THE GERONTOLOGICAL SOCIETY OF AMERICA®

The Gerontologist
cite as: *Gerontologist*, 2016, Vol. 56, No. 1, 14–21
doi:10.1093/geront/gnv097
Advance Access publication November 9, 2015

OXFORD

Special Issue: Veterans Aging: Forum

From Late-Onset Stress Symptomatology to Later-Adulthood Trauma Reengagement in Aging Combat Veterans: Taking a Broader View

Eve H. Davison, PhD,[*,1,2] Anica Pless Kaiser, PhD[1,2] Avron Spiro, III, PhD,[3,4] Jennifer Moye, PhD,[5,6] Lynda A. King, PhD,[1,7] and Daniel W. King, PhD[1,7]

[1]National Center for Posttraumatic Stress Disorder, VA Boston Healthcare System, Boston, Massachusetts. [2]Department of Psychiatry, Boston University School of Medicine, Massachusetts. [3]Massachusetts Veterans Epidemiology Research and Information Center, VA Boston Healthcare System, Boston, Massachusetts. [4]Department of Epidemiology, Boston University School of Public Health, Massachusetts. [5]VA Boston Healthcare System, Brockton, Massachusetts. [6]Department of Psychiatry, Harvard Medical School, Boston, Massachusetts. [7]Departments of Psychology and Psychiatry, Boston University School of Medicine, Massachusetts.

*Address correspondence to Eve H. Davison, PhD, VA Boston Healthcare System, 150 South Huntington Avenue, Boston, MA 02130. E-mail: eve.davison@va.gov

Received January 12, 2015; Accepted June 13, 2015

Decision Editor: Barbara J. Bowers, PhD

Abstract

About a decade ago we proposed the notion of *late-onset stress symptomatology*, to characterize the later-life emergence of symptoms related to early-life warzone trauma among aging combat Veterans. We hypothesized that aging-related challenges (role transition and loss, death of family members and friends, physical and cognitive decline) might lead to increased reminiscence, and possibly distress, among Veterans who had previously dealt successfully with earlier traumatic events. Recently, we have reexamined our earlier ideas, to better reflect our developing understanding of this phenomenon, and to incorporate more contemporary perspectives on posttraumatic growth and resilience. As a result, we have broadened our conceptualization to *later-adulthood trauma reengagement* (LATR). We suggest that in later life many combat Veterans confront and rework their wartime memories in an effort to find meaning and build coherence. Through reminiscence, life review, and wrestling with issues such as integrity versus despair, they intentionally reengage with experiences they avoided or managed successfully earlier in life, perhaps without resolution or integration. This article links LATR to classic gerontologic notions, and elaborates how the LATR process can lead positively to personal growth or negatively to increased symptomatology. We also address the role of preventive intervention in enhancing positive outcomes for Veterans who reengage with their wartime memories in later life.

Key Words: Life review, Veterans, Life course/life span, Meaning-making, Posttraumatic growth

The years are going by and we know it and reflect more. That's what it really is. We reflect.

But now little things trigger thoughts—because we're seniors, we have more time, we're getting older and we have the memories of that time. For us who were probably, as you said, under 20, it was the most momentous time of our life.

I miss the camaraderie of the fellows that I was with. I still send out Christmas cards. And the numbers go down and down. But those memories are very good the

> good times in that company. I really miss it. In my company, there's only five of us left.
>
> For me, it [wartime military service] helped make me a better person. I began to have more understanding and compassion, more wanting to help people. I became a much better person afterwards, even though it took me years to bring back and relive the war.

The U.S. Veteran population is aging at a rapid rate. In 2012, the median age of male U.S. Veterans was 64, compared with a median age of 41 for the U.S. population overall (U.S. Census Bureau, 2012). As of 2014, although Veterans comprised only 7% of the U.S. population, 45% of all Veterans were aged 65 or older (National Center for Veterans Analysis and Statistics, 2014). Notably, as of 2010, 64% of the U.S. male population aged 65 and older—roughly two out of every three men—were veterans of the military (Federal Interagency Forum on Aging-Related Statistics, 2012). World War II and Korean conflict Veterans are now in late old age. Vietnam War Veterans—along with the rest of the baby boomers—are rapidly entering old age: in 2013 there were 7 million living Vietnam-era Veterans (National Center for Veterans Analysis and Statistics, 2014). First Gulf War Veterans are also aging: 52% of the approximately 700,000 Gulf War Veterans are aged 45 and older, and approximately 16% fall within the 55–85 and older age range (U.S. Department of Veterans Affairs, 2011). Even many of our most recent war Veterans will soon be approaching their later years: 8% of Veterans deployed in support of Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF; e.g., Afghanistan and Iraq wars) were born prior to 1960 (Dursa, Reinhard, Barth, & Schneiderman, 2014).

