



A Well-Being Construct for Veterans' Policy, Programming and Research

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VAC Research Directorate Technical Report



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Executive Summary

In legislation, the mandate of Veterans Affairs Canada (VAC) extends to the administration of such acts and orders in council relating to "(i) the care, treatment or reestablishment in civil life of any person who served in the Canadian Forces ... and (ii) the care of the dependants or survivors of any person referred to in subparagraph (i) ...". VAC's Plans and Priorities report identifies "well-being" as one of the Department's reestablishment strategic outcomes² but a clear description of the concept is lacking. Lack of a commonly accepted definition of well-being has hampered progress in developing and measuring outcomes of VAC policies and programs.

This paper describes the Veterans' well-being construct that emerged at VAC over the past decade in a consensus-seeking, multidisciplinary process informed by reviews of published literature, expert consultations and evidence from the *Life After Service Studies* (LASS). The objective of this paper is to describe the well-being construct and place it within a conceptual framework with utility in (1) the development and evaluation of policy, programming and service delivery and (2) research in Veterans' issues. The goal is to support the well-being of Canadian Veterans and their families in life after service.

Method

VAC conducted internal multidisciplinary consultations and additional literature reviews during 2015-16 to clarify a well-being construct. The work was informed by the 2013 *Veterans' Well-Being Conceptual Framework*, the *Life After Service Studies* findings, literature reviews conducted for the *Road to Civilian Life* research program, participation in an expert panel on military-civilian transition (MCT) in Los Angeles in March 2016, and published MCT theory.

Well-Being

A variety of well-being constructs have evolved in various disciplines, including psychology, sociology and economics. Some are subjective, where people are asked how they are doing (e.g. psychological well-being), others are objective, based on observing how people are doing (e.g. income). Composite types combine both.

The type favoured for VAC's business is a composite well-being construct measured subjectively and objectively across seven key areas of life: *employment and meaningful activity, finances, health, life skills and preparedness, social integration, housing and physical environment* and *cultural and social environment*.

This report describes a theory of well-being which says that well-being is the result of a *process* in which a person is influenced by *determinants* in each of the domains of well-being. Determinants can enhance or worsen well-being so that well-being fluctuates

¹ Department of Veterans Affairs Act, http://laws-lois.justice.gc.ca/eng/acts/V-1/ viewed 23 May 2016.

² http://www.veterans.gc.ca/pdf/deptReports/rpp/2016-2017/vac-acc-web-pdf-eng.pdf viewed 21 June 2016.

across the life course in response to prior and current determinant influences. Identification of factors that influence well-being suggests interventions, policies and programs which can promote the effect of positive influences and mitigate the effects of negative influences. A persons' well-being at a point in time is assessed by combining subjective and objective *indicators* for each of the domains that both describe well-being (*descriptors*) and assess factors influencing well-being (*determinants*). Some indicators can be used as outcome measures to assess the effectiveness of interventions, policies and programs.

Conceptual Framework for Planning Policy and Programs

The well-being construct described in this paper is then used as a core concept in a conceptual framework designed specifically for the problem of designing policy and programs to support Veterans' well-being during MCT and the remaining Veteran life course. The three core concepts in the construct are (1) well-being as described in this report, (2) life course from cradle to grave, and (3) the roles of Veterans and their families on the one hand, and the public and private sector on the other hand.

Good well-being is proposed as an ultimate strategic objective for Veterans' policy and programming and as a measure of successful transition. For example, an overall strategic objective for policy, programs and services could be "that Veterans experience good well-being". Strategic objectives are suggested for each well-being domain.

Identification of determinants that influence well-being at various stages of life suggests interventions, policies, programs and services that might be required to enhance well-being.

Well-being indicators can be used to segment the population across a range of need hierarchy, ranging from good well-being (most), to potentially precarious (some), to being in crisis (fewest).

An adaptation of the conceptual framework is described for focusing on planning well-being supports in the particularly intense peri-release period of military-civilian transition, that MCT segment just before and after release.

Sommaire

Le mandat d'Anciens Combattants Canada (ACC), prévu par la loi, s'étend à l'exécution de lois et de décrets en conseil liés « (i) aux soins, au traitement ou à la réinsertion dans la vie civile de personnes ayant servi soit dans les Forces canadiennes [...] » et « (ii) aux soins de leurs survivants ou des personnes à leur charge [...] »³. Dans ses rapports sur les plans et les priorités, ACC définit le « bien-être » comme l'un des résultats stratégiques⁴ du Ministère sur le plan de la réinsertion, mais il n'y a aucune définition claire du concept, et l'absence d'une définition communément acceptée de « bien-être » a nuit à l'élaboration de politiques et de programmes ainsi qu'à la mesure des résultats de ces derniers.

Le présent document expose le concept de bien-être des vétérans qui a vu le jour à ACC au cours des dix dernières années, le fruit d'un processus multidisciplinaire d'établissement de consensus éclairé par des examens de la littérature sur le sujet, par des consultations d'experts en la matière et par les données probantes tirées des *Études sur la vie après le service*. L'objectif du présent document est d'arrêter un concept de bien-être et de l'intégrer à un cadre conceptuel permettant 1) d'élaborer et d'évaluer des politiques, des programmes et des mécanismes de prestation de service et 2) de faire des recherches sur les enjeux liés aux vétérans. Le but est de favoriser le bien-être des vétérans canadiens et de leur famille après le service militaire.

Méthodologie

Au cours de l'exercice 2015-2016, ACC a mené des consultations multidisciplinaires internes et a effectué des examens additionnels de la littérature afin de clarifier le concept de bien-être. Les travaux ont été guidés par le *Cadre conceptuel du bien-être des vétérans* de 2013, les constatations découlant des *Études sur la vie après le service*, un examen de la littérature effectué dans le cadre du programme de recherche *Le chemin vers la vie civile*, la participation à un groupe d'experts sur la transition de la vie militaire à la vie civile (TMC) à Los Angeles en mars 2016, ainsi qu'une théorie publiée sur la TMC.

Bien-être

Un éventail de concepts du bien-être a vu le jour au sein de diverses disciplines, notamment la psychologie, la sociologie et l'économie. Certains sont subjectifs (on demande aux gens comment ils vont – p. ex. le bien-être psychologique), alors que d'autres sont objectifs (on observe comment les gens vont – p. ex. le revenu). D'autres encore font appel aux deux types.

Le type de concept privilégié pour ACC est celui d'un concept de bien-être mesuré subjectivement et objectivement dans sept aspects clés de la vie : *l'emploi et les activités*

³ Loi sur le Ministère des Anciens Combattants, <u>http://laws-lois.justice.gc.ca/fra/lois/V-1/</u>, consultée le 23 mai 2016.

⁴ http://www.veterans.gc.ca/pdf/deptReports/rpp/2016-2017/vac-acc-web-pdf-fra.pdf, consultée le 21 juin 2016.

importantes, les finances, la santé, la préparation et les aptitudes à la vie quotidienne, l'intégration sociale, le logement et l'environnement physique et l'environnement culturel et social.

Le présent rapport avance une théorie du bien-être partant du principe que le bien-être est le résultat d'un *processus* dans le cadre duquel une personne est influencée par des *facteurs déterminants* dans chacun des domaines du bien-être. Les facteurs déterminants peuvent améliorer le bien-être ou y nuire, de sorte que le bien-être fluctue au cours d'une vie en réponse aux influences antérieures et actuelles sur les facteurs déterminants. La détermination des facteurs qui influencent le bien-être laisse entendre que des interventions, des politiques et des programmes peuvent favoriser l'effet des influences positives et atténuer les effets des influences négatives. Le bien-être d'une personne à un moment donné est évalué en combinant des *indicateurs* subjectifs et objectifs de chacun des domaines qui décrivent le bien-être (*descripteurs*) et permettent d'évaluer les facteurs qui ont une influence sur le bien-être (*facteurs déterminants*). Certains indicateurs peuvent être utilisés comme résultats d'évaluation pour déterminer l'efficacité des interventions, des politiques et des programmes.

Cadre conceptuel pour la planification des politiques et des programmes

Le concept de bien-être décrit dans le présent document est ensuite utilisé comme principe fondamental d'un cadre conceptuel conçu expressément pour le problème lié à l'élaboration de politiques et de programmes visant à soutenir le bien-être des vétérans durant la TMC ainsi que pour le reste de leurs jours. Les trois principes fondamentaux du concept sont 1) le bien-être tel qu'il est décrit dans le présent document, 2) le cours d'une vie du début à la fin, 3) les rôles des vétérans et de leur famille d'une part, et ceux du secteur public et du secteur privé d'autre part.

Le bien-être positif est proposé comme objectif stratégique ultime des politiques et des programmes visant les vétérans et comme mesure d'une transition réussie. Par exemple, un objectif stratégique global en matière de politiques, de programmes et de services pourrait être que « *les vétérans éprouvent un sentiment de bien-être positif* ». Par ailleurs, il est proposé que chaque domaine du bien-être soit assorti d'objectifs stratégiques.

Le recensement des facteurs déterminants qui influencent le bien-être à différents stades de la vie laisse croire qu'il faudra peut-être élaborer des interventions, des politiques, des programmes et des services pour améliorer le bien-être.

