

Barriers and Facilitators to Help-Seeking for Individuals  
With Posttraumatic Stress Disorder (PTSD): A Systematic Review

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## Abstract

**Background** Posttraumatic stress disorder (PTSD) brings with it diagnostic symptoms that can be debilitating and persist for years. Left untreated, PTSD can have far-reaching and damaging consequences – for the individual, families, communities, and society at large. While early detection and intervention is recognized as key to the effective treatment of PTSD, many who suffer from PTSD do not seek essential health services. The aim of this study was to answer the research question: based on existing literature, what are the barriers and facilitators to help-seeking for individuals with PTSD?

**Methods** A systematic review, modeled on the Joanna Briggs Institute (JBI) methodology for systematic reviews, examined studies cited in PsycINFO, Medline, Embase, CINAHL and PILOTS published from January 2000 to November 2015. Eligible studies measured barriers and facilitators to help-seeking for adults with PTSD. Two reviewers independently screened citations and double data extraction was exercised.

**Results** Of 1,759 potentially relevant citations, sixteen studies were included, published between 2003 and 2015 and based in five countries, predominantly within the United States ( $n=12$ ). Thirteen studies focused on military as a target population. Eight principal barrier themes and seven principal facilitator themes were identified, under which supportive subthemes were categorized.

**Conclusions** In identifying prominent barriers and facilitators to help-seeking for individuals with PTSD, this review highlights opportunities to inform policies and programs that educate and promote PTSD knowledge and recognition, reduce public and personal stigma, improve access and availability of care, and encourage social support for patients and families living with PTSD.

**Contexte** Le trouble de stress post-traumatique (TSPT) engendre des symptômes débilitants qui peuvent persister pendant des années. Sans traitement, le TSPT peut avoir des conséquences importantes et durables pour l'individu, les familles, les communautés et la société. Bien que la détection et une intervention précoce sont essentielles pour le traitement efficace du TSPT, beaucoup de personnes qui en souffrent ne recourent pas aux services de santé. Cette étude vise à répondre à la question de recherche suivante: à partir de la littérature existante, quels sont les obstacles et les facilitateurs pour les personnes atteintes de TSPT, qui cherchent de l'aide?

**Méthodes** Une revue systématique basée sur le protocole de la Joanna Briggs Institute (JBI) a examiné des études citées dans PsycINFO, Medline, Embase, CINAHL et PILOTES, qui ont été publiées de janvier 2000 à novembre 2015. Les études éligibles examinaient les obstacles et les facilitateurs pour les personnes atteintes de TSPT qui cherchaient de l'aide. Deux examinateurs ont filtré indépendamment les articles et l'extraction de données a été répétée à 2 reprises.

**Résultats** Sur 1759 citations potentiellement pertinentes, seize études ont été incluses. Ces seize études ont toutes été publiées entre 2003 et 2015 et basée dans cinq pays, principalement aux États-Unis ( $n = 12$ ). Treize de ces études ciblaient les militaires comme population. 8 thèmes d'obstacles et 7 thèmes de facilitateurs ont été identifiés, chez lesquels différents sous-thèmes ont émergé.

**Conclusions** En identifiant les obstacles et les facilitateurs pour les personnes atteintes de TSPT qui cherchent de l'aide, cette revue systématique permet d'éclairer les politiques et les programmes éducatifs qui sensibilisent au TSPT, de réduire la stigmatisation, d'améliorer l'accès et la disponibilité des soins, et d'encourager le soutien social pour les patients et les familles vivant avec le TSPT.

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*This work is dedicated to those who live the consequences of traumatic events out of their control – I hope they find peace and understanding both inside themselves and from all those around them – facilitators of healing inside and out.*

## Table of Contents

<b>ABSTRACT</b> .....	<b>II</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>III</b>
<b>TABLE OF CONTENTS</b> .....	<b>IV</b>
<b>LIST OF TABLES</b> .....	<b>VI</b>
<b>LIST OF FIGURES</b> .....	<b>VI</b>
<b>LIST OF APPENDICES</b> .....	<b>VI</b>
<b>LIST OF ACRONYMS AND ABBREVIATIONS</b> .....	<b>VII</b>
<b>INTRODUCTION</b> .....	<b>1</b>
<b>BACKGROUND</b> .....	<b>3</b>
WHAT IS PTSD? AN EVOLUTION OF ITS DEFINITION AND DIAGNOSIS .....	3
LIVING WITH PTSD .....	5
CURRENT TREATMENTS FOR PTSD .....	5
HELP-SEEKING .....	6
BARRIERS AND FACILITATORS TO HELP-SEEKING .....	7
<b>SYSTEMATIC REVIEW</b> .....	<b>8</b>
RATIONALE .....	8
OBJECTIVES AND RESEARCH QUESTIONS .....	9
METHODS .....	9
<i>Design</i> .....	9
<i>Eligibility criteria</i> .....	10
<i>Search strategy</i> .....	10
<i>Study selection</i> .....	14
<i>Critical appraisal of selected studies</i> .....	14
<i>Data extraction</i> .....	15
<i>Data analysis &amp; synthesis</i> .....	15
<b>RESULTS</b> .....	<b>17</b>
EXTENT AND NATURE OF EXISTING LITERATURE .....	17
QUALITY OF EVIDENCE .....	25
CONCEPTUAL AND OPERATIONAL DEFINITIONS OF HELP-SEEKING .....	25
<i>Measurement instruments for help-seeking for persons with PTSD</i> .....	26
<i>Conceptual frameworks of help-seeking for persons with PTSD</i> .....	28
BARRIERS AND FACILITATORS TO HELP-SEEKING FOR PERSONS WITH PTSD .....	28
<i>Barriers</i> .....	29
<i>Facilitators</i> .....	34

