



BECES-V: Modification of the BECES Tool (Barriers to Employment and Coping Efficacy Scales) for Veterans with Mental Health Problems Reintegrating in the Workplace

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Abstract

Objective: Adapt a psychometric tool for evaluating barriers to work and self-efficacy for overcoming them that can be used to assist military Veterans who have mental health problems and are transitioning from military service to civilian life.

Rationale: Former military personnel who leave service with mental health problems can have difficulty re-establishing in civilian work. There is a need for tools to assist them.

Method: A multidisciplinary team was assembled to modify the BECES (Barriers to Employment and Coping Efficacy Scales) tool for military personnel transitioning to civilian life. BECES had been developed for assisting civilians with severe mental health disorders to reintegrate in the workplace. Using a modified Delphi consensus-seeking approach, the team discussed modifications based on the findings of a literature review and a qualitative study, and their clinical experiences working with serving and former military personnel. The team also considered items used in a civilian tool called ROCE-CMD (Return to work Obstacles and Coping Efficacy – Common Mental Disorders) in order to broaden applicability from severe mental disorders to a range of mental health problems.

Result: This work produced an initial version of the modified BECES tool called BECES-V (Barriers to Employment and Coping Efficacy Scales – Veterans). BECES-V will undergo testing and development.

Introduction

Transition from military service to civilian life goes well for many, but can be challenging and difficult for some. In a survey of Canadian Forces (CF) Regular Force Veterans who released from service during 1998-2007, 56% with chronic mental health conditions reported a difficult adjustment to civilian life, compared to 16% of those without mental health conditions (Thompson et al 2011). Since the late 1990s, CF and Veterans Affairs Canada (VAC) have been instituting significant new programs and services for military personnel and Veterans with mental health problems. When the New Veterans Charter was enacted in 2006, the new Rehabilitation Program gave

Veterans access to an array of services to assist them with barriers to re-establishment, including vocational rehabilitation.

Worldwide, mental health problems are associated with significant workplace disability (Harnois and Gabriel 2000). While it is widely recognized that the challenges of overcoming barriers can be significant for persons with mental health problems, the evidence base for best practices in assisting workplace reintegration remains incomplete (Corbière and Lecomte 2009). Evidence for best practices in the management of disability is less incomplete for physical health problems, notably musculoskeletal disorders (Thompson and MacLean 2009).

In 2008, a team of researchers were awarded a Canadian Institutes of Health Research (CIHR) catalyst grant to lay the groundwork for a research program studying workplace reintegration of military Veterans with mental health problems. The team included researchers and clinicians from several institutions including the University of Prince Edward Island, The University of Calgary, the Université de Sherbrooke, Veterans Affairs Canada, the pan-Canadian network of Operational Stress Injury Clinics, and the Department of National Defence.

Products of this catalyst grant work to date have included a literature review (VanTil et al 2010); a qualitative study to identify facilitators and barriers experienced by military Veterans with mental disorders when they seek employment, using interviews of Veterans and clinicians at an Operational Stress Injury Clinic (Farrar et al 2010); and translation into English of two French language tools used in assisting persons with mental disorders to integrate in the workplace: Return to work Obstacles and Coping Efficacy – Common Mental Disorders (ROCE-CMD in English and ORTESES-TM in French; Corbière et al 2011) and Work Disability Diagnostic Interview – Common Mental Disorders (WDDI-CMD; Durand et al 2011). ROCE-CMD (ORTESES-TM) was developed to assess barriers encountered by civilians with less severe mental health disorders when they return to work. WDDI-CMD is also for return to work applications, specifically in evaluating risks and obstacles among those with musculoskeletal or mental health problems.

The literature review found that published research dealing with absence from work for those with mental health conditions was sparse, and there were few studies of Veterans (VanTil et al 2010). The review found “...*limited knowledge about how to integrate people with mental disorders into the workplace following a prolonged absence. Even more limited knowledge was found for Veterans. A robust body of evidence is essential in promoting successful transition from military service to civilian life, in particular for Veterans with mental disorders. Future research is needed to provide insight into what works and what does not for Veterans*”.

