling explanation for these results beyond invoking potential differences between individualistic and collectivist cultures.

In the childhood autobiographical literature, Qi Wang (2006, 2007) found that Chinese children, relative to White American children, had later first memories and remembered less detailed autobiographical information. These results are consistent with other non-European cultural groups, such as New Zealand Maori mother-child dyads, as well (e.g., Hayne and MacDonald 2003).

In summary, there exists a largely untapped, and potentially informative, research area concerning ethnic differences and similarities in reminiscence behavior. The very limited evidence suggests an intriguing difference between Caucasian majority individuals and ethnic minority individuals in the purposeful retrieval of specific types of memories (i.e., to teach life lessons) and possibly even cognitive dimensions such as earliest memory retrieval capability (at least insofar as the childhood literature suggests).

**Personality.** Personality is a powerful and pervasive individual difference variable that influences many important components of motivation, health, relationships, career choice, and a host of other factors related to successful functioning. Nevertheless, it has received limited systematic attention in the reminiscence literature. Recently, Hooker and McAdams (2003) developed a hierarchical model of personality that explicitly includes reminiscence as a vehicle for the development and expression of the life story. Personality, in this model, is conceived of as an interaction between three levels, ranging from the traditional traits at the most specific level, through short-term goals and life plans at the intermediate level, to autobiographical memory manifested in self-narratives at the most general level. The model suggests that the type of memories selected, the nature of their dissemination, and their intended outcome are all partially determined by variables operating at the basic and intermediate levels. For instance, we could hypothesize that the

trait of extraversion makes it more likely that individuals will share retrieved memories with friends and colleagues and, moreover, that these exchanged stories will be of a particular emotional valence (e.g., humorous, exciting) that serves to reinforce particular positive qualities in the teller. In fact, McLean and Pasupathi (2006) recently documented that extraverted participants shared self-defining memories with more people and enjoyed these mutual reminiscences more than introverts.

Consistent with such suppositions, earlier work (e.g., Fry 1995; Webster 1993, 1994) indicated that components of the Big Five (Costa and McCrae 1992) model of personality were associated in predictable ways with certain reminiscence variables. For instance, neuroticism was positively correlated with a ruminative type of reminiscence, and social functions were correlated with extraversion. Fry (1995) developed a sophisticated model of reminiscence emphasizing an interactional perspective, whereby multiple variables reciprocally influence each other. Her work has been underappreciated and we would encourage researchers to examine her model for specific hypotheses and concepts. She found, for instance, that traits such as empathy, optimism, humor, and openness predicted positive forms of reminiscence (e.g., integrative and instrumental), whereas traits such as external locus of control, perfectionism, and self-derogation predicted negative forms of reminiscence (e.g., obsessive and escapist). Subsequent studies (e.g., Cappeliez and O'Rourke 2002, 2006; Cappeliez, O'Rourke, and Chaudhury 2005; Cully, LaVoie, and Gfeller 2001) have found essentially similar outcomes.

The preceding work is important because it illustrates a vital link between relatively stable person characteristics (traits) and reminiscence processes that may be more contextually triggered and dynamic (states) broadly supporting concepts identified by McAdams and Hooker (2003). Moreover, it alerts us to the fact that not everyone is predisposed to reminisce to the same extent or for the same purposes.

## *Functions*

It should be evident from the preceding discussion that reminiscence is not an end in itself. Moreover, as Cohen and Taylor (1998) averred, "it proves unhelpful to consider the frequency of reminiscence without breaking it down into different types with different functions" (p. 605). As a form of episodic memory (Tulving 1972), the retrieval of particular autobiographical elements allow us to achieve some specific goal beyond that of simple recall. Therefore, "the next step in this line of research is to explore the potential for different functions served by reminiscence" (Parker 1999:155).