Over the past couple decades, there has been increasing anecdotal and clinical evidence of the emergence of combat-related distress for Veterans in later life, and many combat Veterans report increases in wartime reminiscences and memories as they age. Trauma exposure is ubiquitous among Veterans, and yet the prevalence of diagnosed posttraumatic stress disorder (PTSD) is comparatively low (Richardson, Frueh, & Acierno, 2010), despite evidence that Veterans also experience higher rates of premilitary trauma than the non-Veteran population (Blosnich, Dichter, Cerulli, Batten, & Bossarte, 2014). The literature also suggests that combat veterans engage in more risky behaviors that can in turn portend more postwar traumatic exposures, at least during the years immediately following deployment (Gackstetter et al., 2002; Hooper et al., 2006; Killgore et al., 2008), and that combat-related PTSD is correlated with increased risk of physical health conditions such as cardiovascular disease in later life (Kang, Bullman, & Taylor, 2006). Taken together, these facts underscore the importance of a life-course perspective on the effects of trauma in the lives of Veterans, and of the potential value of preventive intervention for aging combat Veterans.

Over a decade ago, we proposed the notion of late-onset stress symptomatology, or LOSS, to characterize the later-life emergence of symptoms related to early-life warzone trauma among aging combat Veterans (Davison et al., 2006). We hypothesized that the challenges that occur with aging (role transition and loss, death of family members and friends, physical and cognitive decline) might lead to increased reminiscence, and possibly increased distress, among Veterans who had previously either dealt successfully with these earlier traumatic events or had perhaps avoided, repressed, or moved beyond them earlier in adulthood. Using focus groups, we identified related themes (Davison et al., 2006), developed a self-report questionnaire to measure LOSS, and examined its correlates, possible causes, and consequences (King et al., 2007).

More recently, to further delineate the distinction between LOSS and delayed-onset or subclinical PTSD, we examined LOSS's discriminant validity from PTSD (Potter et al., 2013). We found LOSS to be less strongly associated with emotional well-being and mental health symptoms than was PTSD, and more strongly associated with concerns about retirement. These findings support our conceptualization of LOSS as occurring within the context of common late-life stressors. Additionally, new DSM-5 classifications of PTSD and other "trauma- and stressor-related disorders" do not appear to alter the discriminant validity of LOSS vis-à-vis PTSD, given that "avoidance" symptoms (Criterion C) remain central to the PTSD diagnosis (American Psychiatric Association, 2013), whereas active, intentional reminiscence in response to common late-life events is the hallmark of LOSS.

Over the past several years we have continued our inquiry into LOSS and related constructs, and have reexamined our earlier ideas. To better reflect our growing understanding of this phenomenon, to reflect its inspiration by classic gerontologic theory, and to better integrate it with more contemporary theory and research on posttraumatic growth and wisdom (e.g., Agaibi & Wilson, 2005; Park, 2009; Tedeschi & Calhoun, 2004), we have broadened our initial conceptualization of LOSS, and now refer to the phenomenon as *later-adulthood trauma reengagement*, or LATR. We suggest that in later life many combat Veterans adaptively reengage, or perhaps engage for the first time, with their wartime memories in an effort to find meaning and build coherence. In other words, through reminiscence, life review, and wrestling with issues such as integrity versus despair (Erikson, 1968, 1997), many aging combat Veterans intentionally reengage with wartime experiences from earlier in their lives that they may have avoided, or managed more or less successfully, but without obtaining resolution or integration. This article links LATR to classic gerontologic constructs, elaborates how the LATR process can lead positively to personal growth and meaning-making, or negatively to LOSS and other manifestations of distress. We also address the role of psychoeducation and preventive intervention in enhancing positive outcomes for

those Veterans who reengage with their wartime memories in later life.

Branches of the Tree: The Influence of Classic Gerontologic Notions and Life-Span Developmental Theory on the Conceptualization of LATR

The foundation for LATR was derived from a life-span perspective that emphasizes mechanisms for the developmental changes that occur along with aging-related processes over the life course. Classic gerontologic notions posit that development occurs across the life span involving both continuous (cumulative) and discontinuous (innovative) processes, and that change demonstrates both gains and losses, as well as intraindividual variability. These individual changes are historically embedded and often age-graded.

Stage-based theorists of development emphasize that changes occur over the course of each stage with a focus on potential growth and integration. For example, Erikson expanded on Freud's psychosexual stages to describe psychosocial developmental stages across the life span, each of which contains a crisis to be resolved. Erikson (1968, 1997) conceptualized the crisis and potential learning of old age as a dynamic between integrity and despair. Within this stage, losses often include bodily integrity/health, mental integrity and memory, and psychosocial roles in the world. Faced with these losses, the developmental task of old age is to formulate a new coherence, meaning, and wholeness. Negative resolution of this stage leads to despair or depression, whereas successful resolution can lead to acceptance, understanding, and the development of wisdom.

Personality-oriented theorists (e.g., Ardelt, 2004) describe wisdom as involving cognitive, reflective, and affective personality characteristics. More specifically, knowledge and acceptance of positive and negative aspects of life, self-awareness and the ability to contemplate or reflect on alternative perspectives, and sympathetic and compassionate consideration of others are part of the wisdom construct. In contrast, cognitively oriented theorists view wisdom as an expert knowledge system emphasizing cognitive integration and application. For example, Baltes and Staudinger's (2000) approach concerns the conduct, interpretation, and meaning of life. Important within this concept are factual and procedural knowledge about the pragmatics of life, life-span contextualism, relativism of life priorities and values, and recognition and management of uncertainty. Gerotranscendence (Tornstam, 2005), a developmental process that is linked to aging-related changes, leads individuals to adapt a new perspective on life, often away from the importance of material goods and the self toward viewing oneself as part of the greater whole.

