Empirical Validation of a Model of Reminiscence and Health in Later Life

Philippe Cappeliez$^{1}$ and Norm O’Rourke$^{2}$

$^{1}$School of Psychology, University of Ottawa, Canada.
$^{2}$Department of Gerontology, Simon Fraser University–Vancouver Campus, British Columbia, Canada.

This study addresses the adaptive value of functions of reminiscence with respect to physical and mental health in later life. A model examining the relationships between the functions of reminiscence and life satisfaction, psychiatric distress, and health is presented and tested. Self-positive (reminiscence for Identity, Death Preparation, and Problem Solving) and self-negative (reminiscence for Boredom Reduction, Bitterness Revival, and Intimacy Maintenance) functions have statistically significant and direct associations with the well-being of this sample of older adults, the first positively and the second negatively. Prosocial functions (reminiscence for Conversation, and to Teach–Inform Others) appear to have no direct link with health. Self-functions appear to have an important and lasting influence on physical and mental health, whereas prosocial functions may affect health by means of their role in emotional regulation.

Reminiscence is the volitional or nonvolitional act or process of recollecting memories of one’s self in the past (Bluck & Levine, 1998). A major topic in reminiscence research has been to identify the various functions or purposes of reminiscence, leading to the proposition of several categorizations of functions (for overviews, see Staudinger, 2001; Webster & Haight, 1995). These classifications contain many similar categories. The convergence in this line of research is well represented by the empirically based taxonomy proposed by Webster, which comprises eight functions of reminiscence as measured by the Reminiscence Functions Scale (Webster, 1993, 1997). Although authors use different terms for the various forms of reminiscence, we adopt Webster’s labels for our present purpose. Identity refers to the use of memories to identify a pattern of coherence in one’s life, and to find worth and meaning in life as it was lived. Problem Solving entails remembering past experiences to solve present problems. Death Preparation refers to using memories to come to terms with one’s finitude. Teach–Inform Others entails sharing memories to convey a lesson of life. Conversation is communicating personal memories with no evaluative or instructive intent. Bitterness Revival pertains to rehashing memories of difficult life circumstances. Boredom Reduction refers to memories used to fill a void of stimulation or interest. Finally, Intimacy Maintenance involves keeping alive the memory of a significant other who is separated from the reminiscer, principally on account of death.

Unfortunately, this line of research has provided limited insight into the adaptive value of the various forms of reminiscence. An important issue pertains to the possible links between reminiscence as a unique mental activity and well-being, physical as well as mental, in later life. Indeed, positive effects of reminiscences on health can be postulated on the basis of the research on emotional disclosure (Niederhoffer & Pennebaker, 2002; Pennebaker, 2003).

Empirical evidence on this topic is limited to a few studies that have examined the functions of reminiscence in relation to mental health. Bitterness Revival and Boredom Reduction have been linked with psychiatric distress (Cappeliez, O’Rourke, & Chaudhury, 2005; Cully, LaVoie, & Gfeller, 2001), less successful adaptation to aging (Wong & Watt, 1991), and both lower life satisfaction and psychological well-being (Cappeliez et al.; Coleman, 1986). Fry (1995) has suggested that Bitterness Revival and Boredom Reduction are linked to negative physical and psychological health outcomes. Intimacy Maintenance is associated with psychiatric distress (Cappeliez et al.) and prolonged grief reactions to loss (Coleman). Death Preparation has inconsistently been associated with negative psychological functioning (Cully et al.) yet higher life satisfaction (Cappeliez et al.). Identity and Problem Solving have been linked with better physical and mental health (Wong & Watt) and enhanced life satisfaction and self-esteem among older adults (Fry). Drawing on past successes in difficult situations (e.g., Problem Solving) appears to be adaptive in later life (Aldwin, Sutton, Chiara, & Spiro, 1996). Finally, Conversation is positively associated with life satisfaction (Cappeliez et al.), as well as improved mood (Pasupathi & Carstensen, 2003).