Les indicateurs du bien-être peuvent être utilisés pour diviser la population selon une hiérarchie des besoins à trois niveaux : « bien-être positif » (la plupart des personnes), « situation potentiellement précaire » (quelques personnes) et « situation de crise » (peu de personnes).

Une adaptation du cadre conceptuel est décrite aux fins de la planification des mesures de soutien du bien-être au cours de la période péri-libération de la TMC, c'est-à-dire la période débutant pendant le service, en préparation de la libération, jusqu'à la période

d'adaptation à la vie civile après la libération.

Introduction

Since Confederation, the Government of Canada has recognized the importance of caring for military members and their families during transition from military service to civilian life and throughout their life courses (DVA 1946, Neary 2004). In legislation, the mandate of Veterans Affairs Canada (VAC) extends to the administration of such acts and orders in council relating to "(i) the care, treatment or re-establishment in civil life of any person who served in the Canadian Forces ... and (ii) the care of the dependants or survivors of any person referred to in subparagraph (i)..."5.

Public policy is guidance consistent with legislation and adopted by a government to address a need or achieve an outcome. The term "well-being" is widely cited as a key public policy objective (White 2016). In Canada, for example, the primary objective of the *Canada Health Act* is to "protect, promote and restore the physical and mental wellbeing of residents of Canada". Ability to maintain well-being is a valued characteristic of military commanders, and the words "well-being" or "welfare" have been used in Canadian documents describing Veterans' benefits since the early 20th century (Woods 1953, Neary 2004). However, the term "well-being" means different things to different people in different contexts (Beaumont 2011, White 2016) and conceptual clarity within the VAC context is needed for a well-being construct to ensure clarity, transparency and effectiveness in achieving VAC's strategic goals. VAC's Plans and Priorities report identifies "well-being" as one of the Department's re-establishment strategic outcomes but a clear description of the concept is lacking.

Lack of a commonly accepted definition of successful transition has hampered progress in developing and measuring outcomes of VAC policies and programs. For example, a recent literature review contracted for VAC's *Road to Civilian Life* (R2CL) program of research found lack of consensus in the literature on a definition of successful transition outcome (Shields et al. 2016). At the March 2016 international expert panel on MCT held at the University of Southern California, there appeared to be a degree of consensus that "good well-being" is an appropriate overall outcome measure. To work in that role, the term "well-being" requires clarification.

This paper describes the Veterans' well-being construct that emerged at VAC over the past decade in a consensus-seeking, multidisciplinary process informed by reviews of published literature, findings from the *Life After Service Studies* (LASS) and expert consultations. The objective is to identify a well-being construct and place it within a conceptual framework with utility in (1) the development and evaluation of policy, programming and service delivery and (2) research in Veterans' issues. The goal is to support the well-being of Canadian Veterans and their families in life after service.

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⁵ Department of Veterans Affairs Act, http://laws-lois.justice.gc.ca/eng/acts/V-1/viewed 23 May 2016.

⁶ Canada Health Act, http://laws-lois.justice.gc.ca/eng/acts/C-6/ viewed 23 May 2016.

⁷ http://www.veterans.gc.ca/pdf/deptReports/rpp/2016-2017/vac-acc-web-pdf-eng.pdf viewed 21 June 2016.

Methods

Information Sources

VAC conducted internal multidisciplinary consultations and additional literature reviews during 2015-16 to clarify a well-being construct. The discussions were informed by:

- VAC's initial formulation of the Veterans' well-being conceptual framework (Thompson et al. 2013);
- The determinants of health (PHAC 2013);
- Findings from and the conceptual framework used in the *Life After Service Studies* program of research (MacLean et al. 2010, VanTil et al. 2014, Thompson et al. 2011, 2014);
- Backgrounder and literature reviews for the *R2CL* (Road to Civilian Life) research program (Thompson and Lockhart 2015);
- *R2CL* literature review contracted to University of British Columbia (UBC) researchers through the CIMVHR (Shields et al. 2016);
- An international expert panel on military-civilian transition (MCT) that was convened at the University of Southern California in Los Angeles during March 2016 to identify an MCT theory and conceptual framework (chaired by Dr. David Pedlar and attended by Dr. Jim Thompson); and
- The Castro/Kintzle theory of MCT (**Appendix 1**) (Castro and Kintzle 2016).

Terminology

Concept, Theory and Framework

Concepts, theories, constructs, theoretical frameworks and conceptual frameworks are essential tools for dealing with complex phenomena like well-being and its application in Veterans' policy, programming and service delivery.

Imenda (2014) summarized literature describing concepts, theories and frameworks. *Concepts* are the building blocks of theories and frameworks. The term "concept" refers to an idea of what something is, a symbolic representation of an abstract idea or a complex mental representation of human experience. A *theory* has these characteristics: "(a) is a set of interrelated propositions, concepts and definitions that present a systematic point of view, (b) specifies relationships between/among concepts; and (c) explains or makes predictions about the occurrence of events" (Imenda 2014). A theoretical framework is derived from a set of concepts drawn directly from the theory. A conceptual framework also is a set of concepts built to shed light on a problem, but it is constructed in the absence of a theory and paints a more precise picture of a more limited aspect of the field of interest to provide an integrated way of looking at a complex problem. In the absence of a theory, conceptual frameworks are built "from the ground up" to aid in managing a complex problem (Imenda 2014).

Construct

"Construct" refers to a mental construction, derived from the general scientific process of observing natural phenomena, inferring the common features of those observations, and constructing a label for the observed commonality or the underlying cause of the commonality. When clearly articulated and the phenomena it encompasses are clearly defined so that different people think similarly about it, then it becomes a useful conceptual tool that facilitates understanding and communication. Cronbach and Meehl (1955) did ground-breaking work on the nature and validity of "constructs". A construct is a postulated attribute of people, a population or a community; a psychological conceptualization of something intangible and not directly observable. Constructs are assumed to be reflected by instruments shown to measure them.

Serving Member. Released Member and Veteran

Serving Member denotes those in military service.

Veteran denotes, for the purposes of this report, former serving members (no longer in service, ex-service) with at least one day of service. This definition is broader than the definition used by VAC for recognition purposes⁹ because former CAF members can use or apply for VAC benefits and services from the time of enrolment prior to completing basic or officer cadet training.

Early VAC Well-Being Constructs

Woods (1953) comprehensively reviewed how the "combined rehabilitation operation" of government, Veterans' organizations and communities spent 1.5 billion dollars (exclusive of pensions) and uncounted volunteer hours to help settle Canadian Veterans of the Second World War. At that time, a third of the 1915-45 Canadian generation had engaged in the War, over 100,000 had died, nearly 200,000 had effects of injury or illness and 10,000 were still in Department of Veterans Affairs (DVA) hospitals (Woods 1953). The focus of "rehabilitation" was "the re-establishment of those who had served – injured and able-bodied alike". Programs were established in employment, education, finances, housing/land ownership, health care and rehabilitation of those with health-related impairments. In other words, they developed a comprehensive suite of programs addressing all the determinants of health. The term "well-being" does not appear in early Canadian Veterans' literature, but in the 1950s, the term "welfare" was widely used. "Welfare officers" were established in DVA District Offices "to provide assistance and advice to the veteran in the solution of any of his problems", suggesting that the term had meaning beyond "health" matters alone (Woods 1953).

In Canada, national studies have for decades measured how well populations and communities are doing subjectively and objectively across multiple categories of indicators, including health, disability, labour force participation, economics, etc. At least

^{8 (}http://www.britannica.com/science/construct viewed 27 June 2016.

⁹ http://www.veterans.gc.ca/eng/about-us/definition-veteran.

until the 1990s, this research appears to have been guided by the 1948 World Health Organization definition of health which equated health to "physical, mental and social well-being" (WHO 1948). The surveys focused on the "determinants of health". For example, the National Population Health Survey questionnaire was described this way in 1995 (Tremblay and Catlin 1995): "... the questionnaire includes components on health status, use of health services, risk factors, and demographic and socioeconomic characteristics. For example, health status is measured through questions on selfperception of health, functional ability, chronic conditions, and activity restriction. The use of health services is measured through questions on visits to health care providers, hospital care, and drug use. Behavioural risk factors include smoking, alcohol use, and physical activity. In addition, a special focus of the first survey was psychosocial factors that may influence health, such as stress, self-esteem, and social support. Demographic and socioeconomic information includes age, sex, education, ethnic origin, household income, and labour force status." More recent thinking seems to be shifting toward distinguishing between "health" and "well-being". Rather than seeing them as synonymous concepts, there seems to be a shift toward viewing health as a component of well-being (see "Health" in Appendix 2).

VAC researchers first used a well-being approach in the LASS program of research, including both subjective and objective indicators of health, disability and determinants of health (MacLean et al. 2010, 2014; Thompson et al. 2011, 2014; VanTil et al. 2014, 2015). The LASS research framework informed choice of study indicators and guided data analyses across multiple areas of life: health, health behaviours, health system service use, disability, employment, income, stress, and satisfaction. Findings from the LASS program of research have reinforced the need to clarify the well-being construct owing to the heterogeneity of the Canadian Veteran population and the multidimensionality of factors associated with experiences such as difficult adjustment to civilian life and suicidal ideation (MacLean et al. 2014, Thompson et al. 2011, 2014a, 2014b, 2016).