Successful resolution of late-life challenges and the development of wisdom occur in part by reviewing and integrating life experiences to shape a coherent sense of self and a meaningful life story, which may, in turn, buffer the potential negative impact of late-life challenges. Researchers have pointed out that reminiscence can have positive or negative impact depending upon the function it serves for the aging trauma survivor (e.g., O'Rourke et al., 2015), and that—beyond simply remembering for remembering's sake—reconciliation with traumatic experience can lead to integrity and to a sense of a coherent life story (e.g., Coleman, 1999). Life review is one technique older adults can use to reflect on their life experiences in a structured, deliberate way. Life review involves confronting, working through, and meaningfully integrating painful memories, such as those of trauma, into self-understanding; this process can promote growth (Butler, 1974, 2002). When individuals can identify positive meaning in the aftermath of a threatening experience, they tend to be better adjusted psychologically (Taylor, 1983). Ingersoll-Dayton and Krause (2005) argue that an essential ingredient to a positive outcome of life review is self-acceptance. One way that life review can be helpful to older adults is to modify negative views of self (or schemas) by reinterpreting past events and recognizing beneficial components of these memories (Watt & Cappeliez, 1995). Life review is one mechanism that can foster posttraumatic growth, and lead to positive change as a result of struggling to manage the aftermath of a traumatic event. Those who experience posttraumatic growth often exhibit changes in their views about themselves, their relationships with others, and their priorities in life and sense of meaning (Calhoun & Tedeschi, 1999). For those Veterans who did not fully address their traumatic exposures earlier in life and who are revisiting these experiences as older adults, it may be possible for them to experience delayed-onset posttraumatic growth.

We postulate that military service and its place in adult development could be unique in that, for many aging Veterans, their military experience was much broader than exposure to combat trauma, and included positive benefits and gains such as acquiring skills in training and succeeding in extreme challenges. Their military experience also likely fostered strong relational bonds that Veterans often form as a result of their shared experiences. For these reasons, reminiscence about military experience may be complex, integrating both positive and negative aspects of the experience—a distinct series of events happening over an extended period of time, often with others and in another country, such that in late life, some Veterans report longing to re-experience those bonds, as well as a need to resolve the loss of military friends through memorializing or the desire to make meaning of their experiences (Elder & Clipp, 1988).

LATR: An Elaboration

Our broadened reconceptualization of LOSS into LATR grew out of our group's interest in life-span developmental processes as well as in meaning-making and life review, resilience, and posttraumatic growth in the face

of trauma. We posit that central to the LATR process is its rootedness in the late-life developmental task of a search for meaning and coherence. We suspect that those Veterans who in later life begin to confront their earlier wartime experiences are engaging in the process we call LATR, and are adaptively reworking their trauma-related memories. Further, we believe that some Veterans engaged in this process may be at a point where guided life review and therapeutic reminiscence might facilitate subsequent healthy aging.

This evolution of LOSS into LATR was an iterative process that occurred over the past decade and was influenced by our review of clinical geropsychological theories, our research and clinical practice with aging Veterans, and numerous discussions with our colleagues. When we began to research and write about LOSS in 2000, we were studying and working with aging World War II and Korean Veterans; over the past decade, as Vietnam Veterans aged and were included in our research and clinical work, our thinking has evolved. Whereas our earlier concept included the word "symptomatology," implying disorder or dysfunction—and additionally was conceptualized as an endpoint of sorts—the LATR concept is intended to convey a broader developmental *process* that is adaptive (and may be normative) for aging combat Veterans, and that may be resolved successfully and lead toward more positive outcomes or may lead to the development of increased distress and clinically significant symptomatology for others.

We suggest that in later life many combat Veterans are confronting and adaptively reworking their wartime memories in an effort to find meaning and build coherence. Through reminiscence, life review, and wrestling with issues such as integrity versus despair, they intentionally reengage with experiences they avoided or managed successfully earlier in life, perhaps without resolution or integration. If successfully resolved, meaning-making leads to integrity. If the Veteran becomes stuck in the process in some way, distress may develop into more significant problems. As previously mentioned, Erikson (1968, 1997) postulated that the challenges of late life result from losses of physical and psychological integrity, and of a sense of meaning or place in the world at large. By seeking to reform a sense of integrity and coherence through reviewing and integrating early combat experiences to shape a coherent sense of self and life story that is meaningful, we posit that successful navigation of the LATR process can provide some buffer against the challenges of late life.