The impression among those who work with Veterans is that specialized tools sensitive to the military context are needed to support research and practice in assisting Veterans with mental health problems when they seek workplace reintegration. BECES (Barriers to Employment and Coping Efficacy Scales) is a tool that was developed by

Corbière et al (2000, 2004) to assess barriers and coping efficacy experienced by civilians with serious mental disorders when they reintegrate with the workplace after a prolonged absence from work. The tool has potential for use in studying best practices in disability management for Veterans with mental disorders when they leave military service and enter the civilian workforce. This report describes the fifth and final product of the CIHR catalyst grant: modification of the BECES tool for military Veterans into BECES-V.

Original BECES

BECES was originally developed to assist civilians with severe mental disorders in workplace reintegration by focusing on perceived barriers and promoting self-efficacy, putting the focus on “ability” rather than “disability”. As explained by Corbière et al (2004): *“When people perceive many or significant barriers to their work integration process, their planning and decision-making processes are necessarily altered. Albert and Luzzo (1999) corroborated that ‘the career-related barriers an individual believes currently exist or may encounter in the future are not necessarily grounded in reality or based on factual information’ (p.431), yet these perceptions or beliefs strongly influence one’s behaviors, self-efficacy, and overall work integration process. Therefore, potential barriers and their impact on work integration should not solely be assessed from an observable or objective perspective but also from a subjective one that includes individuals’ perception in overcoming their barriers.... The coping efficacy concept introduces the dimension of how a person reacts or adapts to an unexpected obstacle (Lent et al., 1998). This concept is thus more applicable to the study of contextual factors or influences (e.g., external barriers to employment) that might interfere with goal attainment such as obtaining a job. However, there are also personal or individual barriers to employment.”*

The BECES tool was designed to assist civilians with severe mental illness in work reintegration (Corbière et al 2000, 2004). The tool is comprised of two 7-category Likert scales for each of sixty barriers identified from research literature and interviews with persons with severe mental disorders who were seeking work. The first scale assesses perceptions of the barriers to employment, and the second scale assesses efficacy in coping with those barriers. The tool is available in French and English and has been used in clinical practice for civilians with severe mental disorders. It is completed by the person after instructions provided by a clinician. The process requires about 30 minutes and is used to inform case planning and begin workplace reintegration, based on the theory of planned behaviour and the concept of promoting self-efficacy/readiness to change (Corbière et al, in press).

Corbière et al (2004) provided initial evidence of validity and reliability of the tool using data from 254 French Canadians with mental illness attending a vocational program. Descriptive analysis of the barriers found that participants endorsed items across a broad range of frequencies. Principal component analysis of the coping efficacy subscales demonstrated that items clustered around five dimensions: health, self-

competence/self-confidence, anxiety/amotivation, work adjustment, and external factors.

BECES Modification for Veterans: BECES-V

A multidisciplinary team¹ was convened to modify the BECES tool for the military Veteran context. The team was provided with both the literature review (VanTil et al 2010) and the quality study findings (Farrar et al 2010) to inform their work. Modifications were made by team consensus using an informal Delphi-like process.

Step 1. The team met twice over a two-month period in March 2011 to review the original 60 BECES items in the version dated 08 September 2006. By consensus, they modified the items to fit their understanding of disability experienced by military Veterans who have mental health problems and during reintegration with workplaces after leaving military service. BECES had been developed initially for persons with relatively severe mental disorders; however the team made modifications intended to accommodate a wide range of mental health problems seen among Veterans.

Step 2. One team member (JT) kept minutes of the modification meetings, compiled the changes, and circulated a draft of the preliminary BECES-V to the whole team for further independent review.