In 2012, VAC's conceptualization of Veterans' well-being (Thompson et al. 2012, 2013) therefore began to incorporate the idea that the determinants of health represented domains of well-being in a more general way. This initial well-being framework proved useful in clarifying that there are determinants of well-being in domains other than health alone, similar to the approach taken by the Department of Health in South Australia (Hetzel et al. 2004). The framework distinguished between health-related impairments on the one hand and role participation disability on the other; emphasized the importance of recovery models; emphasized the importance of Veteran and family independence while providing a public and private sector safety net when Veterans and their families need assistance; and incorporated life course theory, meaning the view that well-being at a point in time in Veterans' life courses is influenced by earlier as well as current experiences.

The original 2013 Veterans' well-being framework identified 6 interrelated core concepts that play roles in an individual's well-being (Thompson et al. 2013):

- 1. Determinants of health, disability and determinants of health and well-being more generally: the WHO/PHAC list of determinants of health (Bryant et al. 2011, PHAC 2013).
- 2. Health: Health conditions with related impairments.
- 3. <u>Role disability</u>: inability to participate in home, work and community roles owing to difficulty adapting/coping and encountering social and physical environmental barriers in those with health conditions and related impairments.
- 4. Recovery: living well with chronic health conditions.
- 5. Roles of Veteran and family on the one hand, and public and private sectors on the other: promotion of independence but availability of safety nets when needed.
- 6. <u>Life course</u>: all of 1-5 operate across the life course.

That initial framework proved useful in:

- Clarifying that there are determinants of well-being in domains other than health
 (a person with no health problems can have employment problems, financial
 difficulties, poor housing or lack of social supports for reasons not related to
 physical or mental health problems);
- Clarifying that health problems can be determinants of other aspects of wellbeing, such as employment, finances, housing or social relationships;
- Distinguishing between health-related impairments and role participation disability (people with impairments can function well in work, home and community roles and not experience role disability if adapted and accommodated);
- Stressing the importance of recovery models in living well with chronic health conditions:
- Distinguishing between the roles of Veterans and their families in living independently on the one hand and periodic roles of the public and private sector safety net when they need assistance; and
- Clarifying that well-being fluctuates during Veterans' life courses in response to earlier as well as current influences.

However the initial framework did not:

- Clearly accommodate bidirectional relationships between determinants (health and employment, for example);
- Distinguish between determinants and domains of well-being;
- Define *successful transition*;
- Readily apply to the problem of designing supports for serving members and Veterans during MCT; and
- Readily point to outcome measures for assessing policy, programs and services.

Discussions within VAC evolved the well-being construct further as planners grappled with the challenges of meeting the changing needs of Veterans and their families in a world with evolving infrastructure and cultural values. These disadvantages were addressed by reconsidering alternative well-being constructs.

Well-Being Constructs Revisited

Etymologically, the compound word "well-being" is a noun originating in the 1610s when it arose from the adverb "well" and the form of the verb "be" that functions as an adjective 10. The term therefore describes the state of "being well"; "being" in the sense of existing, and "well" in the sense of satisfactory, successful, sufficient, comfortable or physically and mentally healthy. Since those attributes generally are considered desirable, then well-being can be interpreted as "being in a good way". This sense of the term "well-being" appears to be common to all well-being constructs. There are studies where well-being was measured on a range from poor to good (e.g., Thompson et al. 2011, 2014), suggesting that the concept can be viewed on a continuum. Diener et al. (2007) proposed the term "ill-being" but the proposal has not been taken up in the literature. There seems to be consensus that well-being is dynamic, fluctuating in time over the life course in response to influencing factors (Diener et al. 2007).

Types of Well-Being Constructs

A variety of well-being constructs have evolved in various disciplines, including psychology, sociology and economics. Some are *subjective*, where people are asked how they are doing (e.g. psychological well-being), while others are *objective*, based on observing how people are doing (e.g. income) (White 2016). There is a large and complex literature debating the subjective or objective approaches of various constructs (Diener et al. 2007, White 2016). A third type is *composite*, incorporating both subjective and objective measures across multiple areas of life.

Subjective well-being refers to self-reported constructs that cannot readily be verified objectively¹¹. Diener has done considerable work on subjective well-being (Diener et al. 2007). Proponents of subjective constructs point out that objective approaches can require identifying "ideal" thresholds for measures such as income or degree of health-related impairment. They point out that two people with similar objectively measured states of well-being can report very different subjective well-being. For example, one person with a relatively low income that meets their needs might have excellent sense of subjective well-being, while another at that income level feels they have poor well-being. The Gallup-Healthways Well-Being Index® grew out of work by Diener and others measuring well-being by self-report across five elements of well-being, each with its own score on a 0-10 scale: Purpose (liking what you do each day and being motivated to achieve your goals); Social (having supportive relationships and love in your life); Financial

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¹⁰ Online Etymology Dictionary, 2010 Douglas Harper viewed 14 April 2016.

¹¹ "Self-report" is not synonymous with "subjective". Some self-reported well-being indicators can be verified objectively, such as income. However, satisfication with income is a self-reported subjective measure that cannot be verified objectively.

(managing your economic life to reduce stress and increase security); Community (liking where you live, feeling safe and having pride in your community); Physical (having good health and enough energy to get things done daily); and key outcome metrics such as life evaluation and daily emotions¹².

Objective well-being constructs are based on observations by others of how people are doing, or self-report of attributes that can be verified objectively¹³. Proponents of objective constructs point out that objective measurement thresholds, while they might not apply equally to all individuals, can be used to compare populations as was done for the status of Canadian aboriginal communities (Cooke 2005), income in subgroups of releasing CAF members/Veterans (MacLean et al. 2014, VanTil et al. 2015) and mortality in CAF Veterans compared to the general population (Statistics Canada 2011). Furthermore, people can report good subjective well-being while living in precarious situations such that their well-being could deteriorate rapidly with a small change in life circumstances. For example, a person living with multiple chronic health conditions might be doing well with care-giving and other supports in place, but get into considerable difficulty if their health condition deteriorates even temporarily, if they lose their supports or if they are forced to leave their home. For all these reasons and given that a quarter of CAF Regular Force members report a difficult adjustment to civilian life associated with multiple factors (MacLean et al. 2014, Thompson et al. 2014), it is reasonable to adopt a well-being construct that includes objective as well as subjective measures.

Composite well-being constructs that use both subjective and objective measures across multiple areas of domains of life seem best suited to VAC's business. VAC's policies and programs address multiple domains, and findings from the LASS program of research have emphasized the heterogeneity of the Canadian Veteran population and the multidimensionality of factors associated with difficult adjustment to civilian life (MacLean et al. 2014, Thompson et al. 2011, 2014). We adopted the adjective "composite" because there does not appear to be a generally accepted term to distinguish well-being constructs that use both subjective and objective measures across multiple areas of life like the Canadian Well-Being Index, the ESDC framework, the Canadian First Nations Community Well-Being Framework, and the OECD framework. White (2016) noted that this is the most established type of well-being construct in public policy and described it with the adjective "comprehensive", but we have not seen wide use of that term either.

In Canada, the *Canadian Well-being Index* accounts for the full range of social, health, environmental and economic concerns of citizens in addition to national economic indicators, including the living standards of households, health, community vitality, democratic engagement, leisure and culture, time allocation, education and the environment (Langlois 2014). Employment and Social Development Canada (ESDC) proposed measuring well-being of individuals and Canadian society using indicators in the areas of work, housing, family life, social participation, leisure, health, security,

¹² http://www.gallup.com/poll/128186/Gallup-Healthways-Index-work.aspx Viewed 19 June 2016.

¹³ Some objective measures can be self-reported, such as income, which can be verified ojectively.

environment, financial security and learning¹⁴. The First Nations *Community Well-Being Index* aggregated multiple indices across four dimensions of well-being: education, labour force participation and employment, income, and housing (Cooke 2005).

Internationally, the OECD well-being framework uses 11 domains of individual well-being in two sectors: (1) quality of life (health status, work-life balance, education and skills, social connections, civic engagement and governance, environmental quality, personal security, subjective well-being) and material conditions (income and wealth, jobs and earnings, housing) and (2) well-being sustainability over time based on natural, economic, human and social capital (OECD 2013). The U.K. national well-being framework, which was designed to inform development of statistical measures for the general population, took the view that individual subjective well-being was a key domain affected directly by the domains of social connections, health, work and leisure activities, residence, personal finance and education/skills, and indirectly by the domains of societal governance, regional economy and the natural environment (Beaumont 2011).