Our model of LATR (Figure 1) accounts for the contributing role of several factors across the life course, and acknowledges that the life course is embedded within a sociocultural/historical context. The model posits that early life risk factors, or "pre-existing vulnerabilities," set the stage for the impact the "focal antecedent" of combat exposure will have. Some Veterans may exit the experience of combat with a life-long disorder (e.g., "chronic psychopathology" arrow from "focal antecedent" to "consequences"); others may go on to develop more chronic psychopathology following exposure to subsequent, post-war stressors ("additional life stressors"). Many will not go on to develop clinically significant psychological disorders. For others, a reengagement with past combat experiences is precipitated by and takes place within the context of several key "correlates." Central to our conceptualization of LATR are the changes and challenges of aging, or "common aging events." These common later-life stressors—role transitions and losses brought on by retirement, financial shifts, lifestyle changes, declines in physical health, deaths of spouses or other loved ones—are the context within which the process of LATR unfolds. Along with these common events of aging, and exerting additional impact upon the LATR process, are "intrapersonal factors," many of which were discussed in the previous section, as well as "social and environmental assets" such as current socioemotional and instrumental support, community resources, and residential arrangements. Together, these three sets of correlates impact the manner in which the Veteran engages in the LATR process. The circle within the model represents the developmental task of LATR, and indicates that the Veteran may experience late-onset distress and/or begin to positively reshape his appraisals of his military experience. More successful navigation of the LATR process will lead to "positive outcomes" such as acceptance, growth, and "integrity," and less successful navigation to "negative outcomes" such as distress, depression, and "despair."

In terms of the role that "correlates" play in the LATR process, we want to underscore that we believe there are interactions between "correlates" and LATR. In other words, personal differences—what we have termed, "intrapersonal factors" and "social and environmental assets" in the model—likely interact with LATR to impact "outcomes." In the presence of higher or lower degrees of particular intrapersonal factors or social/environmental assets, the LATR process may be more or less successfully navigated, consequently yielding different outcomes. This is in line with existing research such as, for example, Krause (2004), who found an interaction effect between emotional support—a correlate under "social and environmental assets" in our LATR model—and prior trauma on current feelings of life satisfaction in older adults.

As described earlier, there is a range of reactions to trauma over the life course. We postulate that a variety of responses are possible, not all of them pathological, even though many can be distressing. LATR does have points of overlap with late-life posttraumatic stress symptoms, in that both can occur during a time when an older person is coping with social losses and transitions, medical comorbidities, and declines in functioning. That said, we postulate that the normative late-adult developmental processes of life review, reminiscence, and "search for meaning" are core to LATR, and what further distinguish LATR (a dynamic process) from PTSD (a diagnosis). Compared with PTSD, in LATR "re-experiencing" is characterized by

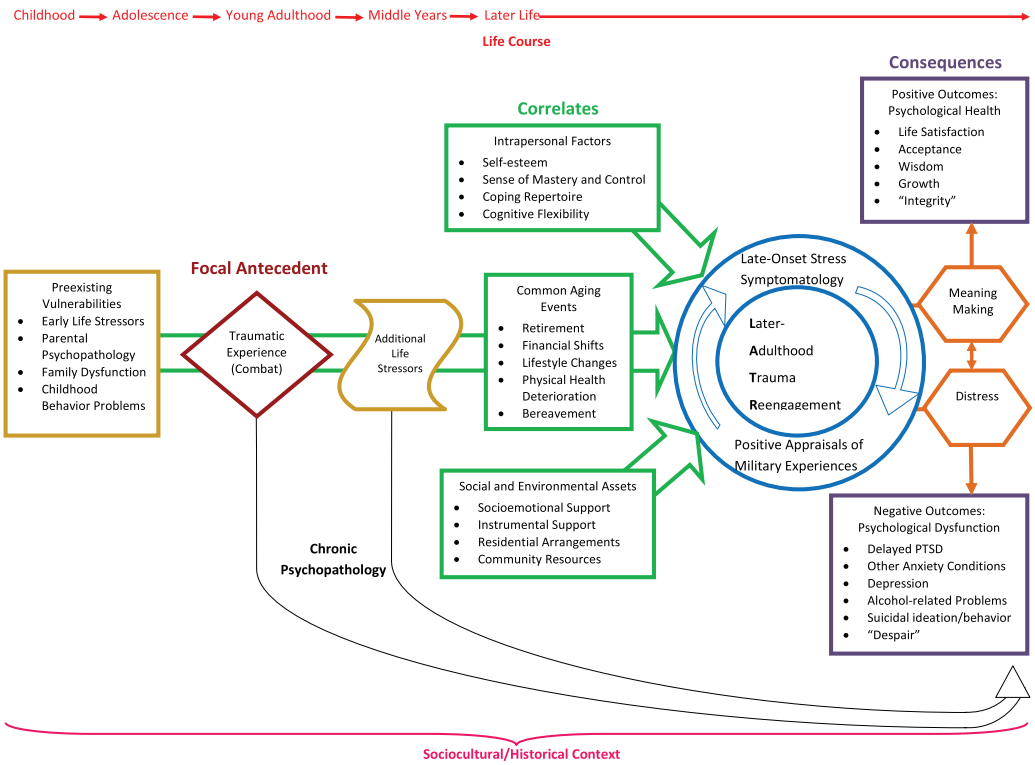

Figure 1. Schematic representation of later-adulthood trauma reengagement: a life-span developmental perspective.