By remembering salient information, we connect with others, feel good about ourselves, overcome negative emotions, render current problems manageable, and consolidate a developing autobiographical narrative and sense of identity, among myriad other purposes. Bluck and Alea (2002) stated that researchers “and practitioners who develop, use, and evaluate reminiscence techniques need to understand functions so as to be able to understand or predict the types of outcomes that thinking about the past might have for participants” (p. 63).

Several classification attempts have been made in an effort to capture relatively distinct uses of reminiscence (see Webster and Haight 1995 for a review) involving either qualitative coding of narrative transcripts or quantitative analysis of questionnaire data. As an example of the former, Wong and Watt (1991) identified six types of reminiscence—integrative, instrumental, transmissive, narrative, escapist, and obsessive—and reported that only the first two types were associated with measures of successful aging. Unfortunately, relatively few follow-up studies have used this narrative coding scheme, so the promise of this approach has not been fully realized to date.

In terms of quantitative approaches, the measure most consistently used until now is the RFS (Webster 1993, 1997, 2003; Webster and Gould 2007). It has the advantage of ease of use in research studies and has developed a record of psychometric consistency in terms of various forms of reliability, validity, and factorial structure (e.g., Coleman 2005; Robitaille et al. 2010). The RFS identifies eight types of reminiscence uses: Bitterness Revival (rehashing and ruminating on memories of difficult life circumstances, lost opportunities, and misfortunes), Boredom Reduction (using memories to fill a void of stimulation or interest), Conversation (communicating personal memories as a form of social engagement), Death Preparation (using memories to deal with the thoughts of one’s life coming to an end), Identity (using personal memories in the search for coherence, worth, and meaning in one’s life and to consolidate a sense of self), Intimacy Maintenance (holding onto memories of intimate social relations who are no longer part of our lives), Problem Solving (using the past to identify former strengths and coping techniques to apply to current challenges), and Teach/Inform (sharing memories to transmit a lesson of life and share personal ideologies).

As such, the RFS is a relatively comprehensive measure of multiple reminiscence uses. Moreover, the RFS captures the uses identified in earlier taxonomies, including the qualitative categories of Wong and Watt (1991). Furthermore, the RFS has good convergent validity with the recently developed scale, Thinking About Life Experiences (Bluck et al. 2005), from the autobiographical memory area, with the advantage that it does not reduce the

possible functions of reminiscence to only three categories (i.e., self, social, and directive), thereby eliminating discriminative power, as does the Thinking About Life Experiences scale.

Several studies reviewed previously (e.g., Cappeliez and O'Rourke 2002, 2006; Cully et al. 2001; Webster and Gould 2007) have shown how different RFS functions are predictably associated with specific variables such as age, personality, life satisfaction, the temporal distribution of memories, the emotional valence of recalled memories, and various mental health outcomes (both positive and negative; see Westerhof et al. forthcoming). A few additional examples will help illustrate the importance of looking at functions and how they are interrelated to other model components.

For instance, Blankenship, Molinari, and Kunik (1996) demonstrated how certain RFS functions (e.g., Bitterness Revival, Boredom Reduction) were significantly higher in a group of geropsychiatric inpatients compared with a community-residing sample, illustrating the importance of context (i.e., institutional vs. community setting) in the uses of reminiscence. Molinari, Cully, Kendjelic, and Kunik (2001) (with geropsychiatric patients) and Webster (1998) (with community residing participants) both illustrated that securely attached persons scored higher on the RFS function of Teach/Inform, suggesting a link between attachment history and willingness and/or ability to pass on life lessons to others. Moreover, in the same study, Webster found that securely attached persons scored lower (relative to insecurely attached adults) on Bitterness Revival, suggesting that relatively stable traitlike moderators influence the emotional tone of autobiographical recall.