<b>DISCUSSION .....</b>	<b>39</b>
EXTENT AND NATURE OF EXISTING LITERATURE .....	39
QUALITY OF EXISTING LITERATURE .....	41
CONCEPTUAL AND OPERATIONAL DEFINITIONS OF HELP-SEEKING.....	44
MEASUREMENT INSTRUMENTS & CONCEPTUAL FRAMEWORKS FOR HELP-SEEKING.....	46
BARRIERS AND FACILITATORS TO HELP-SEEKING .....	52
<i>Avoidance, readiness – Recognition, acceptance.....</i>	<i>52</i>
<i>Treatment-discouraging beliefs – Treatment-encouraging beliefs.....</i>	<i>55</i>
<i>Invalidating post-trauma socio-cultural environment – Social network facilitation and</i>	
<i>encouragement.....</i>	<i>57</i>
<i>Values and priorities that conflict with treatment-seeking.....</i>	<i>58</i>
<i>Health care system concerns, concerns about treatment – System facilitation.....</i>	<i>58</i>
<i>Knowledge barriers.....</i>	<i>60</i>
<i>Access barriers.....</i>	<i>61</i>
<i>Trauma-related factors.....</i>	<i>62</i>
<i>PTSD symptoms, symptom severity.....</i>	<i>63</i>
<b>LIMITATIONS .....</b>	<b>64</b>
<b>CONCLUSIONS .....</b>	<b>65</b>
<b>REFERENCES.....</b>	<b>67</b>
<b>APPENDIX I: RISK FACTORS .....</b>	<b>76</b>
<b>APPENDIX II: FORMAL TREATMENTS FOR PTSD.....</b>	<b>77</b>
<b>APPENDIX III: COMPLETED QUALITY ASSESSMENT FORMS .....</b>	<b>79</b>
<b>APPENDIX IV: JBI DATA EXTRACTION TOOLS.....</b>	<b>95</b>
<b>APPENDIX V: SYSTEMATIC REVIEW SELECTED STUDIES.....</b>	<b>96</b>
<b>APPENDIX VI: SUMMARY OF BARRIERS AND FACILITATORS BY AUTHOR.....</b>	<b>97</b>

### **List of Tables**

- Table 1: Eligibility Criteria (PICO)
- Table 2: Search Strategies for PsycINFO, MEDLINE, Embase, CINAHL and PILOTS
- Table 3: Data Collection Methods of the Included Studies
- Table 4: Study Characteristics
- Table 5: Quality Assessment Scores of Selected Studies
- Table 6: Measurements of Help-Seeking in Selected Articles
- Table 7: Barriers and Facilitators of Selected Studies

### **List of Figures**

- Figure 1: PTSD Symptom Clusters (DSM-V)
- Figure 2: PRISMA Decision Tree
- Figure 3: Date of Publication of Selected Studies
- Figure 4: Location (Country) of Selected Studies
- Figure 5: Gender Sample Population Distribution
- Figure 6: Sample Population
- Figure 7: Andersen's Original (1960's) Model of Health Service Utilization
- Figure 8: Andersen's "Emerging Model" of Health Service Use (1995)
- Figure 9: Sayer's Model of PTSD Treatment Initiation (2009)
- Figure 10: Smith's Model of Help-Seeking for People with PTSD

### **List of Appendices**

- Appendix I: Risk Factors
- Appendix II: Formal Treatments for PTSD
- Appendix III: Completed Quality Assessment Forms
- Appendix IV: JBI Data Extraction Tools
- Appendix V: Systematic Review Selected Studies
- Appendix VI: Summary of Barriers and Facilitators by Author

### List of Acronyms and Abbreviations

APA	American Psychiatric Association
CAPS	Clinician Administered PTSD Scale
CBT	Cognitive Behavioural Therapy
CCHS-CF	Canadian Community Health Survey–Canadian Forces
CINAHL	Cumulative Index to Nursing and Allied Health Literature
DSM	Diagnostic and Statistical Manual of Mental Disorders
EBLIP	Evidence Based Library and Information Practice
EMBASE	Excerpta Medica dataBASE
EMDR	Eye Movement Desensitization and Reprocessing
IES-R	Impact of Events Scale-Revised
ISTSS	International Society for Traumatic Stress Studies
GHSQ	General Help-Seeking Questionnaire
ICD	International Statistical Classification of Diseases and Related Health Problems
JBI	Joanna Briggs Institute
JBI-QARI	Joanna Briggs Institute Qualitative Assessment and Review Instrument
JBI-SUMARI	Joanna Briggs Institute System for the Unified Management, Assessment and Review of Information
MEDLINE	Medical Literature Analysis and Retrieval System Online
MINI	Mini International Neuropsychiatric Interview
MD	Major Depression
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
PCL-C	PTSD Checklist-Civilian
PCL-M	PTSD Checklist-Military
PCL-S	PTSD Checklist-Specific
PICO	Population, Intervention, Context and Outcome
PILOTS	Published International Literature On Traumatic Stress
PRISMA	Preferred Reporting Items for Systematic reviews and Meta-Analyses
PROSPERO	Prospectively Registered Systematic Reviews in Health and Social Care
PSOSH	Perceptions of Stigmatization by Others for Seeking Help
PsycINFO	Psychological Information Database
PTSD	Posttraumatic Stress Disorder
VA	Veterans Affairs
WHO	World Health Organization

## Introduction

“PTSD, or posttraumatic stress disorder, is a psychiatric disorder that can occur following the experience or witnessing of a life-threatening event such as military combat, natural disasters, terrorist incidents, serious accidents, or physical or sexual assault in adult or childhood” (What is PTSD?, 2007, par. 1). Most individuals will be exposed to at least one traumatic event in their lifetime (National Center for PTSD, 2014). Van Ameringen and colleagues (2008) reported 76.1% of their national Canadian sample population to have had such an exposure. In their study, the prevalence rate of lifetime PTSD (individuals who have had the diagnosis of PTSD at some point in their life) was recorded to be 9.2%, and the rate of current (1-month) PTSD (individuals who currently have a diagnosis of PTSD, with symptoms persisting for at least one month) to be 2.4%. Early studies showed that PTSD develops at a much higher rate – twenty-five percent (25%) – on average (Greene, 1994; Figley, 1995), where rates vary within populations exposed to a traumatic stressor, such as a community disaster (25 to 33%), nonsexual assault (65%), rape (35 to 92%), or combat (30% in Vietnam veterans) (Matsakis, 1996, p. 13). The Sidran Institute for Traumatic Stress Education and Advocacy (2014) has summarized a comprehensive list identifying those at risk for developing PTSD (Appendix I), which includes “anyone who has been victimized or has witnessed a violent act, or who has been repeatedly exposed to life-threatening situations” (p. 2) and has more recently summarized risk percentages according to exposure type (Appendix I) that agree with or fall within earlier estimates. Additional risk factors, unique to the individual, may also have a significant bearing on one’s susceptibility and development of PTSD; these include, but are not limited to: type and severity of exposure; historical and cumulative exposures to stress, violence,

trauma, and/or abuse; and lack of social and/or familial supports (Breslau, Troost, Bohnert, & Luo, 2013).