active, deliberate reminiscence, reflection, and reengagement, as opposed to intrusive thoughts and memories. Also in contrast to PTSD, in LATR avoidance is absent, and approach and confrontation with the traumatic material is present. We acknowledge that the aging combat Veteran engaged in LATR may indeed be experiencing distress, but we note that the quality of the "distress" is different than the "clinically significant distress" of DSM-5 PTSD, and may instead be characterized by dissonance, a sense of not being at peace, a sense of being unresolved—which, although uncomfortable, may represent an intermediate step along the path to achieving a sense of integration, resolution, and coherence about the meaning of military experience in one's identity and the sense of one's place in the world at large (see arrows moving upward from "distress" to "meaning making" to "positive outcomes" under "consequences" in the model).

We suspect that in LATR, Veterans are engaging in adaptive reworking of their trauma-related memories and may be open to further structured life review. Veterans experiencing an increase in wartime memories are at a point where life review and therapeutic reminiscence may be integral to subsequent healthy aging. In this sense as well, LATR can again be contrasted to PTSD, which has been characterized as having "stuck points" (Resick & Schnicke, 1992), "stuck narrative" (Hyer, Summers, Braswell, & Boyd, 1995), or obsessive reminiscence (Coleman, 2005)—in other words, a failure to integrate and accommodate the combat experience into one's views of oneself and the world. Life review involves confronting, working through, and integrating memories, such as memories of trauma, into self-understanding; this process can promote growth (Butler & Lewis, 1977). When individuals can identify positive meaning in the aftermath of a threatening experience, they tend to be better adjusted psychologically (Taylor, 1983). Schok and colleagues (2008) point out that this can be a multistep process. For Veterans, in addition to answering questions in the aftermath of warzone exposure (Who? Why? What?), it can be important to place personal significance or benefit on the combat experience. As noted earlier, Ingersoll-Dayton and Krause (2005) posit that self-acceptance is an essential ingredient to positive outcome of life review, and Watt and Cappeliez (1995) believe that one way life review can be helpful to aging Veterans is through changing negative views of self (or schemas) by reinterpreting past warzone events and recognizing beneficial components.

It is possible that the LATR process may not be unique to combat Veterans. As postulated earlier, military experience and its place in adult development is distinguished by the fact that, for many aging Veterans, their military experience was considerably broader than their combat exposures, included benefits and gains, and also resulted in connections and bonds with their comrades (Elder & Clipp, 1988). However, survivors of other forms of trauma may also engage in this later-life process of meaning-making and benefit-finding, and may also experience gains and growth, but the form this process takes may differ depending upon the nature of the past traumatic exposures.

Facilitation of the LATR Process: Implications for Intervention

Veterans who endorsed LOSS symptoms in our original research also reported positive social and occupational adaptation through midlife, suggesting that these individuals are qualitatively different from those with chronic, severe PTSD, many of whom did not have positive social and occupational functioning over the life course. Those Veterans with a history of more adaptive functioning will likely have identified valuable coping or resilience mechanisms during the life course, which may be drawn upon during facilitation of the LATR process. Likewise, there are no doubt many Veterans who struggled more or less continuously with symptoms of PTSD across their life course but were able nonetheless to function at a high level using a variety of coping mechanisms—working multiple jobs, focusing on the needs of family, substance abuse, "blocking out" memories—but who find it more difficult to keep wartime thoughts, memories, and images at bay as they enter late life; these Veterans, too, may benefit from assistance in drawing upon past successful coping and from assistance in navigating the LATR process.

We reiterate that LATR is not itself a "negative condition," but rather a process that, if not successfully navigated, can lead to a "negative condition" (e.g., depression or despair). That said, recognition of the LATR process may present opportunities for those working with aging combat Veterans to facilitate their navigation of the process, possibly averting future distress or despair. Therapeutic reminiscence and structured life review can decrease symptoms and increase coping skills and life satisfaction in elderly trauma survivors with or without PTSD (Bohlmeijer, Roemer, Cuijpers, & Smit, 2007; Cappeliez, O'Rourke, & Chaudhury, 2005; Maercker, 2002). It is possible that Veterans navigating the LATR process may be uniquely capable of beneficial engagement with their peers, of posttraumatic growth, and of meaning-making around past combat experiences.

As LATR is conceptualized as a normative process, we hypothesize that many Veterans may navigate this process independently and/or with the support of family and friends. In contrast, as an exploration of a group-facilitated process, we developed, piloted, and revised a psychoeducational group intervention for aging combat Veterans who are experiencing LATR. The original intervention was designed as a six-session adjunctive treatment to provide education about later-life emergence of symptoms, to assist older Veterans in connecting with peers, and to facilitate the development of meaning-making, posttraumatic growth, and positive coping skills. The group was conducted from a life-span developmental perspective, and aimed to help Veterans understand reactions to trauma, the impact of role transitions, symptom trajectories, and well-being across the life course. In the group Veterans were provided written materials with various exercises including completed life-course graphs and writing in response to prompts. Feedback from pilot group members was positive; although several Veterans reported that talking about their past experiences was difficult, all noted having found the group discussion helpful. Based upon feedback from both group facilitators and participants, we have lengthened the protocol to 10 sessions, and are in the process of recruiting Veterans for additional groups. We anticipate that conducting these groups and assessing Veterans before and after their participation will help us to answer some of our remaining questions about the LATR process.