Theory of Well-Being

A good theory adequately describes, explains and predicts complex phenomena such as well-being. **Figure 1** demonstrates a proposed theory of well-being grounded in prior

literature. The theory says that subjective and objective well-being is the result of a *process*¹⁵ in which a person is influenced by determinants in each of the domains of well-being (**Table 1**). Some determinants enhance and others worsen well-being (Dodge et al. 2012; see examples in **Appendix 2**). Well-being fluctuates across the life course in response to prior and current determinant influences (Easterling 2003, Dodge et al. 2012). A persons' well-being at a point in time is assessed by examining subjective and objective determinant and descriptive indicators for

Positive Determinants

Well-Being

Negative Determinants

Worse

Figure 1. Theory of well-being.

each of the domains. Identification of factors influencing well-being suggests interventions, policies and programs which can promote positive influences and mitigate negative influences. Some indicators can be used as outcome measures to assess the effectiveness of policies and programs.

Well-Being Construct for VAC

We therefore propose a well-being construct of the composite type that uses both subjective and objective measures across multiple areas of life for both individual Veterans and Veteran populations.

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¹⁴ http://well-being.esdc.gc.ca/misme-iowb/h.4m.2@-eng.js Viewed 16 May 2016.

¹⁵ A *process* is a series of actions, changes or functions that bring about a result.

Domains of Well-Being

Domains¹⁶ of well-being represent key areas of life for supporting Veterans and their families. The number and types of domains in a particular well-being construct are determined for a population and application of interest (Dodge et al. 2012). The seven domains shown in **Table 1** and described in **Appendix Table 2** were identified at VAC following a process of (1) review of the content, scope and applicability of existing public health concepts such as the determinants of health (Thompson et al. 2010, PHAC 2013); (2) reappraisal of the 2013 VAC Veterans' well-being conceptual framework (Thompson et al. 2013); (3) findings from the Life After Service Studies (Thompson et al. 2011, 2014); (4) consultation with experts within Canada and internationally for example at the expert panel on MCT in Los Angeles in March 2016; the UBC MCT literature review conducted for the R2CL program of research in 2016 (Shields and Kuhl 2016); (5) review of well-being constructs and theories reported in the literature; and (6) extensive multidisciplinary consultation within VAC to assure applicability to the Veteran experience and policy context.

Table 1. Domains of well-being.

Domain

- 1. Employment or other meaningful activity
- 2. Finances
- 3. Health
- 4. Life skills and preparedness
- 5. Social integration
- 6. Housing and physical environment
- 7. Cultural and social environment

Domains of Well-Being and Determinants of Health

The names of the domains of well-being listed in **Table 1** look very similar to the determinants of health listed on the Public Health Agency of Canada website (PHAC 2013), but in this construct "health" and "well-being" are not synonymous. The words "health" and "well-being" became linked in 1948 when the World Health Organization (WHO) defined "health" as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (WHO 1948). This definition was adopted at a time when impairment and premature death from preventable diseases were much more common in countries like Canada than they are today. Access to basic health care services was a focus for many. The WHO definition was useful in that era for overcoming the notion that health is merely the absence of disease and in emphasizing that mental and social factors affect health, leading to what became known as the determinants of health.

In 1974, the Lalonde Commission identified a "health field" of four elements that

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¹⁶ Domain" refers to a sphere of activity, concern, activity or function.

influence health: human biololgy, environment, lifestyle and health care organization. This was an early stage of the development of the "determinants of health" concept that evolved further in the 1986 Ottawa conference, as described in the 1986 Epp Report and the WHO 1986 Ottawa Charter. documented the various determinants of health lists are now listed by various organizations. Though lists of determinants of health from different organizations vary (Bryant 2010), they all identify determinants from well-being domains similar to those identified at VAC (**Table 1**). The domains of well-being contain both determinants of well-being and measures of well-being. Just as there are determinants of the health domain, there are determinants for each of the other domains of well-being that, like determinants of health, draw on all the other domains of well-being. For example, health is a determinant of employment, just as employment can be a determinant of health. Health and homelessness have a similar bidirectional causal relationship, as do many other well-being determinants.

The separation of health and well-being constructs has been evolving since the 1948 WHO definition. Since 1948, the WHO definition has been criticized as being not operationalizable for policy, programming and research. In the mid-20th century, emphasis shifted from curing and preventing acute disease and premature death to living with chronic physical and mental health conditions (McWhinney 1968, Jadad 2008, Huber 2010, Huber et al. 2011). Jadad (2008) pointed out that most people today can be described as having some kind of social difficulty or physical or mental symptom and therefore it could be said that nobody has "complete" well-being as implied in the WHO definition.

In 2009, the Dutch government hosted an invitational international conference on the concept of "health" when a large Dutch nutritional health study failed to come to a conclusion owing to lack of an operational definition for health (Huber 2010, Huber et al. 2011). The Dutch conference, attended by Canadian experts, concluded that a universal definition for health is unlikely to be found. They proposed describing "the formulation of health as the ability [of an individual] to adapt and to self-manage" (Huber 2010, Huber et al. 2011). Their health formulation emphasizes personal resources allowing one to manage physically, mentally and socially, which is different from well-being constructs. Their view of health does not capture all that is included in the well-being construct, suggesting operational value in separating the two ideas.

In Veterans' issues, "health" is commonly perceived in the context of living with the presence or absence of chronic conditions stemming from illness and injury. However, CAF members can also have challenges in well-being domains other than health in life after service, such as not having a good job or other meaningful activity in spite of not having significant health conditions. While health problems are common among the homeless, not all trajectories to homelessness are related to health problems. For these reasons, health is viewed in this well-being construct as a key domain of well-being, but is not regarded as synonymous with well-being.

The well-being construct described in this report allows for operationalizing both health and more general well-being concepts, and retains the important determinants of health

concept. An advantage of this approach is that the well-being construct accommodates bidirectional causality in the relationships between well-being domains, informing development of policy to support well-being in domains other than health alone.

Indicators of Well-Being: Descriptors and Determinants

In this composite type of construct, well-being is measured using both subjective and objective *indicators* within each domain of well-being: *determinants* and *descriptors*¹⁷ (**Table 2**).

Table 2. Types of well-being indicators.

	Determinants	Descriptors
Subjective	A	С
Objective	В	D

Determinants of well-being are factors or mediators that influence well-being in each domain, comprised of both resources and challenges (Dodge et al. 2012). Policies, programs and services influence well-being by operating on these determinants.

Examples of determinants include reach of an employment assist program (employment domain), access to health care providers and hospitals (health domain), enrollment in school or training (life skills/preparedness domain), perceived social support (social integration domain), type of housing (housing and physical environment domain) and public attitudes to Veterans (cultural and social environment domain).

Subjective determinant indicator example: Rates of reported satisfaction with access to an employment program (type A in **Table 2**).

Objective determinant indicator example: Number of Veterans who found employment after taking an employment program (type B in **Table 2**).

Descriptors of well-being (well-being outcome indicators) are subjective and objective measures of well-being in each domain. Descriptors can be used to measure outcomes. Descriptors can be used to describe well-being at individual or population levels. Well-being can be measured as an aggregate of indicators across all the domains. For example, Thompson et al. (2011) used a table of comparisons to the general population to portray well-being for CAF Veterans across multiple indicators used in the LASS 2010 survey. Well-being can also be measured as a summary index. For example, the *Canadian Wellbeing Index* sums scores across domain indicators to produce a single number (index) described as "a unidimensional index to reasonably represent a multidimensional construct of human wellbeing" (Michalos et al. 2011). Both methods have merit.

¹⁷ "Determinant" refers to a factor that influences or decisively affects the nature or outcome of something. "Descriptor" refers to an element or term that has the function of describing. "Describe" means to give an account in words of something, including relevant characteristics, qualities, or events.

Examples of descriptor indicators include satisfaction with an employment assist program (employment domain), ability to participate in life roles in those with health-related impairments (health domain), educational attainment (life skills/preparedness domain), having good workplace relationships (social integration domain), living in safe and affordable housing (housing and physical environment domain) and acceptance in the community (cultural and social environment domain).

Subjective descriptive indicator example: Self-reported good health (type C in **Table 2**).

Objective descriptive indicator example: Clinically assessed frailty (type D in **Table 2**).

Use of the Well-being Construct in a Conceptual Framework for Planning Policy and Programs

The initial 2013 well-being framework was re-arranged to create a conceptual framework designed specifically for the problem of designing policy and programs to support Veterans' well-being during MCT and the remaining Veteran life course. The framework operationalizes well-being and MCT theory in a manner useful to both policy/program developers and to researchers doing applied research.

Core Concepts

Three core concepts were combined for this conceptual framework:

- 1. <u>Well-being</u>: the outcome of interest, containing both determinants and descriptors assessed by indicators.
- 2. <u>Life course</u>: fluctuation in well-being from birth to death in response to determinants.
- 3. <u>Roles</u>: The roles of Veterans and their families on the one hand, and the public and private sector on the other hand.

Well-Being as a Strategic Outcome and Definition of Successful Transition

Good well-being can be used as an ultimate strategic objective for Veterans' policy and programming and as a measure of successful transition. For example, an overall strategic objective for policy, programs and services could be "that Veterans experience good well-being", where well-being is measured across all the domains. **Table 3** lists examples of strategic objectives within each domain of well-being.

Table 3. Examples of strategic objectives in each well-being domain.