Left untreated, PTSD can have detrimental costs – for the individual, and for society as a whole, including higher rates of unhealthy behaviours, physical health problems, mortality, lost work and productivity, impaired relationships, disrupted marriages and strains on families, parenting difficulties, domestic violence, and an array of mental and social impairments for the individual, as well as effects that are correlated across generations (RAND, 2008). Few studies have attempted to quantify the societal and economic burden of PTSD. Those that exist focus on direct costs to government, where people with PTSD are reported to have among the highest rates of healthcare service use, and billions of dollars are spent treating associated anxiety and depressive disorders, due to the misdiagnosis and under-treatment of the root problem, PTSD (PTSD United, 2013).

Despite its prevalence, as well as its devastating burden on individuals, families, communities, society, our healthcare system and economy, PTSD remains poorly recognized and understood. Further, while there are effective treatments for PTSD, many who suffer from the disorder wait years to decades before seeking professional help, if they seek it at all (Sayer et al., 2009).

To address the disconnect between need and care for individuals with PTSD, this review answers the research question: Based on existing literature, what are the barriers and facilitators to help-seeking for individuals with PTSD? In answering this question, this study aimed to:

- 1) explore and assess the state of science in this area, particularly the extent, nature and quality of existing literature and research;
- 2) summarize conceptual and operational definitions of help-seeking for individuals with PTSD;
- 3) identify and describe instruments used to measure help-seeking and conceptual frameworks used to illustrate help-seeking behaviour(s) for individuals

with PTSD; as well as to 4) comprehensively summarize the barriers and facilitators to help-seeking for persons with PTSD studied and identified in existing literature.

## **Background**

### **What is PTSD? An Evolution of its Definition and Diagnosis**

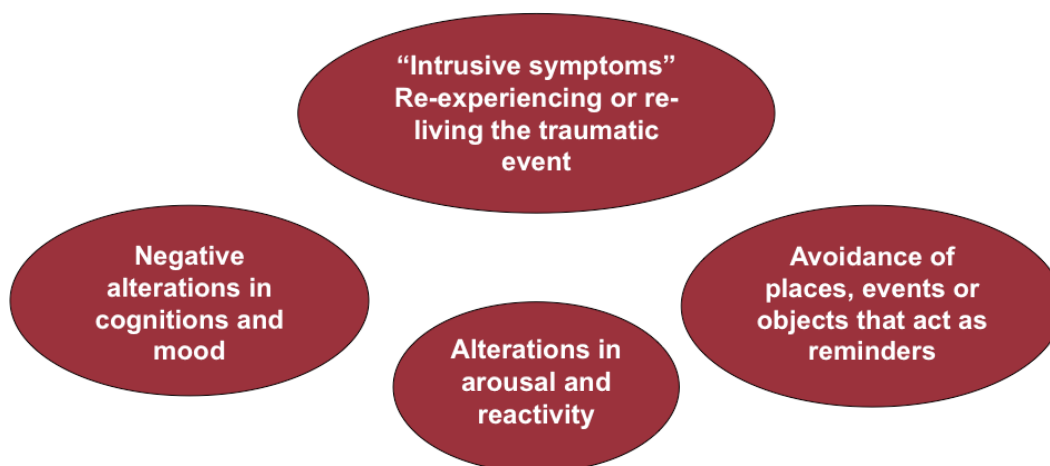
Posttraumatic stress disorder (PTSD) is not new; in fact, it is ancient. Scholars, poets, and playwrights have chronicled symptoms of PTSD in some of the world's oldest writings, dating back to eighth century BC (Jones, 2013). Our modern understanding of PTSD originates from symptomatic diagnoses of soldier's heart, shell shock, battle fatigue, combat stress reaction, or traumatic war neurosis (Crocq & Crocq, 2000) affecting veterans of the Vietnam War; and so the term post-traumatic stress disorder (PTSD) was coined in the mid-1970's, driven in large part by the anti-war movement (Shalev, Yehuda, & McFarlane, 2000). Though veterans have unique experiences compared to their "civilian contemporaries", "post-traumatic stress reactions to crises are not, nor have they ever been, quarantined to the field of battle...the debilitating psychological ailments of PTSD are a common adaptive response to traumatic events" (Jones, 2013, p. 2).

PTSD was first formally recognized within the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) in 1980, and is presently defined by the Canadian Mental Health Association (CMHA) as "a mental illness that involves exposure to trauma involving death or the threat of death, serious injury, or sexual violence" (2014, p. 1). According to the International Statistical Classification of Diseases and Related Health Problems, 10<sup>th</sup> Revision (ICD-10), PTSD "arises as a delayed or protracted response to a stressful event or situation (of either brief or long duration) of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone" (World Health Organization [WHO], 2008). To assist health

care providers with situational assessment, the DSM added a list of qualifying examples, such as serious threat to life or physical integrity; serious threat or harm to one's children, spouse, or other close relatives or friends; sudden destruction of home or property; or seeing another person who has recently been, or is being, seriously injured or killed as a result of an accident or physical violence (Levin, Kleinman & Adler, 2014).

To receive a diagnosis of PTSD, an individual must display particular symptoms identified within the DSM-V, which is comprised of eight criteria. First and foremost, one must have direct exposure – as a victim or witness – to a traumatic event. The four criteria that follow are referred to as ‘symptom clusters’, and include diagnostic symptoms, such as re-experiencing or re-living the traumatic event(s) through flashbacks, nightmares, or intrusive thoughts (“intrusive symptoms”); avoiding places, events, or objects that act as reminders of the event(s) (“avoidance”); “negative alterations in cognitions and mood” such as, estrangement of others, persistent negative trauma-related emotions (e.g., anger, guilt, fear, or shame), or diminished interest in (pre-traumatic) significant activities; and, a heightened physiological reactivity (e.g., startle response), irritable or aggressive behaviour, and sleep disturbances, as a shortlist of “alterations in arousal and reactivity” – of which two of six are required to be diagnosed (American Psychiatric Association [APA], 2013).