In order to organize these disparate findings into a comprehensive whole, Cappeliez and colleagues (2005) proposed a model of reminiscence in relation to mental health in later life. This initial model was inspired by theoretical developments in reminiscence and autobiographical memory research (Bluck & Alea, 2002) and consists of three broad functions: self (reminiscences for Identity and Death Preparation on the positive pole, and reminiscences for Bitterness Revival and Boredom Reduction on the negative pole); guidance (Problem Solving and to Teach–Inform Others); and emotion (Conversation and Intimacy Maintenance). Previously reported findings were generally consistent with the model, but they also indicated the need to adjust the theory and to test it in a more stringent manner in the context of both physical and mental health.

To elucidate relationships between the various forms of reminiscence and both physical and mental health, we propose a revised model consisting of three broad functions of reminiscence: positive self-functions; negative self-functions; and prosocial functions. Positive self-functions encompass...
reminiscences for Identity and Death Preparation along with Problem Solving. Reminiscences for Identity and Death Preparation represent means to reassert present self-understanding or to create new self-awareness. As Randall and Kenyon (2001) wrote, they entail a search for meaning through reflection on one’s life. In Webster’s taxonomy (1993, 1997), Death Preparation represents reminiscence that helps to reduce anxiety about death and to approach the end of life with a sense of completion and wholeness. In classifying reminiscence for Problem Solving as a self-function, we focus on its role in eliciting a positive and motivational view of oneself as capable and competent. These three functions have in common the evaluation and synthesis of personal memories. We hypothesize that this grouping of functions will demonstrate a significant, direct, and positive association with physical and mental health.

Bitterness Revival and Boredom Reduction as well as reminiscence for Intimacy Maintenance (with someone dead or no longer part of one’s life) are deemed to be negative self-functions. Bitterness Revival implies regrets about the past and unattained goals, and Boredom Reduction implies an evasion from the present into a magnified past. Intimacy Maintenance may connote a problematic grief process. As previously discussed, research has consistently demonstrated the negative emotional valence of Bitterness Revival and Boredom Reduction and, to a lesser extent, Intimacy Maintenance. The shared feature of these three functions of reminiscences is that the person reminiscing is caught in persistent ruminations about the past. We hypothesize that this grouping of functions will exhibit a significant, direct, and negative association with physical and mental health.

The prosocial category is believed to include reminiscences for Conversation and to Teach–Inform Others. We propose that these two types of reminiscence affect physical and mental health primarily through their influence on emotional regulation (Alea & Bluck, 2003; Pasupathi, 2003). On the basis of the socioemotional selectivity theory (Carstensen, Fung, & Charles, 2003), we advance that conversational reminiscence maximizes opportunities to experience positive emotions in social encounters (Cappeliez et al., 2005). According to this theory, with time perceived as limited, a person’s goals in later life shift to regulating emotional states in order to optimize the person’s sense of well-being. Thus the present model emphasizes the social, rather than the directive, component of reminiscence to Teach–Inform Others, as far as impact on health is concerned. This grouping of functions should be directly and positively associated with both physical and mental health.

We use structural equation modeling (SEM) to test this model. SEM has the power of a confirmatory analytical procedure. Indices of both objective and perceived health are specified, as well as positive (life satisfaction) and negative (psychiatric distress) indices of mental health.

**Methods**

**Participants**

We recruited a total of 412 older adults (167 men, 245 women) over 1 year as part of a larger study of marriage in later life. The average age of participants was 61.04 years ($SD = 7.79$; range 50–84), with 12.48 years of formal education completed on average ($SD = 3.62$; range 0–30).

**Recruitment**

We obtained participant data by means of an Internet Web site constructed for this study. In addition to those recruited, another 109 respondents did not complete all questionnaires; we excluded them from our analyses. As noted by Granello and Wheaton (2004), one limitation of Web-based research is higher rates of nonresponse as compared with other self-selection recruitment methodologies. However, our prior research with older adults suggests few differences between those recruited by means of the Internet and those recruited by more traditional self-report research methodologies (O’Rourke, 2002, 2003, 2005; O’Rourke & Cappeliez, 2003, 2005). Similar conclusions were reached by Gosling and colleagues (Gosling, Vazire, Srivastava, & John, 2004). They compared responses and participant sociodemographic characteristics from studies published in the *Journal of Personality and Social Psychology* (2002; $n = 102,959$) to data obtained from two large research Web sites ($n = 361,703$ and $n = 132,515$). Contrary to common misconceptions, participants recruited via the Internet are more demographically diverse and equally motivated to provide practicable data. Of particular relevance to the current study, Web-based study participants do not differ from self-selected participants recruited by more traditional means with respect to various well-being constructs (Gosling et al.).