More recently, Cappeliez, Guindon, and Robitaille (2008) demonstrated how different reminiscence functions, as measured by the RFS, can either amplify or reduce associated emotions. For instance, intimacy maintenance functions are initially associated with positive affect, but these emotions subsequently become more negative and ruminative as reminiscing continues. Such research provides valuable, and much-needed, information concerning the dynamic, temporally ordered aspects of the reminiscence process. Other studies have investigated such issues as RFS functions and age of first memory (Rybash and Hrubis 1997) and life story high points (associated with Identity, Teach/Inform, and Conversation; McLean and Pals Lilgendahl 2008).

One way in which to organize such empirical data is via the circumplex model proposed by Webster (2003). Here, the eight RFS factors are arranged along the two orthogonal dimensions of (1) self versus social and (2) reactive/loss versus proactive/growth. This results in four quadrants with two RFS factors in each (see Webster for a full explication of circumplex rationale and

findings). Briefly, quadrant 1 (self-reactive/loss) consists of Bitterness Revival and Boredom Reduction, quadrant 2 (self-proactive/growth) consists of Identity and Problem Solving, quadrant 3 (social-proactive/growth) consists of Teach/Inform and Conversation, and quadrant 4 (social-reactive/loss) consists of Intimacy Maintenance and Death Preparation.

In light of this framework, quadrant 1 factors (Bitterness Revival and Boredom Reduction) have consistently been shown to be related to negative mental health outcomes as well as age differences (younger participants score higher than older participants), and quadrant 3 factors (especially Teach/Inform) consistently show ethnic differences (e.g., African Americans score higher than Caucasian Americans), as just two examples. Continued refinement of the reminiscence circumplex, therefore, may pay research and clinical dividends in the future.

## Outcomes

As noted previously, engaging in autobiographical reflection produces outcomes beyond the mere retrieval of information. Important insights for both empirical and clinical practitioners alike can be derived from identifying the consequences of reminiscence processes. It can contribute to theoretical model building as well as more targeted clinical interventions, as illustrated below.

Fry's (1995) sophisticated, interactional model of reminiscence, illustrates the complex relationship between qualities of reminiscence (e.g., frequency, pleasantness) and both positive (i.e., instrumental and integrative) and negative (i.e., obsessive and escapist) reminiscence outcomes. Furthermore, she noted how a constellation of agentic traits and personality factors can modify outcomes. For example, the agentic traits of humor, optimism, and empathy interact with locus of control and tend to support instrumental and integrative reminiscence functions, which are associated with positive mental health outcomes such as life satisfaction and increased self-esteem. In contrast, agentic traits such as perfectionism and self-derogation are associated with negative reminiscence functions, which are in turn correlated with negative mental health outcomes such as role strain and psychosomatic symptoms. For a full explication of her model, which is beyond the scope of the present article, see Fry (1995).

Other studies have used the RFS to investigate the relationship between reminiscence functions and measures of psychological adaptation in later life. Cully et al. (2001) found that state and trait anxiety correlated with Bitterness Revival, Boredom Reduction, and Death Preparation, whereas

depression was associated only with Bitterness Revival. Cappeliez and O'Rourke (2002) studied the relation between reminiscence functions and meaning in life: A lower score on goal seeking as a component of meaning in life was related to a greater use of Boredom Reduction, Bitterness Revival, and Death Preparation. A higher score on existential vacuum, indicating a lack of meaning in life, was related to a higher score on Death Preparation. Cappeliez et al. (2005) investigated the association of reminiscence functions with life satisfaction and psychological distress. When controlling for personality traits, Boredom Reduction and Bitterness Revival were related to lower life satisfaction, whereas Death Preparation was related to higher life satisfaction. Boredom Reduction, Bitterness Revival, and Intimacy Maintenance were related to psychological distress, but these associations could be explained by personality traits.

Cappeliez and O'Rourke (2006) developed a structural equations model for the same data, relating reminiscence functions to well-being and health. A factor termed Self:Positive (i.e., Identity, Death Preparation, and Problem Solving) was positively related to well-being and health; a factor termed Self:Negative (i.e., Boredom Reduction, Bitterness Revival, and Intimacy Maintenance) was negatively related to well-being and health; finally, a factor termed Prosocial (i.e., Conversation and Teach/Inform) was unrelated to well-being and health.