Remaining Questions

As we continue our investigation into this late-life developmental process, yet more questions and potential lines of inquiry emerge. Is LATR relevant only to combat Veterans, perhaps because of some distinctive features of their military experience? The answer to this question is not clear. As discussed earlier, military experience and its place in adult development is likely unique in that it is much broader than exposure to combat trauma, often extends over several years, can include many positive experiences, and often fosters strong relational bonds. Consequently, the process of reengagement with past combat trauma—or with military service more generally—involves integrating both positive and negative aspects of wartime experiences. In addition to possibly occurring among noncombat military Veterans, the LATR process may also be explored by civilians who have experienced earlier life trauma. It is likely that older adults who have experienced certain other forms of trauma, particularly more solitary forms (e.g., aging survivors of early sexual abuse or assault), might not have the same feelings of longing for positive aspects of the experience and strong seeking of trauma-related stimuli. At the same time, even if reengaging with traumatic memories—for both combat Veterans and other trauma survivors—does not result in an appreciation of positive aspects of the experience, it is possible that the process may nonetheless lead to reconciliation to the impact this trauma exerted in the context of one's life overall, to growth and wisdom, and to a more successful integration of the trauma into one's life story (e.g., Erikson's integrity).

How might LATR relate to adaptation to other late-life stressors? We have investigated this in considering the role of combat trauma, adaptation to combat trauma, and coping with cancer. The diagnosis and treatment of cancer is for many a significant stress, and for some qualifies as a traumatic stressor (Moye & Rouse, 2014; Mulligan, Wachen, Naik, Gosian, & Moye, 2014). In older veterans diagnosed with oral-digestive cancers, having been in combat did not predict greater levels of cancer-related distress. However, cancer-related distress was related to current combat-related PTSD symptoms. Qualitative data provided a window into the dialectic of distress and making-meaning regarding the combat trauma and the cancer experience. Veterans reported that the cancer experience reminded them of combat, and that their combat experiences helped them

cope with cancer, as they also relayed cancer-related growth in the areas of acceptance, worldview, and family relations (Jahn, Herman, Schuster, Naik, & Moye, 2012). As posited by the LATR model, late-life transitions and stressors, such as significant medical illness, may open a window to reconciliation of combat trauma and to late-life growth.

Recognizing when Veterans are engaged in the LATR process represents an opportunity for those working with these Veterans to offer them different modalities of assistance if warranted (e.g., psychoeducational, psychotherapeutic) in order to maximize healthy aging. Further research is needed to determine whether distress, if present during the navigation of the LATR process, abates with reminiscence or life review, as well as to elucidate what effects, if any, are exhibited in mental or physical health of aging Veterans. If we were able to assess or screen aging combat Veterans for LATR, could we facilitate the transition to a healthier old age? Our research group is in the process of validating a brief screening measure, in hopes that this measure might prove useful in clinical contexts such as primary care visits. Could we avert depression, despair, or PTSD by preventing narratives from becoming obsessive or "stuck" in later life? Could psychoeducational efforts provided as Veterans enter retirement assist them in navigating the LATR process? Given that the LATR construct is tied to common later-life stressors and changes, interventions addressing these issues could prove relevant to a wide range of older Veterans. As successive cohorts of the Veteran population age, it will be essential to understand the variety of ways in which military experience manifests in late life, and ways in which aging processes interact with prior combat exposure and military service.

Funding

This research was supported by funding from the Behavioral Science Division of the VA National Center for Posttraumatic Stress Disorder, VA Boston Healthcare System. Avron Spiro was supported by a Senior Research Career Scientist award from the U.S. Department of Veteran Affairs, Clinical Science R&D Service.

Acknowledgments

The authors wish to acknowledge the following past and current colleagues for their significant contributions to this work over the years: Peter Bachrach, Sharmila Chatterjee, Cliff Evans, Danny Kaloupek, Meghan Rooney, Dawne Salgado, Antonia Seligowski, Joyce Wang, and the Stress, Health, and Aging Research Program at VA Boston. The views expressed in this article are those of the authors and do not necessarily represent the views of the U.S. Department of Veterans Affairs or other support institutions.