Figure 1: PTSD Symptom Clusters (DSM-V)



Criteria six addresses the duration of symptoms, which must persist for at least one month following the traumatic event(s); criteria seven assesses function, such that “the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning” (National Center for Biotechnology Information [NCBI], 2014, p.2); and the last criterion, “exclusion”, evaluates PTSD symptoms independent of those caused by any other condition or substance (APA, 2013, p. 1).

### **Living with PTSD**

Traumatic events can leave emotional scars that remain with an individual the rest of their lives (Dovey, 2015). The characteristic symptoms of PTSD such as persistent distress from unwanted memories and/or flashbacks and avoidance of reminders of the trauma(s), feelings of general dissatisfaction or diminished interest in the world, disturbances in sleep, and alterations in mood have deleterious effects on interpersonal relationships, occupational obligations and performance, and quality of life – significantly disrupting an individual’s everyday life.

### **Current Treatments for PTSD**

Various formal treatment options are available for individuals with PTSD that have been proven effective in mitigating these effects and managing damaging behaviours and beliefs related to the trauma. These therapies include individual psychotherapy, behavioural or cognitive behavioural therapy (CBT), eye movement desensitization and reprocessing (EMDR), group therapy, and pharmacotherapy (medication), such as anti-anxiety medication, antidepressants, and adrenergic agents (The Trauma Center, 2007), each of which can be applied on their own or in combination. Psychotherapy and CBT are most common, often effective when coupled with pharmacotherapy. As the aim of this review was not to assess or compare efficacy of available

treatment options, but to uncover the barriers and facilitators for individuals with PTSD in potentially seeking out these options as part of their help-seeking process, further detail on each of these therapies is provided in Appendix II. It is important to note that help comes also from informal support systems (non-professionals, such as family or friends), and from one's self (diagnosis, education, awareness). A combination of all three of these (formal, informal, and self) is critical to successful recovery, healing and help-seeking.

### **Help-Seeking**

Help-seeking, a term used interchangeably with health seeking (Cornally & McCarthy, 2011), is a term rooted in literature examining illness behaviour and conceptualized as part of the illness behaviour process (Rickwood, Thomas, & Bradford, 2012). The concept of illness behaviour

describes the ways in which people respond to bodily indications and the conditions under which they come to view them as abnormal. Illness behaviour thus involves the manner in which individuals monitor their bodies, define and interpret their symptoms, take remedial action, and utilize sources of help as well as the more formal health care system. It also is concerned with how people monitor and respond to symptoms and symptom change over the course of an illness and how this affects behaviour, remedial actions taken, and response to treatment (Mechanic, 1986, p.1).

In their 2012 rapid review on help-seeking measures in mental health, Rickwood et al. note that, while the term help-seeking is widely used, its definition and measurement remain unclear. Rickwood et al. propose that elements such as behavioural process (attitude, intention, behaviour), source of assistance (formal, informal and self-help), type of mental health problem, type of assistance (from generic to specific), and timeframe (temporal constraints) should be

considered when conceptualizing and measuring help-seeking behaviour (2012, p. 11-12). Early models of health care utilization, such as that of Andersen's behavioural model of health services use (Andersen & Newman, 1973; Andersen, 1995), were developed "to assist the understanding of why families use health services; to define and measure equitable access to health care; and to assist in developing policies to promote equitable access" (Andersen, 1995, p. 1).

Within the literature on help-seeking for individuals with mental illness, the decision to seek help, according to Cornally and McCarthy (2011), "is influenced by demographic characteristics, fears, sociocultural norms and values, knowledge, expectations and attitudes" (p. 284). Cornally and McCarthy integrated a number of authors' contributions in their concept analysis of help-seeking behaviour. These authors recognized motivational factors such as gender norms, past help-seeking experience, and self-efficacy (Barker, 2007; Brown & Chen, 2008; Liang et al., 2005) as well as failed self-management (Cornally & McCarthy, 2011, p. 284) to have influence on the decision of those with mental illness to seek help. Earlier contributions underscored the importance of social networks (Rosenstock, 1965; Gourash, 1978; Wilcox & Birkel, 1983) and significant others, as well as beliefs and attitudes about medical services (Moloczij, McPherson, Smith, & Kayes, 2008), on influencing one's decision to seek help. This systematic review aimed to uncover the factors impeding or encouraging help-seeking more precisely, for those with PTSD.

### **Barriers and Facilitators to Help-Seeking**

While multiple articles exist that identify barriers to treatment for people who have mental health problems or psychiatric disorders, identifying common "internal barriers" related to beliefs and attitudes (such as mistrust toward services, not wanting to talk about trauma, etc.) and "external barriers" (such as financial obstacles, language barriers, or lack of knowledge about

services) (Jankovic, 2006), few studies exist that focus specifically on barriers and/or facilitators for individuals with PTSD. Since PTSD is unique from other psychiatric disorders in that its development is, in every occurrence, connected to an external event, the journey one takes to find appropriate and effective treatment for PTSD is similarly distinct. This review aimed to elucidate barriers and facilitators to help-seeking for this particular population so as to highlight ways that will facilitate their journey to recovery.

## **Systematic Review**

### **Rationale**

Despite the existence of effective treatments for PTSD, as well as studies that underscore the advantage of early intervention on shortening the time to remission of symptoms (Santiago, Ursano, Gray, Pynoos, & Spiegel, 2013), millions suffer trauma and the consequent symptomatology of PTSD without intervention or treatment. The literature – the existing body of knowledge – is largely absent in terms of shedding light on why this population continues to go unserved.

As the first comprehensive summary of the prominent barriers and facilitators to help-seeking for individuals with PTSD, the aim of this study was to identify, critically appraise and synthesize existing literature in order to identify gaps in knowledge, areas for future research, as well as opportunities for policy and/or program development that will minimize barriers and maximize and/or create facilitators that encourage the seeking of essential mental health treatment and/or support by individuals with PTSD in order for them to successfully mitigate the effects of trauma on their lives, return to healthy functioning and improve their quality of life post-trauma.

## **Objectives and Research Questions**

The overarching objective of this systematic review is to identify and examine existing literature that addresses the barriers and facilitators to seeking help for people with PTSD.