We placed postings announcing the current study at dedicated Web sites for older adults (e.g., American Association of Retired Persons, SeniorNet, 50+ Net, Age of Reason). We placed a request for participants in an Australian electronic newsletter, with reciprocal links between this Web site and others directed toward older adults. An incentive for participation was the participation in a $500 (Canadian) lottery draw.

More than 90% of respondents indicated their country of origin; the majority lived in Australia or New Zealand (77.9%), and the remainder lived in the United States (8%) and Canada (4.6%). Responses to indices of well-being and functions of reminiscence were statistically indistinguishable across groups, and, for the most part, demographic features did not differ. For instance, gender composition did not differ by country of residence, $\chi^2(2, N = 373) = 1.44, ns.$ Although Australian and New Zealand participants had completed fewer years of formal education ($M = 12.03, SD = 3.57$) than their Canadian ($M = 13.89, SD = 2.51$) and American ($M = 14.22, SD = 1.81$) counterparts, their socioeconomic status based on work currently performed or prior to retirement did not differ from their North American counterparts, $\chi^2(12, N = 371) = 3.08, ns.$ Given the similarity of study participants, we combined responses for subsequent analyses.

**Instruments**

**Reminiscence functions scale.**—The Reminiscence Functions Scale (RFS; Webster, 1993, 1997) consists of 43 items pertaining to particular uses of reminiscence. Respondents indicate how often they reminisce for each reason (from never, 1, to very frequently, 6, on a 6-point Likert-type scale). Items are grouped within eight categories: Boredom Reduction (six
Table 1. Psychometric Features of Study Variables

<table>
<thead>
<tr>
<th>Instrument</th>
<th>M</th>
<th>SD</th>
<th>ρ</th>
<th>Kurtosis</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reminiscence Functions Scale</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem solving</td>
<td>19.16</td>
<td>6.24</td>
<td>.86</td>
<td>−0.58</td>
<td>−0.25</td>
</tr>
<tr>
<td>Death preparation</td>
<td>14.41</td>
<td>6.32</td>
<td>.86</td>
<td>−0.06</td>
<td>0.75</td>
</tr>
<tr>
<td>Identity</td>
<td>20.17</td>
<td>6.70</td>
<td>.86</td>
<td>−0.65</td>
<td>−0.16</td>
</tr>
<tr>
<td>Conversation</td>
<td>16.44</td>
<td>4.94</td>
<td>.83</td>
<td>−0.60</td>
<td>−0.23</td>
</tr>
<tr>
<td>Teach–inform</td>
<td>18.37</td>
<td>5.18</td>
<td>.75</td>
<td>1.44</td>
<td>0.04</td>
</tr>
<tr>
<td>Bitterness revival</td>
<td>10.28</td>
<td>4.87</td>
<td>.85</td>
<td>1.04</td>
<td>1.12</td>
</tr>
<tr>
<td>Boredom reduction</td>
<td>13.20</td>
<td>6.03</td>
<td>.86</td>
<td>0.04</td>
<td>0.80</td>
</tr>
<tr>
<td>Intimacy maintenance</td>
<td>14.05</td>
<td>4.77</td>
<td>.84</td>
<td>−0.13</td>
<td>−0.54</td>
</tr>
<tr>
<td>Satisfaction With Life Scale</td>
<td>23.98</td>
<td>6.46</td>
<td>.87</td>
<td>−0.07</td>
<td>−0.64</td>
</tr>
<tr>
<td>General Health Questionnaire</td>
<td>17.11</td>
<td>10.13</td>
<td>.92</td>
<td>2.20</td>
<td>1.46</td>
</tr>
<tr>
<td>Health conditions</td>
<td>2.50</td>
<td>1.70</td>
<td>—</td>
<td>−0.03</td>
<td>0.54</td>
</tr>
<tr>
<td>Perceived health</td>
<td>11.21</td>
<td>2.57</td>
<td>—</td>
<td>−0.17</td>
<td>−0.45</td>
</tr>
</tbody>
</table>