In summary, the findings differ between studies, in part because they used different operationalizations of mental health. The findings for Bitterness Revival and Boredom Reduction are the most consistent: they are negatively related to mental health. Conversation and Teach/Inform tend to be unrelated to mental health, although Teach/Inform correlated positively, albeit weakly, with happiness (Webster 1998). Findings on the association of the other functions with mental health are less conclusive. Part of this inconsistency for Death Preparation and Intimacy Maintenance may be explained from a developmental perspective. For example, Intimacy Maintenance may be perceived as negative immediately after the death of a spouse, when the shock, grief, and negative emotions of mourning are hypersalient. At some point in the future, however, this function may be perceived as much more positive, given that the memories are recalled after a certain amount of closure has occurred. Similarly, Death Preparation's association with mental health may fluctuate depending on the context and life stage of individuals. Longitudinal studies are needed to tease out these possibilities.

In terms of clinical approaches, the effectiveness of reminiscence interventions has been much debated. Although reviews of the early period came

to the conclusion that the evidence base of reminiscence interventions is still scarce (Kovach 1990; Molinari and Reichlin 1985; Thornton and Brotchie 1987), the situation has improved over the past years. A number of reviews (Lin, Dai, and Hwang 2005) and meta-analyses (Bohlmeijer et al. 2003, 2007; Woods et al. 2005) have shown that reminiscence interventions can be effective in improving well-being and alleviating depression.

For instance, Cuijpers, van Straten, and Smit (2006) conducted a meta-analysis of randomized studies on psychological treatments for depression in older adults. Twenty-five studies were included, of which five compared reminiscence with a control condition. A standardized mean effect size of  $d = 0.72$  was found for all psychological treatments. No differences were found between cognitive behavioral therapy (CBT) and other treatments, including reminiscence. Unfortunately, no mean effect sizes were measured for reminiscence interventions alone.

Pinquart, Duberstein, and Lyness (2007) conducted a meta-analysis of 57 controlled studies, of which 8 compared reminiscence with a control condition. A large effect size ( $d = 1.00$ ) was found for reminiscence, which is comparable with CBT. The authors concluded that both reminiscence and CBT are very well established and acceptable forms of treatment of depression in older adults.

Meta-analytic studies generally conclude that the effects are heterogeneous. People with higher initial levels of depression profit more than people with low or moderate levels of depression. Furthermore, the effects of structured, evaluative reminiscence interventions (life review) are stronger than those from the effects of unstructured, simple reminiscence interventions. Hence, these effect studies illustrate the importance of our distinction between simple reminiscence interventions for less distressed persons and structured life review for persons with higher levels of distress.

Certainly a more complex picture is emerging concerning the antecedents and sequelae of reminiscence behavior across the life span. Thus the conceptual model of reminiscence presented here includes multiple elements, given the dynamic quality and contextually embedded features that constitute it. We briefly turn now to some implications for research and practice derived from our model. Our aim here is not to privilege or champion particular areas but rather to illustrate but a few examples of testable hypotheses that can be derived from the model. The potential combination of questions that could be asked is exceptionally large. Imagine, for instance, if all the identified model variables were included in a hypothetical analysis-of-variance design (e.g., 2 [triggers]  $\times$  2 [modes]  $\times$  3 [contexts]  $\times$  4 [moderators]  $\times$  8 [RFS functions], etc.). What follows, then, is only a highly limited illustration of possibilities.

## Implications for Research

We are now at the stage at which we can formulate and test specific, theory-driven hypothesis. Whereas earlier research often, of necessity, was confined to making very general, relatively unsophisticated queries (e.g., “Do you reminisce a lot, somewhat, or only a little?”) contemporary researchers (e.g., McKee et al. 2005) need to ask and answer more conceptually rigorous questions.