Step 3. The team reconvened by teleconference to finalize by consensus the initial modifications. This resulted in a first iteration of BECES-V, containing 72 items.

Step 4. The team was provided with the ROCE-CMD tool and asked to consider further modifications to BECES-V. ROCE-CMD was designed to assess barriers and coping efficacy for persons with a broader range of mental health conditions when they *return to work*. The team felt that the original BECES tool, because it was designed for persons with severe mental health conditions who were *reintegrating* in the workplace after a prolonged absence, did not fit many Veterans returning to civilian work, for example those who had served in the military for short periods, or those whose civilian jobs might be very similar to their jobs in the military. It was agreed that ROCE-CMD could provide useful additional modifications to BECES-V in the form of new or revised items.

Step 5. The team reconvened on 08 June 2011 to discuss their suggestions for further revisions to the first iteration of BECES-V based on their comparisons to the ROCE-CMD tool. This resulted in the second iteration of BECES-V, containing 105 items.

Table 1 summarizes the types of modifications made to the original BECES items in this first step. This initial modification resulted in expanding the tool to 72 items. Two items were deleted; 59 questions were not contextualized to military Veterans transitioning to civilian life; and 13 questions were contextualized for military Veterans, for example by

¹Marc Corbière, Jim Thompson, Tina Pranger, Linda VanTil, Norman Shields, May Wong and Chantal Basque.

adding the adjective “civilian” to “job”, or by asking about occupational experience while in military service.

Table 1. Types of modifications made in the first step.

Type of Modification	Number of Items	Rationale
Generic Context, not Specific to Veterans		
No changes	24	Original items not specific to Veterans that were judged appropriate for Veterans reintegrating with civilian workplaces after transition from military service.
Question wording changed	24	Word changes the team thought would improve understanding. A common example was replacing “lack” with “limited”.
Examples expanded	5	Examples the team thought would improve understanding.
New items	3	Added because the team felt these items, not present in the original BECES, should be included.
Question wording changed and example expanded	3	As above.
Military Veteran Context		
Question wording changed to military context, with appropriate examples	4	Added adjectives such as “civilian” and “military”, for example.
New items for military context	9	Items the team felt might be important in the experience of military Veterans with mental health problems who experience disability in the workplace.
Items deleted	- 2	Redundant after making modifications.

Discussion

This project produced a preliminary modification of the BECES tool which has potential value in assisting both still-serving military personnel with mental health problems who are about to transition to civilian life, and Veterans with mental health problems who have released from service and are attempting to work in a civilian job. This modification can be tested in a population of military personnel and Veterans for evidence of utility, reliability and construct validity. For instance, after collecting data from a large sample of Veterans with mental health problems who are attempting to work in a civilian job (sample size of 200 to 300 individuals), factor analysis can be conducted to determine whether the five dimensions found by Corbière et al (2004) hold, and whether the team’s effort to introduce a new dimension that could be termed “military context” is meaningful.

Only one item asks specifically about physical health issues; however BECES is an adjunct to a more complete intake assessment that would include physical health.

Physical health interplays significantly with mental health. In a survey of CF Regular Force personnel who released during 1998-2007, 24% (95% confidence interval 22-25%) had at least one chronic mental health condition, and 21% (19-22%) had at least one each of a chronic physical and mental health condition among those asked about in the survey (Thompson et al 2011). Among clients receiving benefits through the New Veterans Charter, 60% (56-64%) reported at least one chronic mental health condition, and 55% (95% CI 51-59%) reported having both physical and mental health conditions. The triad of a musculoskeletal disorder, chronic pain and a mental health condition was reported by 15% (14-16%), and 48% (44-52%) of VAC clients participating in NVC programs. Many of the BECES-V items ask about symptoms such as low energy, poor sleep, mood changes, behavioural problems, anxiety and stress. These are all symptoms that can be explained or exacerbated by physical health diagnoses. This physical health dimension can be explored in further research.

