The CAF Recruit Health Questionnaire: Longitudinal Studies of Resilience in CAF Recruits

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Faculty/Presenter Disclosure

- **Faculty:** Jennifer Lee

- **Relationships with commercial interests:**
  - None
Mitigating Potential Bias

- Not applicable
Background

Health Surveillance Reform

• Key challenges *(Young, Gibson, & Ryan, 2006)*
  – Lag behind time-sensitive deployments
  – Deployment awareness and accuracy of medical/psychological data

• Necessity of baseline health data
  – Evaluation of health risks and behaviours before military service
  – Understanding of potential impacts of deployments throughout service
  – Development and assessment of intervention and prevention programs
Background

**Baseline Health Assessment in the CAF**

- Since July 2003, baseline health assessment among CAF non-commissioned member (NCM) and officer candidates of the Regular Force has been carried out using the Recruit Health Questionnaire (RHQ)

- This presentation will provide a summary of research that highlights the different uses of the RHQ in mental health research to:
  - Monitor health
  - Conduct prospective health research
  - Complement other research projects
Recruit Mental Health Trends

Methods

• Participants
  – 30,195 participants from 2003 to 2012; 8,379 since 2010
    • Estimated overall response rate of 75%
    • Mainly male (86%) NCM candidates (78%) of 23.7 (±6.1) years of age, on average

• Objectives
  – Examine the proportion of recruits who screened positive for at least one mental health condition in each cohort year from 2003 to 2012
  – Taking into account any differences in the age or sex profile of cohorts across the years, determine if there is a significant increase or decrease A) across the 10 years and B) in the 4 most recent years (using logistic regression analysis)
Recruit Mental Health Trends

**Results**

- Positive screen on depression, posttraumatic stress disorder (PTSD), panic disorder or other anxiety disorder based on Patient Health Questionnaire or PTSD Checklist for Civilians screening tools (*Kroenke et al., 2001; Spitzer et al., 1999, 2000; Weathers et al., 1993*)

- 2003 to 2012: no change
- 2009 to 2012: significant decrease ($\chi^2(3) = 90.00, p<.001$)
Prospective Analysis of Post-Deployment Health 

Methods

• Participants
  – 3,319 Regular Force personnel who completed the Enhanced Post-Deployment Screening between 2008 and 2011 and the RHQ
  • 27.0 (±5.3) years of age, on average
  • Median years of service of four years
  • Primarily male (90.0%)
  • Primarily single/never married (54.5%)
  • Mostly NCM (89.6%) and Army (87.8%)

• Objectives
  – Examine the association of pre-military mental health conditions and somatic symptoms with post-deployment health outcomes; namely, post-concussive-like symptoms (using sequential negative binomial regression analysis)
Prospective Analysis of Post-Deployment Health

Results – Baseline Only

Baseline
- Depression
- PTSD
- Somatic Symptoms

Deployment*
- Combat Exposure
- Mild Traumatic Brain Injury

Post-Deployment
- Depression
- PTSD
- Somatic Symptoms
- Post-Concussive-Like Symptoms

*Assessed post-deployment
Prospective Analysis of Post-Deployment Health

Results – Baseline and Deployment

Baseline
- Depression
- PTSD
- Somatic Symptoms

Deployment*
- Combat Exposure
- Mild Traumatic Brain Injury

Post-Deployment
- Depression
- PTSD
- Somatic Symptoms

Post-Concussive-Like Symptoms

*Assessed post-deployment
Prospective Analysis of Post-Deployment Health

Results – All Stages

Baseline

- Depression
- PTSD
- Somatic Symptoms

Deployment*

- Combat Exposure
- Mild Traumatic Brain Injury

Post-Deployment

- Depression
- PTSD
- Somatic Symptoms

Post-Concussive-Like Symptoms

*Assessed post-deployment
Correlates of Mental Health Care Use Intentions

Methods

- Participants
  - 244 CAF recruits who were part of a larger study on the effects of various teaching methods for mental health training
    - 213 men and 31 women; average age of 22.6 years (±4.8)
    - 15.7% reported having a biological parent with a history of mental health problems
    - 4.3% consulted a health professional about their emotional health in the past year

- Objectives
  - Identify personality/individual difference characteristics that are associated with mental health care use (MHSU) intentions
  - Determine if personality/individual difference characteristics are associated with MHSU intentions because they are associated with MHSU-related attitudes and beliefs (using multiple mediation analysis)
Correlates of Mental Health Care Use Intentions

Results

“Big Five” Traits
- **Agreeableness**
- Conscientiousness
- Extroversion
- Neuroticism
- Openness

Emotional Processing
- **Difficulty Describing Feelings**
- Difficulty Identifying Feelings
- Externally-Oriented Thinking

Salutogenic “Happy” Factors
- **Hardiness**
- Mastery
- Positive Affect

- **Attitudes**
- **Social Norms**
- **Behavioral Control**

MHSU Intentions
Discussion

- RHQ has been integral to enhancing the CAF/DND’s capacity to:
  - Monitor recruit health
  - Conduct methodologically stronger prospective health research
  - Provide complementary data to integrate into other studies

- Other work has involved linking the RHQ to other data records to:
  - Identify predictors of basic training attrition
  - Identify predictors of other post-deployment health outcomes
  - Understand pathways linking childhood adversity to adult health
  - Assess the stability of psychological resilience

- Its prospective research potential will continue to grow as the CF Health Electronic Records and Outcomes (CF-HERO) capacity increases
Other Relevant References