*Depth Path.* We see future research proceeding along two parallel paths. The first will be a *depth* path, on which questions are domain specific (e.g., they might focus exclusively on modes or on a particular moderator variable such as ethnicity). Here, work will flesh out specific details resulting in specific micromodels. For instance, investigations into audience effects (e.g., conversational turn taking, sibling influences in the co-construction of narratives, the censoring impact of peers or parents on adolescents’ abilities to share personal memories, or the shifts in content as stories are retold to different audience members) will prove invaluable in understanding the fluid and context-specific nature of reminiscence.

Another example is the effect of relationship status on reminiscence functions. For instance, what are the short- and long-term consequences for the frequency and quality of intimacy maintenance and bitterness revival functions as a result of widowhood? Bereavement research suggests that during the immediate effects of widowhood, thinking about one’s lost spouse would sharply increase the frequency of intimacy maintenance functions associated with a high degree of emotional intensity. It would be predicted that both frequency and intensity might decline over the ensuing years. Cases in which such decline does not occur may be evidence of unresolved, or complicated, grief. Similarly, bitterness revival might also increase initially as feelings of an unjust world, unfairness, and anger at the departed contribute to such memories. Again, we might expect these to decrease over time. Both expectations would most likely be qualified by moderator variables as described previously. The answer to these types of questions entails longitudinal designs, a rarity to date in reminiscence studies. Similarly, specific questions can be pursued within each of the factors identified in the model.

*Breadth Path.* At the same time, a *breadth* path will examine the broader linkages among the model components, resulting in a macromodel perspective; we want to see the proverbial forest, as well as the trees. Given the factors

identified above in our conceptual model, researchers have the opportunity, and perhaps obligation, to address interconnections among model features. For instance, which is the stronger predictor of reminiscence: age, personality, or setting? Answers to this type of question have theoretical implications, as Butler's (1963) and Erikson's models predict that old age is the trigger for reminiscence. If personality variables (e.g., neuroticism, extraversion) and/or settings (e.g., children's queries to parents about earlier times, high school reunions) are stronger predictors, then we need to rethink the who, what, where, when, and why components of reminiscence processes.

Another example concerns the complex interaction among modes, contexts, moderators, functions, and outcomes. To illustrate, does the nature of interpersonal reminiscences between friends differ for men and women with respect to positive mental health outcomes for conversational reminiscence? It could be that the quality and quantity of male-to-male peer reminiscence is different in both nature and outcome. Men might offer fewer and less intimate details in shared reminiscences, which might nevertheless produce a positive social bonding experience. Women, in contrast, may connect with peers on a deeper emotional level, with greater details, and this may enhance self-esteem or sense of identity.

These, and myriad other, highly conjectural suppositions await future empirical assessment. It is important to investigate such questions, because we know that reminiscence is neither universal nor a panacea. For particular persons, under specific conditions, certain types of reminiscence are salubrious. In contrast, some individuals get along fine without much reminiscence of any kind, and for perhaps a minority of persons, reminiscence is unpleasant, useless, and perhaps even harmful to mental health. We turn now to a brief discussion of such potential outcomes.

### *Implications for Practice*

Particular styles of reminiscence are differently related to mental health. Reminiscence with the functions of Boredom Reduction, Bitterness Revival, and Intimacy Maintenance has been found to correlate with poorer mental health. Practitioners should be aware that reminiscence interventions could have negative effects (Westerhof et al. forthcoming). Careful planning and testing of reminiscence protocols by making use of research findings and scientific theories that link psychological processes in reminiscence and its outcomes are now crucial (Bluck and Levine 1998; Goldfried and Wolfe 1996). Reminiscence interventions have to take account of factors such as setting (context), the goals of the intervention, psychological and developmental

theory, characteristics of the target group (e.g. level of psychological distress), and the skills and education of counselors (Lin et al. 2005). We propose that it is useful to discern three basic types of reminiscence interventions: simple or unstructured reminiscence, structured reminiscence or life review, and life-review therapy (see also Westerhof et al. forthcoming for a more extensive review of reminiscence practice and mental health).