Domain	Strategic Objective
Employment or	Veterans are engaged in activities that are beneficial and meaningful to
other meaningful	them.
activity	
Finances	Veterans are financially secure.
Health	Veterans are functioning well physically, mentally, socially and
	spiritually.
Life skills and	Veterans are able to adapt, manage, and cope within civilian life.
preparedness	
Social integration	Veterans are in mutually supportive relationships and are engaged in
	their community.
Housing and	Veterans are living in safe, adequate and affordable housing.
Physical	
Environment	
Cultural and Social	Veterans are understood and valued by Canadians.
Environment	

Segmenting the Population: Doing Well, Borderline, or in Crisis

Table 4 demonstrates how the Veteran population can be segmented into three groups along a continuum ranging from those doing well (most), to those in potentially precarious states (some), to those likely to be in crisis (fewest).

Table 4. Segmenting the population using this well-being construct.

Segment	Examples
Doing Well	 A Veteran meeting all of the criteria in Table 3, measured both subjectively and objectively, could be described as having good well-being and would be living well independently. A Veteran not meeting one of the criteria in Table 3 might be doing well overall and at low risk of experiencing difficulty. Example: a healthy student with limited financial resources who is doing well on a limited budget.
Potentially Precarious	 A Veteran not meeting good well-being criteria in more than one domain could be getting by reasonably well but could be in a precarious situation requiring public and private sector supports when challenged by a change in circumstances. Example: a student with limited finances who is living with a service-related chronically painful musculoskeletal condition. Similarly, a Veteran with good subjective well-being in most domains but marginal or poor objective well-being in some could be in a precarious situation. Example: a Veteran with a chronically painful and impairing musculoskeletal condition who reports doing well in life roles but has to depend on an informal caregiver.
In crisis	• A Veteran with poor well-being in most domains or a Veteran having a severe problem in one or two domains could be in a state of crisis.

Life Course

It is useful to consider Veterans' well-being issues in the "cradle to grave" life course context (**Table 5**) for three main reasons. First, factors that influence well-being prior to recruitment, childhood experiences and the economic well-being of society as a whole can impact the well-being of the next generation of military members during and after service in a number of ways. Parenting, for example, can lead to adverse childhood experiences.

Second, factors encountered before and during service can influence well-being during the MCT process and throughout the remainder of Veterans' life courses. Service-related chronic health problems are easily understood. There are other examples, such as the potential for civilian employment disadvantages of certain military trades, for example combat arms, unless the member develops transferrable skills and knowledge and civilian employers are made aware of the value that Veterans bring to the workplace.

Third, well-being fluctuates over time (Easterling 2003). A Veteran can have good well-being after the MCT process ends, but then circumstances can change in one of the domains, such as exacerbation of a chronic health condition or loss of a job or marital relationship. Some service-related health problems arise years after leaving service.

The MCT process usually begins for most at the time when they decide to leave the military and ends within a few months or years after. This is the "peri-release" period, when transition stress and need for services is likely to be most intense. But some might start preparing for eventual release early in their careers, while others might never quite get over leaving military life.

Table 5. Key dates and phases in the life courses of military members/Veterans.

Dates and Phases	
Date of Birth	
Life before recruitment	Childhood Adolescence Early adulthood
Enrolment Date	
Life in military service	Adjustment to military life Service career Preparing to release
Release Date	
Life after service	Adjustment to civilian life Remainder of life after service
Date of Death	

Framework Overview

Table 6 demonstrates the framework visually. This table can be used to identify indicators for the following items for each combination of well-being domain and life course phase (each cell in the table):

1. Domain-specific determinants:

- a. Factors that influence well-being.
- b. Evidence-based interventions, policies, programs or services that can be brought to bear to modify those influencing factors to improve well-being then and later in life.

2. Domain-specific descriptors:

- a. Measures that can be used to assess well-being in a particular point in the life course.
- b. Measures of the outcomes of policies, programs and services.

Influencing factors, needs and interventions vary with life stage and a variety of personal and military characteristics including age, gender, marital status, family status, education, military trade/career trajectory, rank, service branch and component.

The diagram emphasizes the roles of various actors in well-being. Veterans and their families play the lead roles. The public and private sectors play supporting roles throughout life when needed, but well-being works best when Veterans and their families have the capacity to do well independently. CAF and DND have lead roles during service, VAC has a lead role after release from service, and the two collaborate during MCT.

The following examples illustrate how the framework helps to organize thinking around *influencing factors*, related *interventions* and well-being *outcome measures* for each life course phase. Much more work is required to comprehensively identify all key influencing factors, relevant interventions and outcome measures related to successful MCT outcomes and good well-being later in life.

Table 6. Conceptual framework. See text for the examples.

	Peri-Release Period of Transition								
		Life Course Dates and Phases							
Well-Being Domain	Birth	Pre-Service Childhood, Adolescence, Early Adulthood	Enrolment	In Service	In Service Pre- release	Release	Ex- Service Post- release	Ex-Service Later Life	Death
Employment/ other meaningful activity							Example 5		
Finances					Example 3				
Health				Example 2				Example 8	
Life skills/ preparedness					Example 4		Example 6		
Social integration		Example 1							
Housing and physical environment									
Cultural and social environment							Example 7		
	Roles of Veterans and Their Families								
	Primarily CAF and DND Role					arily VAC Role			
						CAF/DND and VAC Roles			
		Private Sector and Other Public Sector Roles							

Pre-Service – Example 1 (Social Integration): There is growing evidence that adverse childhood experiences can play a role in mental illness during service (Sareen et al. 201_, Lee et al. 2016). There is also evidence in the general population of a link between child abuse and later life physical health conditions (Afifi et al. 2016), and chronic physical health conditions are prevalent in Veterans (Thompson et al. 2016). Interventions in the social integration domain during the childhood life phase that minimize adverse childhood experiences could mitigate the effects of combat stressors on mental health during service. This type of intervention is out of the scope of Veterans' administrations but within the scope of other public and private sector agencies and would impact MCT outcomes in future generations of soldiers. However, protective interventions can be applied later in life, for example resilience training for recruits who had adverse childhood experiences.

<u>In Service – Example 2 (Health)</u>: During service, the stresses of military training and operations are thought to be offset by resilience training and could be particularly beneficial in those prone to military occupational stress injuries. Well-being measures for resilience have been developed by researchers. The goal is to preserve good mental health during service not only for operational effectiveness, but to mitigate the psychological effects of service stressors that could play out later, during the stressful MCT process.

<u>In Service Pre-Release – Example 3 (Finances)</u>: During service in the pre-release MCT period, stress can begin to build around finances as members approach release. Those concerned about their financial well-being at release could be provided with financial supports or reassured that severance pay will not be delayed.

<u>In Service Pre-Release – Example 4 (Life Skills)</u>: In the life skills/preparedness domain, members can have insufficient personal financial skills and knowledge to manage in civilian life. Programs exist in some countries to teach personal financial management. Outcome measures would need to be found to assess current or anticipated post-release well-being in terms of preparedness for managing finances. There are many other examples, for example courses that prepare releasing members and families for the MCT experience, learning resilience to psychological stress, learning to negotiate the shift in personal identity, and developing a new sense of purpose after leaving service.

<u>Ex-Service Post-Release – Example 5 (Employment or Other Meaningful Activity)</u>: In the post-release MCT period, Veterans can experience difficulties establishing in civilian employment or enjoying retirement. Post-release employment support services usually are the most developed MCT support programs. Outcome measures have classically assessed only whether Veterans have jobs, but not the employment fit and quality.

<u>Ex-Service Post-Release – Example 6</u>: Releasing members might not have a housing plan and end up with precarious housing such as living on a friend's couch and other situations not conducive to doing well in other well-being domains. Interventions could include programs that prepare releasing members to seek more appropriate housing, and programs that assist them if they are at significant risk of precarious housing or homelessness.

<u>Ex-Service Post-Release – Example 7 (Cultural and Social Environment)</u>: There is emerging interest in studying the influence of society's view of Veterans (social identity) on Veterans' well-being, and identifying evidence-based activities that can be undertaken to enhance Veterans' well-being. Examples include undoing the "broken Veteran" stereotype, and helping employers understand the value that Veterans bring to the workplace.

<u>Ex-Service Later Life – Example 8 (Health)</u>: Throughout the later life course, after the MCT process completes, service-related disadvantages can continue to impact well-being. For example, a service-related mental health illness might be well controlled with treatment during service and MCT but recur later in life as stressful physical health or socioeconomic circumstances emerge. Late-onset disorders such as cardiovascular

diseases, degenerative arthritis, respiratory diseases, cancers and psychiatric disorders can arise up to decades after service and have been accepted as service-related for disability compensation and benefits in many countries. The framework can be used to organize supports and research throughout the Veteran life course.

Focus on the Peri-Release MCT Period

The cradle-to-grave approach gets into impractical areas for VAC policy and planning, such as well-being during pre-recruitment and the in-service phase prior to the decision to release from service. Since well-being in MCT is most directly influenced by what happens during MCT, then the framework can zero in on the peri-release period (**Table 7**). Planners can concentrate on identifying *influencing factors*, *interventions and outcome measures* just for this part of the life course.

The hypothesis is that exposure to factors that enhance well-being during MCT contributes to good well-being later in Veterans' life courses. During service, the military meets the needs of serving members in many well-being domains including employment, income, education, housing, and health care. But during MCT, serving and released members are challenged with finding new avenues for meeting needs in various domains while also navigating a civilian environment that may be unfamiliar to them.