BECES-V has potential to be useful in documenting the nature of the barriers encountered by Veterans with a range of mental disorders during transition to civilian workplaces. BECES-V therefore has potential value for evaluating programs offered by DND/CF and VAC, and for research on best practices in assisting Veterans with these problems. BECES-V also has potential to assist the support worker or case manager with helping the Veterans overcome perceived barriers preventing them from transitioning to civilian work. It could be a useful tool to guide case planning, and to ensure that proper attention is given to barriers Veterans perceive to be most significant. BECES-V has potential to assist health care practitioners assisting Veterans with mental health problems to work in civilian jobs.

References

Corbière M, Lecomte T. Vocational services offered to people with severe mental illness. *Journal of Mental Health*, 2009;18(1):38-50.

Corbière M, Mercier C, Lesage A. Perceptions of barriers to employment, coping efficacy, and career search efficacy in people with mental illness. *J Career Assessment*. 2004;12(4):460-478.

Corbière M, St-Arnaud L, Durand MJ, Briand C, Goulet C, Charpentier N. (2011). *Return to work Obstacles and Coping Efficacy – Common Mental Disorders (ROCE-CMD)*. Sherbrooke, Canada : Université de Sherbrooke. 2011.

Corbière M, Zaniboni S, Lecomte T, Bond G, Gilles P-Y, Lesage A, Goldner E, Job acquisition for people with severe mental illness enrolled in supported employment programs: A theoretically grounded empirical study. *Journal of Occupational Rehabilitation* (in press).

Corbière M, Bordeleau M, Provost G, Mercier C. [Barriers to socio-professional reintegration of people with severe mental disorders: empirical data and theoretical points of reference.]. *Sante Ment Que*. 2002;27(1):194-217. (French language).

Durand MJ, Corbière M, Briand C, Coutu MF, St-Arnaud L, Charpentier N. Les facteurs reliés aux absences prolongées du travail en raison d'un trouble mental transitoire. Développement d'un outil de mesure. Rapport de recherche, IRSST, R-674. Montréal, Québec. 2011.

Farrar PJ, Buchner D, Pranger T. Barriers and Facilitators to Optimal Workplace Reintegration of Veterans with Mental Health Conditions. Qualitative Study Report. Veterans Affairs Canada. October 2010;82 p.

IOM. The future of disability in America. Committee on disability in America. Editors: Field MJ and Jette AM. 2007a;42p.

Harnois G, Gabriel P. World Health Organization; InFocus Program on Knowledge, Skills and Employability; and International Labour Organization, "Mental Health and Work: Impact, Issues and Good Practices" GLADNET Collection. 2002;Paper 222:68 p. <http://digitalcommons.ilr.cornell.edu/gladnetcollect/222>

Nagi S. Some conceptual issues in disability and rehabilitation. In: Sussman MB, editor. Sociology and rehabilitation. Washington, DC: American Sociological Association; 1965. p. 100-13.

Nagi S. Disability concepts revisited: implications for prevention. In: Pope A, Tarlov A, editors. Disability in America: towards a national agenda for prevention. Washington, DC: National Academy Press; 1991. p. 309-27.

Thompson JM, MacLean MB. Evidence for best practices in the management of disabilities. Research Directorate Technical Report. Veterans Affairs Canada. Charlottetown. 27 July 2009;51 p.

Thompson JM, MacLean MB, Van Til L, Sudom K, Sweet J, Poirier A, Adams J, Horton V, Campbell C, Pedlar D. *Survey on Transition to Civilian Life: Report on Regular Force Veterans*. Research Directorate, Veterans Affairs Canada, Charlottetown, and Director General Military Personnel Research and Analysis, Department of National Defence, Ottawa. 04 January 2011:103 p.

VanTil LD, Pranger T, Pedlar D. Literature Review of Work and Mental Disorders. Veterans Affairs Canada Research Directorate Technical Report, December 17, 2010.

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.