*Simple Reminiscence.* The first type, called simple reminiscence, is mainly unstructured autobiographic storytelling and spontaneous reminiscence. This often takes place within a relational context, for example, at anniversaries and reunions and among friends and family. The interpersonal functions of reminiscence, such as Conversation and Teach/Inform, are most common in this mode. This level of reminiscence may be facilitated in interventions, in the form of reminiscence groups in nursing homes in which prompts for positive memories are given. The goal may be to enhance social contacts and short-term well-being. An example of a salient, supportive theory is socio-emotional selectivity theory, as this form of reminiscence relates to a focus on emotional functioning and strengthens the positivity bias in memory. An example is the use of reminiscence in a group fostering intergenerational bonding (van Kordelaar et al. 2007). Counselors need basic skills in facilitating the process of spontaneous reminiscence and promoting social interaction.

*Life Review.* The second type of reminiscence intervention is life review. Relative to simple reminiscence, it is much more structured, focuses on the integration of both positive and negative life events, and is evaluative (Haight and Dias 1992; Webster and Young 1988). Life review may be excellently directed at people with mild psychological distress who need support with coping with transitions or adversities in life. It helps restore a positive self-identity. Continuity theory is one theory that underpins this type of reminiscence intervention, as an important aim is to find continuity between past and present. Life review helps people gain insight into how they have developed throughout their lives and how they have become the people they are now. It also helps them focus on successful past coping repertoires and values that have guided them in their lives to adapt successfully to changes and life events in their present lives. Promoting the use of the reminiscence functions of problem solving and identity formation is therefore central in these types of interventions. Individual life review interviews (Haight 1988), guided autobiography (Birren 1987), and preventive life review (Bohlmeijer et al. 2005; Westerhof, Bohlmeijer, and Valenkamp 2005) are examples of this second modality. Counselors need more advanced skills (e.g., structuring



interventions and asking questions that promote problem-solving reminiscence to help participants reframe the meaning of past events).

*Life-Review Therapy.* The third type of reminiscence intervention is typically applied in a psychotherapeutic setting and may be called life-review therapy. It is highly structured and is aimed at people with severe levels of depression or anxiety. The focus is not only on promoting coherence and continuity but also on diminishing the reminiscence functions of bitterness revival and boredom reduction. Reminiscence with people who have serious psychological distress will most probably elicit problem-saturated stories and a bias to negative memories and negative interpretations of life events. To diminish the negative uses of reminiscences, such as bitterness revival or boredom reduction, it may be necessary to apply more dynamic psychotherapy, with a focus on underlying cognitive schemata related to the self and the world (Cappeliez 2002) or the deconstruction of problem-saturated stories (Kropf and Tandy 1998). Counselors will need specialist skills to apply interventions developed within these frameworks.

In contrast to life review, in which the overall identity remains intact, life-review therapy may involve the creation of a new life story and changes in self-identity. Primary outcomes are therefore also the reduction of depression and anxiety. Examples of this mode are the integrative and instrumental reminiscence protocols, in which reminiscence is combined with cognitive therapy and problem-solving therapy (Watt and Cappeliez 2000) narrative therapy (Bohlmeijer et al. 2008, 2009), and the life-review protocol used by Serrano et al. (2004), in which the focus was on eliciting specific positive memories. This protocol was based on the finding that depressed older adults have trouble retrieving these kinds of autobiographic memories. Studies linking structured life review to cognitive theories of depression have found substantial effects on depression in the participants. This seems a particularly promising route to explore further.