Notes: For the table, N = 412. Descriptive statistics suggest that the internal consistency and distribution of responses to study variables are within normal parameters (Tabachnick & Fidell, 2001).

Table 2. Correlation Coefficients Between Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem solving</td>
<td>.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death preparation</td>
<td>.74</td>
<td>.67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity</td>
<td>.52</td>
<td>.40</td>
<td>.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversation</td>
<td>.45</td>
<td>.40</td>
<td>.48</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teach–inform</td>
<td>.30</td>
<td>.43</td>
<td>.24</td>
<td>.23</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bitterness revival</td>
<td>.36</td>
<td>.46</td>
<td>.37</td>
<td>.34</td>
<td>.19</td>
<td>.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boredom reduction</td>
<td>.34</td>
<td>.41</td>
<td>.42</td>
<td>.36</td>
<td>.41</td>
<td>.39</td>
<td>.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimacy maintenance</td>
<td>.01</td>
<td>.01</td>
<td>.04</td>
<td>.04</td>
<td>.03</td>
<td>.30</td>
<td>.24</td>
<td>.14</td>
<td>.10</td>
<td>.26</td>
</tr>
<tr>
<td>Satisfaction With Life Scale</td>
<td>.12</td>
<td>.22</td>
<td>.13</td>
<td>.11</td>
<td>.08</td>
<td>.40</td>
<td>.35</td>
<td>.29</td>
<td>.47</td>
<td></td>
</tr>
<tr>
<td>General Health Questionnaire</td>
<td>.02</td>
<td>.04</td>
<td>.01</td>
<td>.02</td>
<td>.02</td>
<td>.14</td>
<td>.10</td>
<td>.06</td>
<td>.14</td>
<td>.26</td>
</tr>
<tr>
<td>Health conditions</td>
<td>.02</td>
<td>.09</td>
<td>.01</td>
<td>.06</td>
<td>.06</td>
<td>.22</td>
<td>.15</td>
<td>.08</td>
<td>.19</td>
<td>.35</td>
</tr>
<tr>
<td>Perceived health</td>
<td>.19</td>
<td>.35</td>
<td>.54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: 1 = problem solving; 2 = death preparation; 3 = identity; 4 = conversation; 5 = teach–inform; 6 = bitterness revival; 7 = boredom reduction; 8 = intimacy maintenance; 9 = life satisfaction; 10 = general health questionnaire; 11 = physical health conditions; 12 = perceived health. Correlations higher than 0.09 and lower than −0.09 were significant at the 0.05 level.

Demographics and health questionnaire.—We constructed a questionnaire for this study to gather personal data and subjective and objective health information. We adapted this scale from the demographics questionnaire used in the Canadian Study of Health and Aging (Canadian Study of Health and Aging Working Group, 1994). Participants indicated whether or not they had experienced various health problems over the past year from a list of 12 items (e.g., heart condition, cancer, high blood pressure). We computed a cumulative variable on the basis of endorsement of these health conditions, with a higher score indicating worse health. Four additional questions pertained to participants’ perceived health: ability to engage in desired activities; health status as compared with a year ago; health status as compared with that of same-age peers; and overall perceived health. We created a single, cumulative variable, with higher scores indicative of higher subjective ratings. Table 1 provides descriptive information and psychometric data for responses to the study questionnaires, and Table 2 reports the correlation coefficients between variables.