Precisely, the following research question has been addressed: Based on existing literature, what are the barriers and facilitators to help-seeking for individuals with PTSD?

In the context of this research question, the objectives of this systematic review were to:

1. To describe the state of science, determining the extent, nature and quality of existing literature.
2. To summarize the conceptual and operational definitions of help-seeking in the literature for persons with PTSD.
3. To identify and describe the instruments used to measure help-seeking for persons with PTSD, and to summarize the pertinent conceptual frameworks of help-seeking for persons with PTSD.
4. To summarize and describe the barriers and facilitators to help-seeking for persons with PTSD.

## **Methods**

### **Design**

A systematic review was conducted using the Joanna Briggs Institute (JBI) Methodology for systematic reviews (The Joanna Briggs Institute, 2014). The purpose was to capture and examine all published literature that speaks to the defined research question and objectives. The principal researcher was supported by a supervisory committee comprised of experts in the fields of nursing, psychology and population health, with specialized training and experience in conducting systematic reviews. The protocol was developed and approved by the research team prior to initiating the review. A library scientist supported the principal researcher throughout the

review protocol, particularly with the completion of the search strategy, helping to select appropriate subject headings and key words so as to minimize bias, as well as carry out the utmost detailed and exhaustive database searches. This systematic review protocol was registered in the international database of prospectively registered systematic reviews in health and social care (PROSPERO) to reduce unnecessary duplication of effort among researchers; the PROSPERO registration number is CRD42016039852.

### **Eligibility criteria**

The inclusion and exclusion criteria were defined a priori utilizing the PICO mnemonic: **P**opulation, **I**ntervention, **C**ontext and **O**utcome measures (Miller & Forrest, 2001). Qualitative and quantitative, peer-reviewed studies of all designs were included if they reported on barriers and facilitators to help-seeking and/or seeking healthcare for individuals 18 years of age or older with PTSD, in any setting, and were published between January 2000 and November 2015. Five (5) databases were searched that were considered to have the most relevant articles with respect to the research question and objectives; these were the American Psychological Association's PsycINFO, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), MEDLINE, Embase and the Published International Literature On Traumatic Stress (PILOTS) databases. Articles with a focus on individuals aged <18 years of age, books, theses, grey literature, conference proceedings, unpublished studies, and abstracts, as well as articles published in a language other than English were excluded (Table 1).

### **Search strategy**

Prior to commencing this systematic review, a rapid search of PsycInfo, Medline and Embase databases, as well as the Cochrane Database for Systematic Reviews, was conducted to ensure no systematic review had been conducted on the research question in the last ten years.



Table 2 outlines the search strategy performed for each database. Given the targeted nature of the PILOTS database and the comprehensive searches performed within the accompanying four databases, a wider net was cast as a search strategy within the PILOTS database. The third and final stage involved searching reference lists and bibliographies of selected articles for additional studies (hand search).

Table 2: Search Strategies for PsycINFO, MEDLINE, Embase, CINAHL and PILOTS

Database	Line no.	Subject headings and keywords	Results
PsycINFO	1	posttraumatic stress disorder/	24,522
	2	acute stress disorder/	498
	3	(posttrauma* stress or post-trauma* stress or PTSD).ti,ab.	31,188
	4	or/1-3	33,412
	5	help seeking behavior/	4,270
	6	health care seeking behavior/	3,248
	7	information seeking/	3,245
	8	health care utilization/	12,990
	9	or/5-8	22,930
	10	4 and 9	510
	11	limit 10 to yr="2000-Current"	464
	12	limit 11 to english language	453
	13	limit 12 to adulthood <18+ years>	388
PsycINFO total included: 388			

Database	Line no.	Subject headings and keywords	Results
MEDLINE	1	Stress Disorders, Post-Traumatic/ or Stress Disorders, Traumatic/ or Combat Disorders/	25,637
	2	(posttrauma* stress or post-trauma* stress or PTSD).ti,ab.	23,074
	3	health care seeking behavior/	34,129
	4	"Patient Acceptance of Health Care"/	34,129
	5	health care utilization/	34,129
	6	health services accessibility/	56,651
	7	or/1-2	31,991
	8	or/3-6	87,569
	9	7 and 8	554
	10	limit 9 to yr="2000-Current"	505
	11	limit 10 to english language	495
	12	limit 11 to "all adult (19 plus years)"	349
MEDLINE total included: 349			

Database	Line no.	Subject headings and keywords	Results
Embase	1	Posttraumatic stress disorder/	40,331
	2	(posttrauma* stress or post-trauma* stress or PTSD).ti,ab.	29,144
	3	or/1-2	43,593
	4	Help seeking behavior/	6,054
	5	Information seeking/	1,495
	6	Health care utilization/	46,706
	7	or/4-6	53,611
	8	3 and 7	742
	9	limit 8 to yr="2000 -Current"	720
	10	limit 9 to english language	706
	11	limit 10 to adult <18 to 64 years>	436
Embase total included: 436			

Database	Line no.	Subject headings and keywords	Results
CINAHL	S1	(MH "Stress Disorders, Post-Traumatic")	9,577
	S2	TI (posttrauma* stress OR post-trauma* stress OR PTSD ) OR AB (posttrauma* stress OR post-trauma* stress OR PTSD )	6,483
	S3	(MH "Help Seeking Behavior") OR (MH "Health Seeking Behavior Alteration (Saba CCC)") OR (MH "Information Seeking Behavior") OR (MH "Health Seeking Behaviors (NANDA)") OR (MH "Health Seeking Behavior (Iowa NOC)")	5,494
	S4	(MH "Health Services Needs and Demand") OR (MH "Community Mental Health Services") OR (MH "Health Services Accessibility")	60,277
	S5	(MH "Health Resource Utilization")	9,900
	S6	(MH "Attitude to Mental Illness")	2,859
	S7	(MH "Mental Health Services")	18,957
	S8	S1 OR S2	10,843
	S9	(S1 OR S2) AND (S3 OR S4 OR S5 OR S6 OR S7)	874
	S10	(S1 OR S2) AND (S3 OR S4 OR S5 OR S6 OR S7) Narrow by Language: English	872
	S11	Limiters – Peer Reviewed; Published Date: 20000101-20151131; Age Groups: All Adult	
	S12	S10 AND S11	286
CINAHL total included: 286			