Well-Being of Families

The well-being of families was beyond the scope of this work. There are two distinct but related aspects of the well-being of the "family":

- 1. "individual family members" on the one hand and
- 2. "the family unit" comprised of individual family members on the other hand.

The well-being theory describes what the well-being of individuals but not necessarily the family unit. So the well-being of *family units*, although affected by the well-being of individual members, requires a different conceptual approach. Beaujot et al. (2007) proposed describing the well-being of family units in the domains of *earning*, *learning*, *caring* and *constrained decision-making* (making good choices within the family's constraints) across the life course. They wrote, "For the framework, we propose the use of the concepts of caring, earning and learning as these represent the core activities of families, the structure of the life course as it represents an obvious context within which to view family questions, and constrained decision making as it applies to various family-related behaviours."

 ${\bf Table~7.~Conceptual~framework~focused~to~the~peri-release~MCT~period.}$

Well-Being Domain	Pre-Service Childhood, Adolescence, Early Adulthood	Emrolment In Service	In Service Pre-release	Release	Ex-Service Post-release	Ex- Service Later Life	Death
Employment/ other meaningful activity Finances							
Health							
Life skills/ preparedness							
Social integration							
Housing and physical environment							
Cultural and social environment							
			Roles of Veterans and Their Families				
			Primarily CAF and Primarily DND Role VAC Role				
			CAF/DND and VAC Roles				
			Private Sector and Other Public Sector Roles				

References

Afifi TO, MacMillan HL, Boyle M, Cheung K, Taillieu T, Turner S, Sareen J. Child abuse and physical health in adulthood. Health Rep. 2016 Mar 16;27(3):10-8.

Bannerjee, S., Jedwab, J., Thomas, T., & Soroka, S. Cultural intelligence and identity development: Concepts, measures and relationship to Canadian Forces Professional Development. Kingston, ON: Canadian Forces Leadership Institute and Director General Military Personnel Research and Analysis. Technical Report 2011-02. 2011.

Burk J. Military culture. In L. R. Kurtz J. E. Turpin, *Encyclopedia of violence, peace and conflict* (Vol. 2). Academic Press. 1999.

Butler A, Eren E, Budgell G. Literature Review: Theories, Concepts and Measure of Professional, Organizational, and Military Identity. Contract Report by Human Resource Systems Group, Ltd for Director General Military Personnel Research and Analysis. 2014.

Beaujot R, Ravenera ZR, Burch TK. Toward an HRSDC Family Research Framework. Presented at Social Development Canada Expert Roundtable on Challenges for Canadian Families, Chateau Cartier Resort, Gatineau, Quebec. Discussion Paper No. 07-02. London, ON: Population Studies Centre, University of Western Ontario. March 2007.

Beaumont J. Measuring national well-being – Discussion paper on domains and measures. London, UK: Office for National Statistics. 2011. http://apps.bps.org.uk/ publicationfiles/consultation-responses/Measuring%20National%20Well-Being%202%20-%20cons%20paper.pdf viewed June 5, 2016.

Blosnich JR, Dichter ME, Cerulli C, et al. Disparities in adverse childhood experiences among individuals with a history of military service. JAMA Psychiatry. 2014 Sep;71(9):1041-1048.

Bryant T, Raphael D, Schrecker T, Labonte R. Canada: A land of missed opportunity for addressing the social determinants of health. Health Policy 2011;101(1):44–58. doi:10.1016/j.healthpol.2010.08.022. PMID 20888059.

CFHS. Health and Lifestyle Information Survey of Canadian Forces Personnel 2004: Regular Force Report. Directorate of Force Health Protection, CF Health Services Group. September 2005;96 p.

Castro CA, Kintzle S. Suicides in the military: the post-modern combat Veteran and the Hemingway effect. Curr Psychiatry Rep. 2014 Aug;16(8):460-014-0460-1.

Cooke M. The First Nations Community Well-Being Index (CWB): a conceptual review. Ottawa, ON: Strategic Research and Analysis Directorate, Indian and Northern Affairs

Canada. January 26, 2005. http://www.publications.gc.ca/collections/Collection/R2-400-2005E.pdf viewed 16 June 2016.

Davis, K. D. Cultural intelligence and military identity: Implications for Canadian Forces leader development. Kingston, ON: Canadian Defence Academy. 2012.

DVA. Back to Civil Life. Ottawa, ON: Department of Veterans Affairs. Pamphlet. 1946.

Diener E, Lucas RE, Schimmack U, Helliwell JF. Well-Being for Public Policy. New York, NY: Oxford University Press. 2009.

Dodge R, Daly AP, Huyton J, Sanders LD. The challenge of defining wellbeing. Int J Wellbeing. 2012;2(3):222-235.

Easterling RA. Building a better theory of well-being. Los Angeles CA: Paper prepared for the conference "Paradoxes of Happiness in Economics" University of Milano-Bicocca, March 21-23, 2003. http://www-bcf.usc.edu/~easterl/papers/BetterTheory.pdf viewed 21 June 2016.

English, A. D. *Understanding military culture: A Canadian perspective*. Kingston, ON: McGill-Queen's University Press. 2004.

Hatch SL, Harvey SB, Dandeker C, et al. Life in and after the Armed Forces: social networks and mental health in the UK military. Sociol Health Illn. 2013 Sep;35(7):1045-1064.

Hetzel D, Page A, Glover J, Tennant S. Inequality in South Australia, Key determinants of wellbeing. Volume 1: The evidence. Adelaide, SA: Department of Health. 2004.

Huber M. Invitational conference "Is health a state or an ability? Towards a dynamic concept of health" – Report of the meeting December 10-11, 2009. The Hague, Netgherlands: ZonMw (Netherlands Organization for Health Research and Development). May 2010.

Huber M, Knottnerus JA, Green L, van der Horst H, Jadad AR, Kromhout D, et al. How should we define health? BMJ 2011 Jul 26;343:d4163.

Imenda S. Is There a Conceptual Difference between Theoretical and Conceptual Frameworks? Journal of Social Sciences 2014;38(2):185-195.

Jadad AR, O'Grady L. How should health be defined? BMJ 2008 Dec 10;337:a2900.

Keyes CM. The Mental Health Continuum: From languishing to flourishing in life. J Health Soc Res 2002; 43(June): 207-22.

Langlois S. Wellbeing in Canada. Chapter in Global Handbook in Quality of Life.

Springer. 2014.

Lee JE, Phinney B, Watkins K, Zamorski MA. Psychosocial Pathways Linking Adverse Childhood Experiences to Mental Health in Recently Deployed Canadian Military Service Members. J.Trauma.Stress 2016 Apr;29(2):124-131.

MacLean MB, Campbell L, VanTil L, Poirier P, Sweet J, McKinnon K, Sudom K, Dursun S, Herron M, Pedlar D. Pre- and Post-Release Income: Life After Service Studies. Charlottetown (PE): Veterans Affairs Canada, Research Directorate Technical Report; 3 July 2014.

MacLean MB, Van Til L, Thompson JM, Sweet J, Poirier A, Sudom K, et al. Postmilitary adjustment to civilian life: potential risks and protective factors. Phys.Ther. 2014 Aug;94(8):1186-1195.

MacLean MB, Van Til L, Thompson JM, et al. Life After Service Study: Data collection methodology for the income study and the transition to civilian life survey. Charlottetown, PE: Veterans Affairs Canada. Research Directorate Technical Report. 2010.

MacLean MB, Van Til L, Kriger D, Sweet J, Poirier A and Pedlar D (2013). Well-being of Canadian Armed Forces Veterans: Canadian Community Health Survey 2003. Research Directorate Technical Report. Veterans Affairs Canada. 2013 May 10;65p.

Maruthappu M, Watkins J, Noor AM, Williams C, Ali R, Sullivan R, Zeltner T, Atun R. Economic downturns, universal health coverage, and cancer mortality in high-income and middle-income countries, 1990-2010: a longitudinal analysis. The Lancet. Published Online: 25 May 2016. doi: 10.1016/S0140-6736(16)00577-8

McWhinney IR. The foundations of family medicine. Can.Fam.Physician 1969 Apr;15(4):13-27.

Neary P. Honouring Canada's Commitment: "Opportunity with Security" for Canadian Forces Veterans and Their Families in the 21st Century. Charlottetown, PE: Canadian Forces Advisory Council, Veterans Affairs Canada. 2004.

OECD. How's Life? 2013: Measuring Well-being, OECD Publishing. 2013.

Public Health Agency of Canada, What makes Canadians healthy or unhealthy? 2013. http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php#determinants viewed August 9,2016.

Sareen J, Henriksen CA, Bolton SL, et al. Adverse childhood experiences in relation to mood and anxiety disorders in a population-based sample of active military personnel. Psychological Medicine. 2013;43(1):73-84.

Shields DM, Kuhl D, Lutz K, Frender J, Baumann N, Lopresti P. Mental health and well-being of military Veterans during military to civilian transition: review and analysis of recent literature. Vancouver BC: Report prepared for Veterans Affairs Canada and the Canadian Institute for Military and Veteran Health Research. 2016.