Analytic Procedure

SEM provides simultaneous examination of variance between multiple dependent and independent variables. This procedure allows for the analysis of both observed and unobserved variables. In contrast to exploratory analyses, SEM is akin to a confirmatory statistical procedure, thus allowing for the testing of theory. We applied SEM here to assess model fit relative to obtained data. The derived sample and resulting degrees of freedom provide sufficient statistical power, assuming a medium effect size and a standard alpha level.
RESULTS

Estimation of the Measurement Model

We initially examined the proposed measurement model to determine if observed variables effectively measure their respective latent constructs as well as the viability of these latent constructs as discrete phenomena. An initial estimation of the measurement model (prior to computation of the hypothesized structural model) was warranted, given that this conceptual framework of reminiscence and health has yet to be empirically assessed. We computed this model with the AMOS statistical program (Analysis of Movement Structures; Arbuckle, 1999), using the maximum likelihood method of parameter estimation.

We first computed the measurement model with each observed variable assumed to contribute significantly to the measurement of its respective latent construct, and significant covariance assumed between each pair of latent constructs. We observed acceptable indices of fit subsequent to correction for three related pairs of error terms, \( \chi^2(\text{df} = 45) = 127.89, p < .01, \text{power} = .98 \). For instance, the Comparative Fit Index for this model falls within accepted parameters (i.e., CFI \( \geq .95; \text{CFI} = .95 \)), as do the root mean square error of approximation (i.e., RMSEA < .07; RMSEA = .06) and the Adjusted Goodness of Fit Index (i.e., AGFI \( \geq .90; \text{AGFI} = .92 \)). Observed variables each contributed significantly to measurement of their respective latent constructs, with values of \( t \geq 1.96 \). The same was true for each pair of covariance estimates with the exception of the association between prosocial functions of reminiscence and well-being. Contrary to our initial assumption, a direct association between these latent constructs does not appear to exist.

We also estimated the composite reliability for each latent variable vis-à-vis observed variables. (This statistic is analogous to Cronbach’s alpha computed to estimate internal consistency of responses to instruments; see O’Rourke & Hatcher, in press.) The resulting coefficients were within accepted parameters for well-being (.61), prosocial (.65), self-positive (.87), and self-negative (.72) constructs. In other words, groupings of observed variables under their respective latent constructs appear to be interrelated. This finding supports the delineation of these functions of reminiscence as hypothesized by our theoretical model.

We next examined the discriminant validity of latent constructs to ascertain whether or not the three groupings measure distinct phenomena as we hypothesized. Following Bagozzi and Phillips (1982), we fixed each pairing of covariance estimates to a value of 1.0, and we compared the resulting chi-squared statistic with that of the initial measurement model. For prosocial versus self-positive, \( \Delta \chi^2(\Delta \text{df} = 1) = 173.35, p < .01 \), prosocial versus self-negative, \( \Delta \chi^2(\Delta \text{df} = 1) = 67.62, p < .01 \), and self-positive versus self-negative, \( \Delta \chi^2(\Delta \text{df} = 1) = 114.45, p < .01 \), latent constructs, significant change in chi-squared values suggests that each measures a distinct latent construct, thus providing support for the discriminant validity of these three groupings.

One limitation of this method of estimation, however, pertains to the likelihood of capitalization on chance for the family of tests (i.e., incorrect rejection of the null hypothesis of no difference between constructs). For this reason, we also performed confidence interval tests to further assess the discriminant validity of latent constructs. This entailed calculating confidence intervals around the correlation between factors (±2 SE). Discriminant validity is suggested when confidence intervals do not include the value 1.0. We observed this for prosocial versus self-positive (17.15 ± 3.58 = 13.57–20.73), prosocial versus self-negative (9.85 ± 2.67 = 7.18–12.52), and self-positive versus self-negative (16.76 ± 3.93 = 12.83–20.69) latent variables. These findings are in accord with the chi-squared change calculations previously reported.

In addition to goodness of fit indices supporting the viability of the measurement model, discriminant validity analyses provide further support (both content and structure), with the sole exception being the hypothesized association between prosocial and well-being latent constructs. Upon estimation of the structural model, we deleted this path.