Database	Line no.	Subject headings and keywords	Results
PILOTS		(help seeking OR health care seeking OR information seeking OR health care utilization) AND (PTSD OR posttraumatic stress disorder)	1034
PILOTS total included: 1034			

**Study selection**

A three-step selection process was similarly utilized to select studies for inclusion. First, titles and abstracts were independently screened by two team members (JRS and AFW) to determine broad eligibility. Studies identified as “included” and “unclear” were then re-screened by the principal reviewer (JRS) using full text reports (n=101). Citations that remained unclear with respect to meeting inclusion criteria were reviewed by the second reviewer for consensus on inclusion. To resolve disputes regarding inclusion, consensus meetings were held between the principal reviewer (JRS) and second reviewer (AFW). Unresolved disputes following discussion between the first and second reviewer were resolved by a third reviewer (SY), who reviewed full text to reach a final decision. The principal reviewer conducted all hand searches, as well as thorough full-text review of hand-searched citations. Once all database and hand searches were completed, the studies selected through this three-step process made up the selection of studies on which further, critical appraisal was carried out for this systematic review.

**Critical appraisal of selected studies**

Included studies were appraised for their strengths and limitations by applying critical appraisal instruments from the JBI and the Evidence Based Library and Information Practice (EBLIP). Quality itself did not constitute exclusion. In other words, the articles selected for review were not excluded on the basis of validity scores assessed by JBI or EBLIP quality assessment tools; they were included for their relevance to the overarching goal of the systematic review – to summarize barriers and facilitators to help-seeking for individuals with PTSD. Completed critical appraisals for each of the selected studies for this systematic review are included in Appendix III.

**Data extraction**

The JBI Qualitative Assessment and Review Instrument (JBI-QARI) and JBI Meta Analysis of Statistics Assessment and Review Instrument (JBI-MAStARI) (Appendix IV) were used as a guide to define the characteristics considered and extracted from the included studies and recorded within standardized Microsoft Excel spreadsheets. Double data extraction was performed by the principal reviewer (JRS) at two independent points in time into two separate sets of data extraction spreadsheets in order to ensure accuracy. The second reviewer (AFW) performed independent data extraction on two randomly selected articles as a check for accuracy and thoroughness. When data did not match between the first and second extraction, or was not in agreement with the data extraction performed by the second reviewer, full text was reviewed to ensure accuracy of data. Synoptic tables were created based on the research question, study objectives, and PICO criteria, and include: 1) study characteristics, such as: primary author, date of publication, location (country) of study, study period, sample size, sample population, study type, data collection, and study objective; 2) data collection methods; 3) measurements of help-seeking (whether study participants were seeking and/or receiving help and/or health care, and what this help and/or health care was defined to be within the study); and, 4) a thematic summary of barriers and facilitators presented within the selected studies. These barrier and facilitator themes were extracted from each of the selected studies in the words of the author and categorized into principal and sub-ordinate themes.

**Data analysis & synthesis**

Study characteristics such as date of publication and the country in which the study took place were illustrated graphically, as was gender sample population distribution and sample population. Relevant data that were sufficiently homogeneous and/or measured across studies were summarized using descriptive statistics and illustrated graphically when images better

reflected meaningful findings. Thematic content analysis was conducted, considering the information drawn from the literature as it related to the research question and study objectives, and provided a summary of the nature and extent of existing evidence including the types of studies published, the populations of interest, conceptual frameworks related to help-seeking, and the barriers and facilitators identified in the literature in terms of help-seeking for individuals with PTSD.

## Results

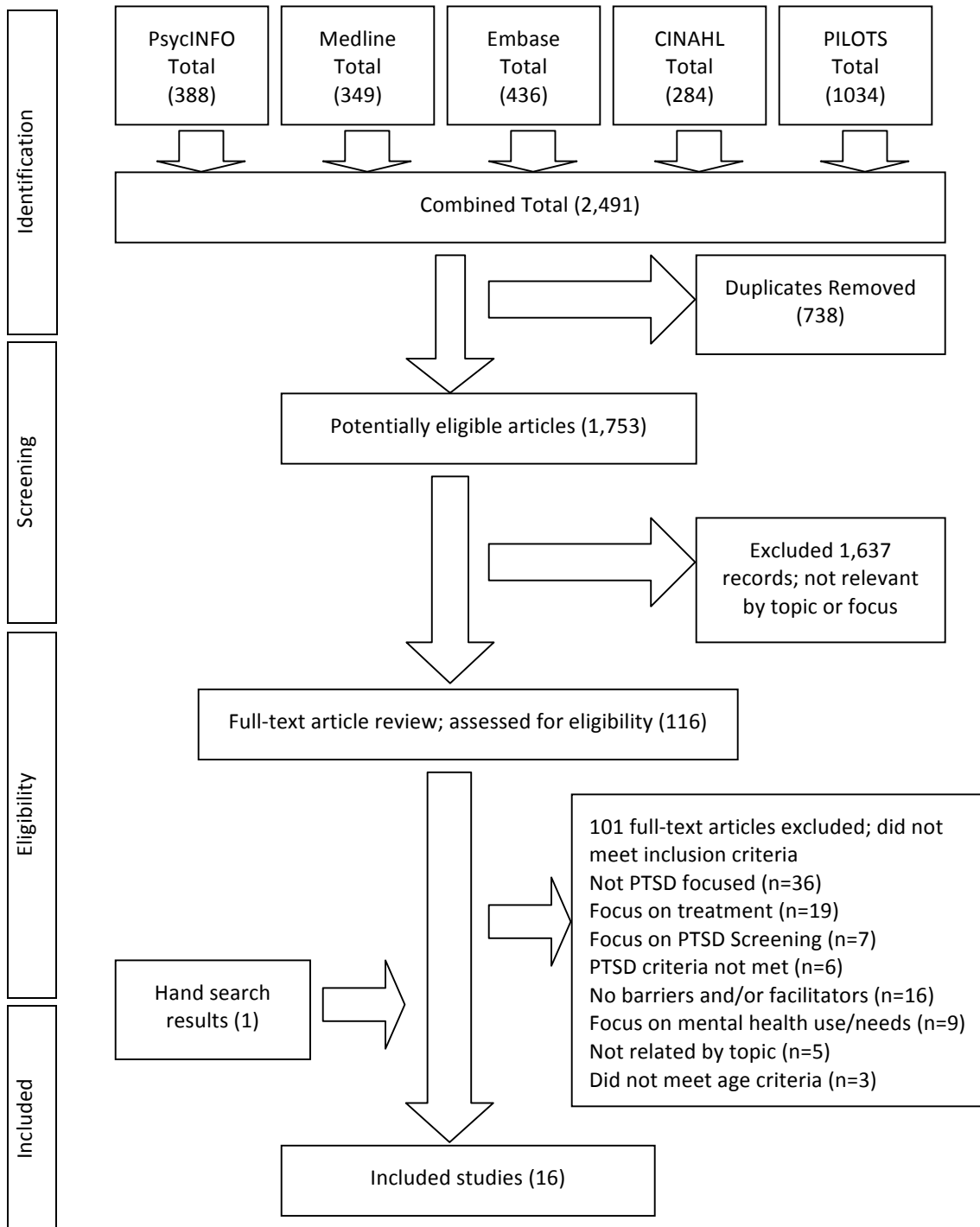
### Extent and Nature of Existing Literature