The distinction between unstructured and structured reminiscence has often been made (e.g. Bohlmeijer et al. 2003, 2007; Coleman 1974; Fry 1983; Haight and Dias 1992; Webster and Young 1988). The need to distinguish between life review and life-review therapy has been proposed by fewer researchers until now. It links up with the need to distinguish between self-change and self-acceptance as the desired outcome of life review (Bluck and Levine 1998). In life review, self-acceptance is the main goal. The basic structure of memories is left intact, but people are encouraged to interpret (reframe) life experiences in a more resourceful manner and to integrate both positive and negative experiences. In general, the focus is on “memories that are highly

accessible because of the current organization of the self-schema” (Bluck and Levine 1998:201). If self-change is the aim of life review, a more dynamic approach is appropriate: “The role of the therapist may be to provide conditions in which the individual is able to access or reconstruct memories that are not central to the current self-schema (i.e., not part of the standard script of self)” (Bluck and Levine 1998:201). Also, the way in which memories are interpreted may be discussed so that revision of the self is possible. This kind of life-review therapy can be more threatening and anxiety provoking and requires more resilience and ego strength from participants.

The three types of reminiscence interventions could also be seen as three levels of intensity of reminiscence (Garland and Garland 2001). At all three levels, different specific reminiscence protocols can be developed. However, the distinction between the three types of reminiscence interventions guides practitioners on a global level with the development of a specific intervention. For example, life-review therapy as a form of treatment of depression may require quite a different protocol than life review as a form of prevention that assists people in coping with transitions in their lives (e.g., Bender et al. 1999). Recently, several excellent treatises (e.g., Gibson 2004; Haight and Haight 2007; Kunz and Soltys 2007) have examined the above issues and provided detailed plans for conducting different types of therapeutic interventions, including preparation, execution, and evaluation of implemented programs. We refer practitioners to these, and similar, resources.

Finally, we note the potential reminiscence in its various forms may have for special populations, particularly persons experiencing dementing illnesses such as Alzheimer’s disease. Even during the latter phases of dementia, tapping into autobiographical memories via reminiscing can pay important and measurable dividends for both those afflicted and caregivers alike (Gibson 2004). Examples include decreased disorientation upon admission to a nursing facility (e.g., Tabourne 1995), increased levels of well-being compared with an activities group (Brooker and Duce 2000), decreased depression and increased cognitive function (J. Wang 2007), and increased verbal fluency compared with an everyday conversation group (Okumura, Tanimukai, and Asada 2008).

## Conclusion

Nearly 50 years ago, Butler (1963) emancipated the naturally occurring process of late-life reminiscence from the shackles that equated life review with incipient dementia. As just noted above, practitioners have turned this prejudice on its head, and we now have evidence that reminiscence is not the

harbinger of dementia but rather one means of mitigating its horrendous toll. Sparked by this liberation, which then conceptualized reminiscence and life review as types of cognitive activities in which older adults maintained, if not improved, their abilities, researchers and practitioners eagerly implemented programs aimed at enhancing the mental and emotional health of elders through individual and group reminiscence projects. Originally, there was a wholesale acceptance and expectation that reminiscence was universally good, and this naive expectation persisted despite the lack of any sound empirical support.

Eventually, repeated identification of serious limitations of both conceptual and methodological areas forced interested parties to examine the field from a more critical perspective. A growing awareness of the multifaceted nature of reminiscence led to work on modes and functions; theoretical critiques led to examining reminiscence in all age groups from a life-span perspective; and an emerging awareness of individual differences (e.g., gender, personality, ethnicity) focused attention of those moderators of reminiscence which produce differences in outcomes.

The field is now entering a more mature stage of development. Our conceptual guide capitalizes on this emerging trend by serving as a heuristic framework for future research and practice. We hope it will act as a schematic for work to come by identifying linkages that still need to be explored and by highlighting some of the more important variables that need further examination. From an original, virtually exclusive focus on elderly, primarily white female nursing home participants, contemporary research and practice is assessing the manifold process, content, and outcome variables of reminiscence across the entire life, from toddlers to centenarians, from a wealth of diverse backgrounds. We hope this exciting and expansive focus can continue and derive insightful and productive questions from the model presented here.

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