Estimation of the Structural Model

Given the viability of the measurement model, we next examined the hypothesized paths between latent constructs. Change in the chi-squared statistic was negligible, that is, \( \Delta \chi^2(\Delta \text{df} = 0) = 1.85 \), suggesting no perceptible loss of fit between measurement and structural models. Note that there is no change in the number of degrees of freedom caused by deletion of the path between prosocial functions of reminiscence and well-being (i.e., nonsignificant covariance estimate in the measurement model). Fit indices are also within accepted parameters (see Table 3).

Given that each of these goodness of fit indices is strongly influenced by the measurement model, we also calculated the Relative Normed-Fit Index (RNFII; Mulaik et al., 1989). In contrast to indices such as the RMSEA and AGFI, the RNFII measures only the fit of the structural portion of models (O’Rourke & Hatcher, in press). Similar to the CFI values,
RNFI values greater than 0.94 suggest good fit. For this study, this threshold was exceeded (i.e., RNFI = 0.99), providing support for the viability of the structural model (see Figure 1).

This resulting model is consistent with our initial hypotheses. Both self-positive and self-negative functions of reminiscence appear to have direct and significant associations with the well-being of these older adults. No such direct association is observed between prosocial functions and well-being.

Identity provides the greatest contribution to the self-positive latent construct. Boredom Reduction provides the greatest relative contribution to the measurement of self-negative functions of reminiscence. The contribution of Conversation is greater than that of Teach–Inform Others with respect to the prosocial latent construct.

Although both self-positive and self-negative functions of reminiscence are significantly associated with (the absence of) well-being, the contribution of the latter is substantively greater. This association would appear to be more pronounced for indices of psychological well-being (i.e., life satisfaction, psychiatric distress), yet significant associations between these functions of reminiscence and physical wellness are also apparent (i.e., chronic conditions, perceived health); this is in accord with our holistic view of well-being in later life (i.e., encompassing both physical and mental health).

**DISCUSSION**

These findings support the main tenets of the proposed model regarding the links between the different reminiscences and the well-being of this sample of older adults. Specifically, self-positive (reminiscence for Identity, Death Preparation, and Problem Solving) and self-negative (reminiscence for Boredom Reduction, Bitterness Revival, and Intimacy Maintenance) functions of reminiscence appear to be directly associated with well-being in positive and negative directions respectively. Prosocial functions (reminiscence for Conversation, and to Teach–Inform Others) appear to have no direct link to health.

First and foremost, the theory-based assignment of the various functions of reminiscence to the three groups of the model is supported by the observation that the three appear to
measure distinct constructs. This finding is of particular relevance for three forms of reminiscence (i.e., reminiscences for Problem Solving, Intimacy Maintenance, and to Teach–Inform Others), whose categorization had remained ambiguous in the previous research (Cappeliez et al., 2005). The present study suggests that reminiscence for Problem Solving is best categorized as a self-function (at least for these older adults). This is consistent with the findings reported by Webster (1993) and Bluck and colleagues (Bluck, Alea, Habermas, & Rubin, 2005), who found overlap between Problem Solving and Identity—an indication that reminiscences about problems, plans, and goals are intrinsically linked with meaning, continuity, and sense of identity. Of note, this finding is also in accord with clinical research that has shown that prompting instrumental reminiscence with depressed older persons (similar to Problem Solving) enhances self-efficacy by consolidating a coherent self-history and a view of oneself as competent (Watt & Cappeliez, 2000).

Similarly, reminiscence for Intimacy Maintenance appears to serve a self-function, albeit in a negative way. Working through the loss of a significant other might entail recurrent negative feelings; indeed, reminiscence for Intimacy Maintenance has been linked with prolonged grief reactions (Coleman, 1986). Additionally, this type of reminiscence is often followed by reconsiderations of one’s life trajectory, in particular as it pertains to purpose and meaning, further supporting its significance as a self-function (Cappeliez, Guindon, & Hamel, 2004).