References

Agaibi, C. E., & Wilson, J. P. (2005). Trauma, PTSD, and resilience: A review of the literature. *Trauma, Violence, & Abuse*, **6**, 195–216. http://dx.doi.org/10.1177/1524838005277438

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Publishing. http://dx.doi.org/10.1176/appi.books.9781585624836.jb07

Ardelt, M. (2004). Wisdom as expert knowledge system: A critical review of a contemporary operationalization of an ancient concept. *Human Development*, **47**, 257–285. http://dx.doi.org/10.1159/000079154

Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *American Psychologist*, **55**, 122–136. http://dx.doi.org/10.1037/0003-066X.55.1.122

Blosnich, J. R., Dichter, M. E., Cerulli, C., Batten, S. V., & Bossarte, R. M. (2014). Disparities in adverse childhood experiences among individuals with a history of military service. *JAMA Psychiatry*, **71**, 1041–1048. http://dx.doi.org/10.1001/jamapsychiatry.2014.724

Bohlmeijer, E., Roemer, M., Cuijpers, P., & Smit, F. (2007). The effects of reminiscence on psychological well-being in older adults: A meta-analysis. *Aging and Mental Health*, **11**, 291–300. http://dx.doi.org/10.1080/13607860600963547

Butler, R. N. (1974). Succesful aging and the role of the life review. *Journal of the American Geriatrics Society*, **22**, 529–535.

Butler, R. N. (2002). The life review. *Journal of Geriatric Psychiatry*, **35**, 7–10.

Butler, R. N., & Lewis, M. (1977). *Aging and mental health: Positive psychological approaches*. St. Louis, MO: Mosby.

Calhoun, L. G., and Tedeschi, R. G. (1999). *Facilitating posttraumatic growth: A clinician's guide*. Mahwah, NJ: Lawrence Erlbaum.

Cappeliez, P., O'Rourke, N., & Chaudhury, H. (2005). Functions of reminiscence and mental health in later life. *Aging and Mental Health*, **9**, 295–301. http://dx.doi.org/10.1080/13607860500131427

Coleman, P. (1999). Creating a life story: The task of reconciliation. *The Gerontologist*, **39**, 133–139. http://dx.doi.org/10.1093/geront/39.2.133

Coleman, P. (2005). Uses of reminiscence: Functions and benefits. *Aging and Mental Health*, **9**, 291–294. http://dx.doi.org/10.1080/13607860500169641

Davison, E. H., Pless, A. P., Gugliucci, M. R., King, L. A., King, D. W., Salgado, D. M., … Bachrach, P. (2006). Late-life emergence of early-life trauma: The phenomenon of late-onset stress symptomatology among aging combat veterans. *Research on Aging*, **28**, 84–114. http://dx.doi.org/10.1177/0164027505281560

Dursa, E. K., Reinhard, M. J., Barth, S. K., & Schneiderman, A. I. (2014). Prevalence of a positive screen for PTSD among OEF/OIF and OEF/OIF-era Veterans in a large population-based cohort. *Journal of Traumatic Stress*, **27**, 542–549. http://dx.doi.org/10.1002/jts.21956

Elder, G. H., & Clipp, E. C. (1988). Combat experience, comradeship, and psychological health. In J. P. Wilson, Z. Harel, & B. Kahana (Eds.), *Human adaptation to extreme stress* (pp. 131–156). New York: Plenum Press. http://dx.doi.org/10.1007/978-1-4899-0786-8_6

Erikson, E. (1968). *Identity, youth and crisis*. New York: W. W. Norton.

Erikson, E. (1997). *The life cycle completed, extended version*. New York: W. W. Norton.

Federal Interagency Forum on Aging-Related Statistics. (2012). *Older Americans 2012: Key indicators of well-being*. Washington, DC: U.S. Government Printing Office. Retrieved from http://www.agingstats.gov/Main_Site/Data/2012_Documents/docs/Population.pdf

Gackstetter, G., DeBakey, S., Cowan, D., Paxton, M., Weaver, R., Lange, J., … Hooper, T. (2002). # 54 Fatal motor vehicle crashes among veterans of the gulf war era: A nested case–control study. *Annals of Epidemiology*, **12**, 509–510. http://dx.doi.org/10.1016/S1047-2797(02)00342-3

Hooper, T. I., DeBakey, S. F., Bellis, K. S., Kang, H. K., Cowan, D. N., Lincoln, A. E., & Gackstetter, G. D. (2006). Understanding the effect of deployment on the risk of fatal motor vehicle crashes: a nested case–control study of fatalities in Gulf War era veterans, 1991–1995. *Accident Analysis & Prevention*, **38**, 518–525. http://dx.doi.org/10.1016/j.aap.2005.11.009

Hyer, L., Summers, M. N., Braswell, L., & Boyd, S. (1995). Posttraumatic stress disorder: Silent problem among older combat veterans. *Psychotherapy: Theory, Research, Practice, Training*, **32**, 348–364. http://dx.doi.org/10.1037/0033-3204.32.2.348

Ingersoll-Dayton, B., & Krause, N. (2005). Self-forgiveness: A component of mental health in later life. *Research on Aging*, **27**, 267–289. http://dx.doi.org/10.1177/0164027504274122

Jahn, A. L., Herman, L., Schuster, J., Naik, A., & Moye, J. (2012). Distress and resilience after cancer in veterans. *Research in Human Development*, **9**, 229–247. http://dx.doi.org/10.1080/15427609.2012.705555