Statistics Canada. Canadian Forces Cancer and Mortality Study: causes of death. Ottawa: Statistics Canada; 2011.

Thompson JM, Banman M, Jaeger H, Landry C, Wedge M, MacLean MB, Pranger T, Van Til L. Veterans' Well-Being Conceptual Framework. Veterans Affairs Canada, Charlottetown. Research Directorate Technical Report. 02 January 2013;32 p.

Thompson JM, Banman M, Jaeger H, Landry C, Wedge M, MacLean MB, Pranger T, Van Til L. Veterans' Well-Being Conceptual Framework: Appendices and References. Veterans Affairs Canada, Charlottetown. Research Directorate Data Report. 19 December 2012;77 p.

Thompson JM, Lockhart W. Backgrounder for the Road to Civilian Life (R2CL) Program of Research into the Mental Health and Well-Being of Canadian Armed Forces Members/Veterans During Military-Civilian Transition. Charlottetown, PE: Veterans Affairs Canada. Research Directorate Technical Report. 14 July 2015.

Thompson JM, MacLean MB, Van Til L, et al. Survey on Transition to Civilian Life: Report on Regular veterans. Charlottetown, PE: Veterans Affairs Canada and Ottawa, ON: Director General Military Personnel Research and Analysis, Department of National Defence. Technical Report. 04 January 2011.

Thompson JM, Van Til L, Poirier A, et al. Health and Well-Being of Canadian Armed Forces Veterans: Findings from the 2013 Life After Service Study. Charlottetown, PE: Veterans Affairs Canada. Research Directorate Technical Report. 2014a.

Thompson JM, VanTil L, Zamorski MA, Garber B, Dursun S, Fikretoglu D, Ross D, Richardson JD, Sareen J, Sudom K, Courchesne C, Pedlar D. Mental health of Canadian Armed Forces Veterans – Review of Population Studies. JMVFH. 2016;2(1):70-86.

Thompson JM, Zamorski MA, Sweet J, et al. Roles of physical and mental health in suicidal ideation in Canadian Armed Forces Regular Force veterans. Can J Public Health. 2014b;105(2):e109–15.

Van Til L, Macintosh S, Thompson JM, MacLean MB, Campbell L, Sudom K, Dursun S, Herron M, Pedlar D. 2013 Synthesis of Life After Service Studies. Charlottetown (PE): Veterans Affairs Canada, Research Directorate Synthesis Report; 3 July 2014.

White SC. Introduction: The many faces of wellbeing. White SC and Blackmore C (eds) *Cultures of Wellbeing*. London UK: Palgrave MacMillan. 2016.

Woods WS. Rehabilitation (A combined operation). Being a History of the Development and Carrying Out of a Plan for the Re-establishment of a Million Young Veterans of World War II by the Department of Veterans Affairs and its Predecessor the Department of Pensions and National Health. Queen's Printer. Ottawa, Canada. 1953;518 p.

WHO. Definition of Health. Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948. http://who.int/about/definition/en/print.html viewed 23 May 2016.05.23

WHO. Commission on Social Determinants of Health. Closing the Gap in a Generation: Health Equity Through Action on the Social Determinants of Health (PDF). World Health Organization. 2008. ISBN 978-92-4-156370-3.

WHO. International Classification of Functioning, Disability and Health (ICF). World Health Organization. Resolution of the World Health Assembly WHA54.21. 22 May 2001:1 p. http://www.who.int/classifications/icf/en/viewed 27 October 2008.

Appendix 1. The Castro/Kintzle MCT Theory

Two experienced military transition researchers in the U.S. recently proposed an MCT theory (Castro and Kintzle 2015). The theory defines MCT as a process and describes, explains and predicts what happens to serving military members as they go through MCT. The theory says that military members go through three phases when they release from military service and adjust to life out of uniform.

The first phase, approaching the military transition, outlines the *personal*, *cultural* and transitional factors that create the base of the transition trajectory. These include military cultural factors such as type of military discharge and combat history, personal characteristics such as health, expectations and personal preparedness, and lastly, factors describing the nature of the transition, i.e. predictable or unpredictable, positive or negative.

The second phase, managing the transition, refers to factors impacting the individual's progression from service member to civilian life. Individual adjustment factors, such as coping styles, attitudes and beliefs all impact how transition is managed. Social support in varying forms such as family, friends, community and society may also affect transition. Military transition management includes navigating the resources provided by the military, Veterans Affairs benefits, education benefits and career planning. Finally, community and civilian transition support describes those factors the civilian population can utilize in supporting transitioning service members.

The third phase, <u>assessing the transition</u>, describes *outcomes* associated with transition. These outcomes are measured through the categories of work, family, health, general well-being and community, such as whether the transitioning service member has secured adequate employment, is adjusted to new family roles, is living well with physical and psychological health conditions if any, has developed new social networks and is engaged in the community. Outcomes are interconnected and impact each another. For example, health problems can create challenges in finding employment, but unemployment can worsen health. Success or failure in one outcome does not indicate success or failure in overall transition.

MCT is a Process

The theory views MCT as a *process*. By definition, a process is a series of actions, changes or functions that brings about a result. The actions require inputs and resources, are influenced by circumstances, and lead to a series of changes that results in an ultimate outcome.

As military members progress from preparing to be released from the military through the release date to establishing in civilian life, they all take actions or have actions done to them in series during which they experience changes, the specifics of which vary from person to person depending on personal, organizational and cultural circumstances.

Attention by themselves and helping organizations to the right actions at the right time results in a better process and better outcome. The MCT theory allows for predictions about how the process should unfold in a manner that suits varying needs and results in a successful outcome.

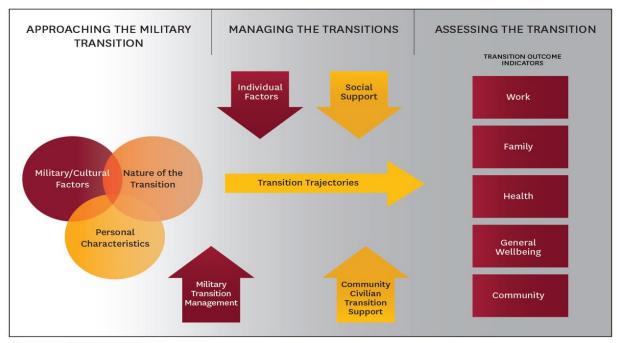


Figure 1. Military transition theory

Appendix 2. Descriptions of the Domains of Well-Being

Well-being in each of these domains can be measured with subjective and objective <u>indicators</u> of determinants and descriptors.

1. Employment or Other Meaningful Activity

It is widely agreed that having a good job or other meaningful activity and a sense of purpose are factors in good well-being. Most CAF members do not transition from long service to full retirement (Thompson et al. 2011, 2014). Since the average age of release from military service in many nations is 40 or less, post-release civilian employment is critical to MCT success. Employment has multiple advantages in areas of income, health, sense of meaning and purpose in life and in establishing a civilian identity. Unemployment is linked with a wide range of negative outcomes including difficult adjustment to civilian life and health and social difficulties. Some Veterans over the age of 50 transition into retirement or semi-retirement from the workforce.

A number of studies have found that securing meaningful, employment is an area of disappointment and unmet expectations for some releasing military members. There are many issues facing transitioning military members: unemployment, under-employment, entering an unfamiliar civilian job market for the first time, adapting to the civilian workplace culture and leadership styles, wage loss if civilian salaries are lower than the military, lack of familiarity of civilian employers with Veterans' strengths, poor military skills translation to civilian life, lack of rigorous assessment of Veterans' employment needs or expectations, and lack of collaboration and coordination among agencies delivering employment services to Veterans.

2. Finances

Personal financial status is widely recognized as a key factor in well-being. Military members undergoing MCT experience changes in sources of income and can have temporary or long-term reduction in income levels post release. Sufficient finances are associated with independence, healthy lifestyle choices, access to health services, quality of housing, family stability and avoidance of debt. Veterans may face many problems in this domain: finding steady and sufficient employment income; additional monies needed for relocation moves, housing, vehicles, family and child care expenses, health care expenses and costs of living in a new community. Some will benefit from the support of financial planning services and self-skills to plan and manage finances. These challenges may be tougher if some cost of living expenses like health care, housing and leisure activities were provided free of charge or subsidized on military bases or installations during service. Some Veterans will face financial emergencies during MCT that cause distress for them and their families.

• Examples of *determinants*: financial planning support approaching release, special payments to support additional costs associated with MCT, availability of

- civilian, Veteran or military programs to provide or supplement income, MCT programs that fund final moves to location of choice prior to release.
- Examples of *descriptors*: measures of income replacement rates from pre and post release, pre- and post-income levels, pre- and post-military incomes and satisfaction with finances, and low income.

3. Health

"Health" has been and will remain a predominant domain of Veterans' well-being. Throughout Canadian history, compensation for and mitigation of role disability for Veterans with service-related health problems and related impairments has been a primary concern (Neary 2004).