The social nature of reminiscence to Teach–Inform Others is supported by the present findings, in agreement with the findings of Alea and Bluck (2003). Conceptual developments on the social functions of autobiographical memory (Alea & Bluck) and the construction of identity through conversational reminiscing (Pasupathi, 2001) provide useful frameworks for empirical research on the role of this form of reminiscence in the lives of older adults. It may also be fruitful to conceive reminiscence to Teach–Inform Others in the larger context of generativity, the concern for and commitment to the well-being of the next generation (Erikson, 1963), which is believed to promote psychological well-being (McAdams & Logan, 2004).

As we hypothesized, two of the three groupings of functions appear to have a direct and significant association with the well-being of older adults. First, the self-negative functions exhibit a negative influence on both physical and psychological indices of well-being. The negative influence of these self-negative functions is greater than the positive influence of self-positive functions (i.e., larger standardized path coefficients). Among these, escapist reminiscence seems particularly problematic. This form of reminiscence entails a sense of apathy and a perceived lack of purpose (Cappeliez & O’Rourke, 2002) that are deleterious to health.

Among the functions subsumed under the self-positive latent construct, the greater contribution to wellness, in a positive way, is made by integrative reminiscence (as captured here under the Identity function). This suggests that reminiscence that fosters self-continuity, coherence, and meaning has a positive influence on wellness as broadly defined. Various authors have stressed the importance of integrative reminiscence for personal development and well-being. Older adults who are deemed to be ageing successfully report higher frequencies of integrative reminiscences (Wong & Watt, 1991). Higher levels of both maturity and life satisfaction reported by older adults have been explained, in part, by the tendency to interpret memories in terms of growth (Bauer, McAdams, & Sakaeda, 2005). The capacity to transform negative life events into good outcomes (redemption sequence; see McAdams, 2003), one facet of integrative reminiscence, is associated with life satisfaction, self-esteem, and a sense of life coherence, and it is negatively associated with depression among middle aged adults (McAdams, Reynolds, Lewis, Patten, & Bowman, 2001). Similarly, using reminiscences to reduce fears of death and face thoughts of one’s mortality with equanimity (Death Preparation), a crucial element of a positive life review, contributes to physical and mental health.

Contrary to our expectation, we observed no direct association between the prosocial functions of reminiscence (Conversation and to Teach–Inform Others) and health. One possible explanation is that these reminiscences have primarily a short-term influence on states, such as mood and emotions, and in and around the time of remembering without a demonstrable effect on longer term physical and mental health, at least with the measures used in the present study. It should also be noted that there is relatively less opportunity for spontaneous use of these functions of reminiscence, as they require the presence of partners, unlike the other modes of reminiscence that occur in private and at virtually any time. In other words, prosocial functions are more context dependent. They may exert an influence on physical health and mental health in an indirect fashion by means of their links with self-functions.

Reminiscence for Conversation appears as the predominant prosocial function. In accord with socioemotional selectivity theory (Carstensen et al., 2003), our model contends that this form of reminiscence contributes to emotional regulation, specifically by providing content and occasions to experience positive mood in the company of others. Pasupathi (2003) has underlined the emotion regulatory function of conversational remembering. Compared with younger adults, older adults report greater positive emotion when engaged in mutual reminiscing, selectively focusing on positive events (Pasupathi & Carstensen, 2003). That being said, our emphasis on emotional regulation obviously does not preclude a contribution of conversational reminiscing to the development of identity in adulthood (Pasupathi, 2001). To reminisce to Teach–Inform Others (transmissive reminiscence), the other prosocial function, allows one to convey a self-presentation as experienced, wise, and possibly self-enhanced. This process is also likely to elevate mood.

The findings of this study also provide additional support for the basic tenets of the theory of cognitive adaptation (O’Rourke, 2002, 2004, 2005), as direct and significant associations are evident between autobiographical memory and health. According to this theory, the ways in which people subjectively interpret their interpersonal relations and life histories are significantly associated with wellness in later life. Self-positive autobiographical recall has been shown to predict the health of older adults in correlational (O’Rourke, 2004, 2005) and longitudinal (O’Rourke, 2002) research. These results are not restricted to the well-established links between cognition and mental health; they also extend to the physical well-being of older adults. The latter finding supports the
assertion that appraisal, encoding, and recall of personally relevant information positively affect health (O’Rourke, 2002, 2004, 2005).