The search strategy identified 388 citations in PsycINFO, 349 in MEDLINE, 436 in Embase, 286 in CINAHL, and 1034 in PILOTS for a total of 2,491 potentially relevant articles, of which 738 were duplicates and 1,637 did not meet eligibility criteria, predominantly by topic or focus. Most of these (n=1521) were eliminated during broad (first-level) screening, by title and/or abstract. Second-level screening involved a full-text screen of 101 articles, carried out by the principal reviewer (JRS). Eleven “unsure” articles were reviewed (full-text) by the second reviewer (AFK) and, following a consensus meeting between the first and second reviewer, three remained uncertain and were full-text reviewed by a third reviewer (SY). Fifteen (15) articles were deemed eligible for inclusion. One (1) study was identified from reference and bibliography searches (hand search), which was screened for inclusion by the principal reviewer (JRS). Appendix V contains a list of included citations, including author, year, title and the journal in which the study was published.

Articles were excluded most often because they were not sufficiently focused on PTSD, results could not be separated out with respect to individuals with PTSD, or PTSD data could not be distinguished from other disorders studied (n=36). Articles were also excluded for the following reasons: focused on treatment only, i.e., forms of therapy/treatment, treatment outcomes, time to treatment, treatment cessation, or family perspectives on treatment (n=19); focused on PTSD screening, diagnosis, symptoms, prevalence, risk factors, and diagnostic tools only (n=7); no focus on barriers and/or facilitators to help-seeking (n=16); PTSD was not a criteria for study participants, or study participants did not have PTSD (n=6); focused on general mental health use/needs only (n=9); were unrelated (n=5); or did not meet age criteria (missed by

initial screen) (n=3). A Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) flow diagram (Liberati et al., 2009), or decision tree, presents a numerical analysis of the extent and nature of the included studies (Figure 2).

Figure 2: PRISMA Decision Tree



### *Origin of the evidence*

Sixteen articles, published between 2003 and 2015, were selected for critical appraisal for this systematic review. The studies were based in one of five countries, primarily within the United States (n=12), as well as one in each of Canada, the United Kingdom (UK), South Africa, and other (Western Europe and the Balkans); all but one sample population was drawn from western developed countries. The average study period was 10.93 months (n=10), ranging from one day to 27 months.

Figure 3: Date of Publication of Selected Studies

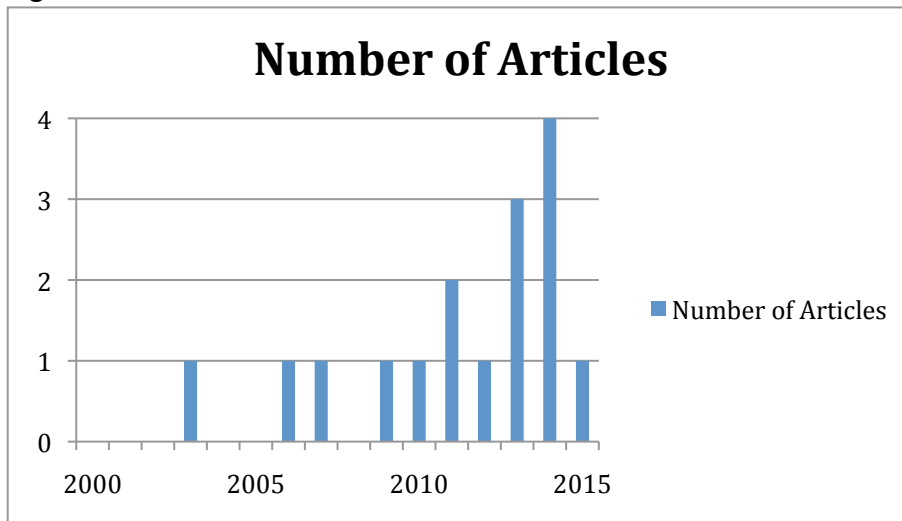
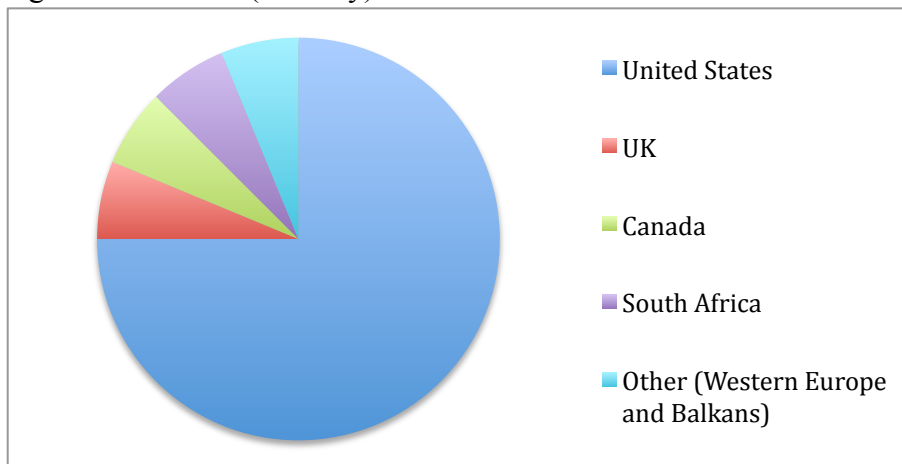


Figure 4: Location (Country) of Selected Studies



### *Study sample and participant characteristics*

#### *Sample size*

The number of participants in the selected studies varied markedly from 8 to 7,645. The qualitative studies sample sizes ranged from 8 to 212, with a mean of 88 participants (n=6), where the quantitative studies sample sizes ranged from 153 to 7,645, with a mean of 1,300 participants. The majority (n=8) of quantitative study samples were comprised of between 153 and 766 participants (mean=330; n=8), and a further two studies involved 2,713 and 7,645 participants, respectively (mean=5,179; n=2).