Chronic physical and mental health problems are common challenges to good well-being among Veterans in life after service, especially when they co-occur, and more so when chronic pain is added to that mix. This is true for CAF members who are released for any reason, including voluntary release (Thompson et al. 2011, 2014). Due to health screening at recruitment, military recruits tend to have fewer health problems than civilian populations: the "healthy soldier" effect. However not all recruits and serving members are free of physical or mental health issues. There is evidence from the Army STARRS study, for example, that a number of recruits have mental health problems prior to recruitment (Blosnich et al. 2014) and the Canadian Armed Forces *Health and Lifestyle Surveys* found that more than half of serving members had chronic physical health conditions (CFHS 2005). A number of serving members acquire and accumulate chronic health conditions both owing to service and for non-service reasons. Like non-Veterans, Veterans acquire physical or mental health conditions after leaving service that may or may not be service-related.

The health domain includes measures of subjective well-being such as life satisfaction and happiness, consistent with the rapidly emerging emphasis on positive psychology (Dodge et al. 2012). Health includes the notion of flourishing mental health, which can coexist with the presence of diagnosed mental or physical conditions (Keyes 2002).

The health domain also includes disability, used here in the sense of health-related restrictions in participation in family, work and community life roles rather than presence of health conditions and related impairments. In the modern biopsychosocial disability paradigm, *role participation disability* is viewed as an ecological construct influenced by the presence of health conditions and health-related impairments, activity restrictions, personal factors such as adaptive coping, and environmental factors such as barriers in the physical and social environment. This concept is best described by the WHO International Classification of Functioning, Health and Disability (ICF) (WHO 2008).

The 2009 Dutch conference proposed that health can be viewed as the *physical*, *mental*, *social and spiritual ability of an individual to function well* (Huber 2010, Huber et al. 2011). This includes the ability to adapt based on their own internal physical and mental resources as opposed to external resources like having a job, having money, having good life skills, having good relationships, living in a good house or living in a well-governed

community that understands them as Veterans – domains other than health. Good health is one of the keys to mitigating role participation disability.

- Examples of *determinants*: See the PHAC and WHO lists of determinants of health and the WHO ICF ecological framework for role participation disability: access to and use of needed health care and rehabilitation services, continuity of care in transition from military to civilian health systems, availability and access to comprehensive diagnostic and treatment services, availability of case management to coordinate services, support to informal caregivers who may experience burden themselves and need support providing care and understanding of the military context of Veterans' health issues in civilian health care systems.
- Examples of *descriptors*: presence of physical and mental health conditions, chronic pain, psychological distress, psychological well-being, health-related quality of life, ability to participate in life roles in the presence of health-related activity limitations.

4. Life Skills and Preparedness

The "life skills and preparedness" domain deals with skills, knowledge and insights that prepare military members for MCT and enable them to navigate the process of lving in civilian life. This domain is not about health because the life skills needed may have nothing to do with management of physical or mental health conditions, but it does include personal health practices and healthy lifestyles. Some life skills acquired by military members during service can serve them well during MCT: resilience training for dealing with stress, organized and disciplined management of personal clothing and equipment, establishing daily routines, and executing plans to solve problems.

Military members who encounter difficulties in MCT often have insufficient skills for managing in civilian life: planning for release, personal financial management, job searching, house-hunting and getting along in a civilian workplace. There is anecdotal evidence that many military members have to learn to reflect on their preparedness for MCT. A key challenge in MCT is negotiating the shift in personal identity from military to post-military, a life skill that is not familiar to many people who find themselves in a major life transition like MCT. This domain also includes education and job training.

- Examples of *determinants*: MCT preparation programs for skills and knowledge including self-reflection and acquisition of a sense of purpose; personal financial management; identity negotiation; social network development; and personal health practices.
- Examples of *descriptors*: education attainment, measures of sense of purpose or identity resolution, financial management ability, ability to form relationships, and performance in the civilian workplace.

5. Social Integration

There is broad agreement that social networks and social relationships play key roles in well-being, and that a key challenge in MCT is adapting to new ones. Well-being in

multiple domains is a function of the degree and effectiveness of a person's social integration in home, work and community environments. For example, there is strong evidence that psychological well-being is related to the nature of social relationships and degree and quality of perceived social support (Hatch et al. 2013). Veterans' social networks are built across the life course, during pre-service (likely mostly civilians), active duty (mostly service members), and post-service (mixture of civilians, service members, and Veterans). Social networks may be informal (friends and family) or formal (peer support or agency staff).

Military service places high demands on both members and families to ensure a workforce capable of engaging in war, including physical and mental stressors and unusually intense workplace social integration (Hatch et al. 2013). A challenge facing many Veterans going through MCT is the disruption arising from shifting from being embedded in a primarily military social network to building a new civilian network. Following release, some Veterans will continue to engage in military social networks through direct contact and these networks may help with finding employment or integrating in a new community that includes civilians. Some research has shown that Veterans have a preference for connecting with other Veterans during MCT primarily because other Veterans are perceived to be more knowledgeable of what participants are going through during the civilian life. Building new and civilian social networks play an important role in finding and receiving needed supports, and in re shaping a military to civilian identity.

Family and workplace relationships can be adversely affected by the Veteran's physical and mental health problems in many ways, for example when their emotions and behaviours are altered by chronic pain or mental illness, or their ability to participate in life roles is impaired by a health problem. Such Veterans can live better with their chronic health conditions if they have good social supports.

- Examples of *determinants*: physical and mental health status, social networking skills, employment, finances, availability of a good support social network, social values.
- Examples of *descriptors*: perceived social support, presence of mutually supportive relationships, community engagement, marital status and family unit functioning.

6. Housing and Physical Environment

Safe water and clean air, healthy workplaces, safe and suitable housing, and the quality of community infrastructure all contribute to good well-being. Some Veterans might access temporary accommodation and end up in a downward spiral to living in shelters and on the street. The presence of a comprehensive net of services across all the well-being domains can prevent homelessness from occurring in the first place.

• Examples of *determinants*: Employment, finances, availability and quality of housing, mental and physical health problems and addiction, social supports, unemployment or under employment, financial supports.

• Examples of *descriptors*: housing status, satisfaction with housing.

7. Cultural and Social Environment

This domain is about how the well-being of Veterans responds to the changing cultural and social environments in which they live. It is about well-being in terms of the society within which people live, including the array of values and norms with respect to Veterans and community governance and cohesiveness. Military personnel are challenged by transitioning from a culture based on military discipline, professional ethos, ceremonial displays and etiquette, cohesion (type of social environment) and esprit de corps (Burke, 1999) to living in the broader, more diverse societal culture (English, 2004), often called "civilian life".

Communities have the power to dictate, influence, or even change social norms, meaning the range of values, beliefs, and behaviors that are deemed acceptable within a particular group, and who participates in a group. Civilian communities can provide support for Veteran employment by creating an inclusive environment that honors military service and takes a proactive (instead of reactive) stance in mitigating the unique challenges faced by Veterans. Community support for Veterans takes place in the form of public and private partnerships. Releasing members are more likely to find jobs when the economy is expanding than when it is shrinking, and there is evidence that economic downturns are associated with adverse health outcomes when public funding for healthcare shrinks (Maruthappu et al. 2016). This domain is about the policies, programs and services established to support the well-being of Veterans and their families. There is considerable interest in the role that societal recognition and understanding of military Veterans plays in their well-being. Throughout history, societies have honored military Veterans to varying degrees, and cultural recognition that led to the establishment of Veterans administrations in countries like Canada, the U.S. and Australia, and Veterans' support programs and charities in many other countries.

"Identity" refers both to one's sense of self with respect to social groups (personal identity) and the way others identify a person (social identity). Butler et al. (2014) refer to "military identity": "The military is an institution of the state and consequently, an individual's sense of military identity will most likely reflect a combination of national (Canadian) and organizational (military) values, principles, and imperatives" (Bannerjee et al. 2012). There is at least anecdotal evidence that Veteran well-being is affected by the struggle to shift identities in MCT. Transition to civilian life can bring unexpected identity disruption as Veterans attempt to navigate their way through an unfamiliar civilian world, particularly when Veterans' identities are incompatible with their social identities and incongruent with societal stereotypes. For example, employer stereotypes influenced by the myth of the "broken Veteran" or failure to recognize the values that Veterans bring to the workplace can contribute to Veteran unemployment or underemployment. In the health domain, provider attitudes toward an understanding of the military context of Veterans' health problems is thought to be a factor that could affect quality and effectiveness of care.

There is growing expert consensus that identity resolution in MCT is an important factor in determining Veteran well-being, as it is in many major life transitions. Leaving the military means losing touch with the serving military community, often described as a "family". There is evidence that military Veterans must adjust and contextualize their military identity to fit within the civilian environment, an adjustment that at least hypothetically could be made easier when society has a more realistic and nuanced understanding of former military members.

- Examples of *determinants* (mediators): life skills counselling and training to manage identity shifts in MCT, mental health care services, actions taken by administrations to influence Veterans' social identities, attitudes of employers and health care providers towards Veterans, willingness of families and employers to accommodate Veterans with health-related impairments, Veterans' legislative and policy infrastructure, business practices in serving Veterans and their families, and state of the economy.
- Examples of *descriptors* (outcomes): Veterans' sense of being valued and understood by their community, sense of community belonging, effectiveness of policies and services.