Kang, H. K., Bullman, T. A., & Taylor, J. W. (2006). Risk of selected cardiovascular diseases and posttraumatic stress disorder among former World War II prisoners of war. *Annals of Epidemiology*, **16**, 381–386. http://dx.doi.org/10.1016/j.annepidem.2005.03.004

Killgore, W. D., Cotting, D. I., Thomas, J. L., Cox, A. L., McGurk, D., Vo, A. H.,…Hoge, C. W. (2008). Post-combat invincibility: Violent combat experiences are associated with increased risk-taking propensity following deployment. *Journal of Psychiatric Research*, **42**, 1112–1121. http://dx.doi.org/10.1016/j.jpsychires.2008.01.001

King, L. A., King, D. W., Vickers, K., Davison, E. H., & Spiro, A. III (2007). Assessing late-onset stress symptomatology among aging male combat veterans. *Aging and Mental Health*, **11**, 175–191. http://dx.doi.org/10.1080/13607860600844424

Krause, N. (2004). Lifetime trauma, emotional support, and life satisfaction among older adults. *The Gerontologist*, **44**, 615–623. http://dx.doi.org/10.1093/geront/44.5.615

Maercker, A. (2002). Life-review technique in the treatment of PTSD in elderly patients: Rationale and three single case studies. *Journal of Clinical Geropsychology*, **8**, 239–249. http://dx.doi.org/10.1023/A:1015952429199

Moye, J., & Rouse, S. J. (2014). Posttraumatic stress in older adults: When medical diagnoses or treatments cause traumatic stress. *Clinics in Geriatric Medicine*, **30**, 577–589. http://dx.doi.org/10.1016/j.cger.2014.04.006

Mulligan, E. A., Wachen, J. S., Naik, A. D., Gosian, J, & Moye, J. (2014). Cancer as a Criterion A traumatic stressor for Veterans: Prevalence and correlates. *Psychological Trauma: Theory, Research, Practice, and Policy*, **6**), S73–S81. http://dx.doi.org/10.1037/a0033721

National Center for Veterans Analysis and Statistics. (2014). *Veteran Population Projections Model (VetPop 2014), Table 1L*. Retrieved January 8, 2015, from http://www.va.gov/vetdata/Veteran_Population.asp

O'Rourke, N., Canham, S., Wertman, A., Chaudhury, H., Carmel, S., Bachner, Y. G., & Peres, H. (2015). Holocaust survivors' memories of past trauma and the functions of reminiscence. *The Gerontologist*. Advance online publication. http://dx.doi.org/10.1093/geront/gnu168

Park, C. L. (2009). Overview of theoretical perspectives. In C. Park, S. Lechner, M. Antoni, & A. Stanton (Eds.), *Medical illness and positive life change: Can crisis lead to personal transformation?* (pp. 11–30). Washington, DC: American Psychological Association. http://dx.doi.org/10.1037/11854-001

Potter, C., Pless Kaiser, A., King, L. A., King, D. W., Davison, E. H., Seligowski, A. V., … Spiro, A. III (2013). Distinguishing late-onset stress symptomatology from posttraumatic stress disorder in older combat veterans. *Aging and Mental Health*, **17**, 173–179. http://dx.doi.org/10.1080/13607863.2012.717259

Resick, P. A., & Schnicke, M. K. (1992). Cognitive processing therapy for sexual assault victims. *Journal of Consulting and Clinical Psychology*, **60**, 748–756. http://dx.doi.org/10.1037/0022-006X.60.5.748

Richardson, L. K., Frueh, B. C., & Acierno, R. (2010). Prevalence estimates of combat-related post-traumatic stress disorder: Critical review. *Australian and New Zealand Journal of Psychiatry*, **44**, 4–19. http://dx.doi.org/10.3109/00048670903393597

Schok, M. L., Kleber, R. J., Elands, M., & Weerts, J. M. P. (2008). Meaning as a mission: A review of empirical studies on appraisals of war and peacekeeping experiences. *Clinical Psychology Review*, 28, 357-365. http://dx.doi.org/10.1016/j.cpr.2007.04.005

Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American Psychologist*, **38**, 1161–1173. http://dx.doi.org/10.1037/0003-066X.38.11.1161

Tedeschi, R. G. and Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, **15**, 1–18. http://dx.doi.org/10.1207/s15327965pli1501_01

Tornstam, L. (2005). *Gerotranscendence: A developmental theory of positive aging*. New York: Springer Publishing Company.

U.S. Census Bureau (2012). Profile of veterans: 2012: Data from the American Community Survey. Prepared by the National Center for Veterans Analysis and Statistics, June 2015.

U.S. Department of Veterans Affairs (2011). Gulf War era Veterans report: Pre-9/11. Retrieved January 6, 2015, from http://www.va.gov/vetdata/docs/SpecialReports/GW_Pre911_report.pdf

Watt, L. M., & Cappeliez, P. (1995). Reminiscence interventions for the treatment of depression in older adults. In B. K. Haight & J. D. Webster (Eds.), *The art and science of reminiscing: Theory, research, methods, and applications* (pp. 221–232). Washington, DC: Taylor and Francis.