Socioemotional selectivity theory (Carstensen et al., 2003) similarly contends that selective information processing plays a role in well-being in later life. According to this theory, with life expectancy perceived as finite, older adults shift their goals to regulating emotional states in order to improve mood and optimize well-being. This greater focus on emotional goals leads them to avoid negative memories (Mather, 2004; Mather & Carstensen, 2005; Schlagman, Schulz, & Kvakilashvili, 2006).

It should also be noted that the present model may apply only to older adults in the age range of our sample. The importance of particular functions of reminiscence and their adaptive value undoubtedly change across the life span in accord with age-associated developmental tasks (Erikson, 1978). This realization may well explain certain discrepancies between studies. For instance, the preponderance of the directive or guidance function (i.e., planning for present and future actions) in the study by Bluck and colleagues (2005) may be attributed to the age of their sample (i.e., undergraduate students), as these young adults are in a stage of life characterized by the developmental challenge of goal definition and life planning. Reminiscences with these directive functions may be more apparent at times of confrontation with problems requiring solution and decision (Pillemer, 2003). Indeed, the pattern of reminiscence of young adults attending college appears to be characterized by higher uses of reminiscence for Problem Solving (and also Identity; see Cappeliez, Lavallée, & O’Rourke, 2001).

Another important caveat pertains to our inability to assume causal relationships, given the correlational nature of the current dataset. Not withstanding the methodological strengths of SEM, it remains that only an experimental or longitudinal design can lead to definitive claims of cause–effect relationships.

Together with Bluck and colleagues (2005), we raise fundamental questions about current research on the functions of reminiscence. The main challenge concerns the complexity of identifying reminiscence functions. Although we treat them as discrete entities, functions of reminiscence overlap in real life. The same reminiscence about a past success might serve to solve a problem, to transmit a lesson of life, and to bolster one’s sense of self-esteem at another point. Because memory functions do not operate in isolation, the question of which mode of reminiscence is most adaptive is overly simplistic. Therefore, future research ought to address patterns of use as well as their interactions over time. One might also speculate as to the existence of other functions of reminiscence in addition to the eight of the RFS and the three latent constructs identified herein. As research continues to evolve, other types may be identified and deemed worthy of study in terms of their adaptive value (e.g., reminiscence for spiritual reasons or artistic pursuits).

We need to study the adaptive value of reminiscence in a dynamic fashion within natural reminiscence episodes. There are limitations to measuring reminiscence functions with self-report scales, as individuals vary in their definitions of reminiscence as well as their understanding of their uses. Awareness of uses of reminiscence also varies. For instance, Pillemer (2003) reported that individuals are less aware of memories used for guidance purposes than those for self-functions or social functions. Self-report instruments measuring the frequency of various reminiscences, such as the RFS, may therefore skew responses toward functions involving awareness and effortful mental activity, perhaps neglecting more elusive automatic modes of reminiscences (Pillemer). In addition, the retrospective and potentially reconstructive judgments required by these scales may well be influenced by implicit theories that people have developed about the value of reminiscing.

In conclusion, this study provides empirical support for a model of the adaptive value of reminiscence among older adults in relation to their physical and psychological health. This model consists of three broad functions of reminiscence: self-positive, self-negative, and prosocial functions. The generalizability of this model has to be assessed further with other age groups and with more refined and dynamic assessments of reminiscence, including prospective examination of causal relationships between reminiscence and health over time.

ACKNOWLEDGMENTS

This study was conducted with financial support from the Simon Fraser University/Social Sciences and Humanities Research Council of Canada Institutional Grants Program (N. O’Rourke), and from the Social Sciences and Humanities Research Council of Canada under Grant 410-2002-045 (P. Cappeliez).

Address correspondence to Philippe Cappeliez, School of Psychology, University of Ottawa, 11 Marie Curie Street, Ottawa, Canada K1N 6N5.

E-mail: Philippe.Cappeliez@uottawa.ca

REFERENCES