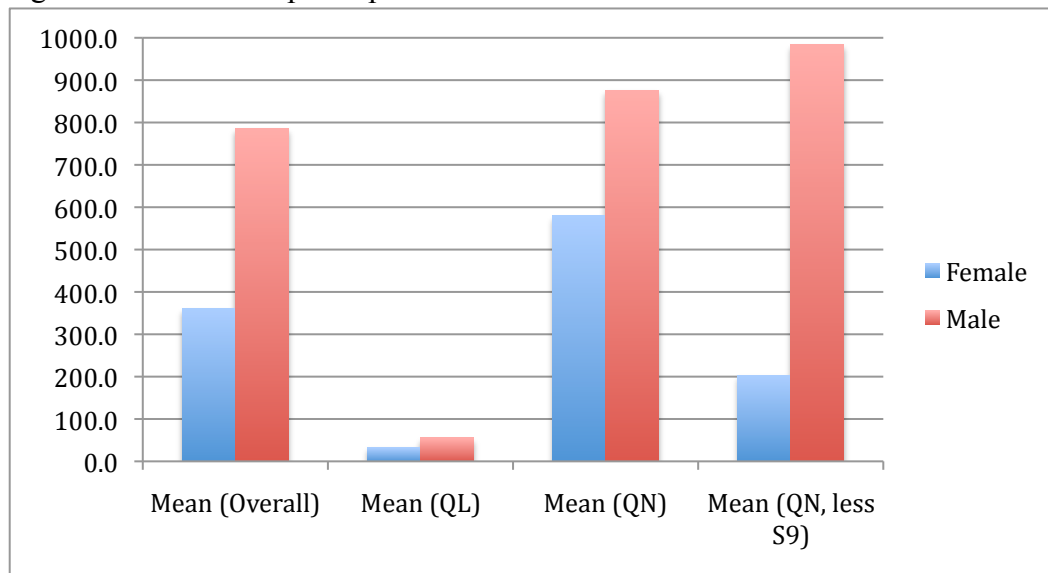
#### *Participant age*

Data reported on the age of participants varied. Eight studies provided an age range in years (18-40 to 25.6-92.5), while six others provided the mean age of participants (27.89-56.01); i.e., the age of participants ranged from 18 to 92.5 years old, with a mean of 39.35 years old.

#### *Gender distribution*

Gender distribution was analyzed overall, as well as separately for quantitative and qualitative studies. Gender distribution was also examined while omitting Lehavot et al. (2013) – a large study in which the entire study population (3,593) was female. The gender population distribution in quantitative studies (less Lehavot et al., 2013) was 17.1%; in other words, seventeen percent of study samples, overall, were comprised of women (hence, 83% of sample populations were male, overall). Within qualitative studies, female study participants made up 37% of the study sample.

Figure 5: Gender Sample Population Distribution



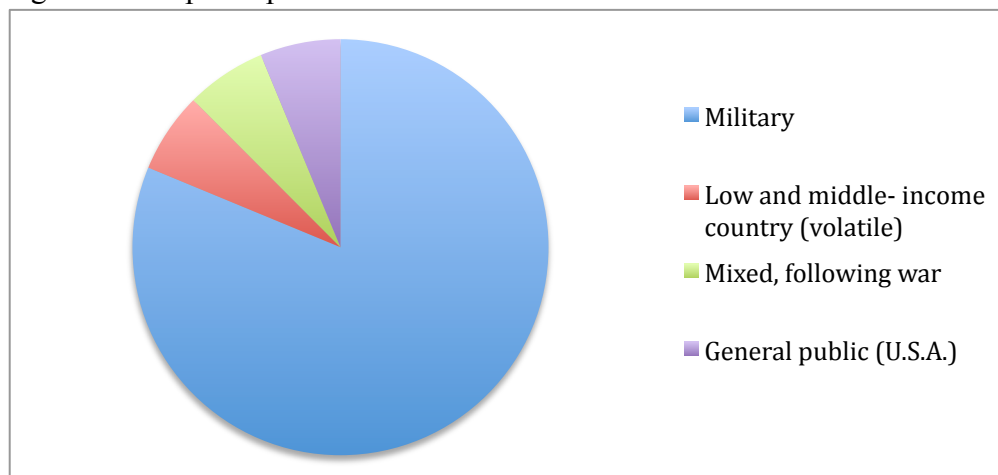
Mean (QL) = Mean gender sample population distribution within all qualitative (QL) studies

Mean (QN) = Mean gender sample population distribution within all quantitative (QN) studies

### *Sample population*

The sample populations were predominantly military samples (n=13), while participants from the remaining three (3) articles were comprised of a civilian population following war (refugees (72.6%), war veterans (10.4%), veterans and refugees (10%), and civilians (7.5%)); the general public (a one-day national screening day in the United States); as well as a sample from a low- to middle- income (developing) country (volatile environment).

Figure 6: Sample Population



Race was reported in thirteen of the studies, defined under varied (15) descriptors. The descriptor that was constant and measured across studies (n=16) was the categorization of ‘white’, in which grouping approximately 75% of the mean overall population was concentrated. Culture was not a focus within any of the selected articles; therefore, no measurement across articles could be gathered.

### ***Study characteristics***

Six studies were qualitative and ten studies were quantitative in nature. The average overall sample size was 1,438 (n=16), where the average amongst the qualitative studies was 88 (n=6) and 1,581 (n=10) for quantitative studies. Data collection methods varied across studies and are summarized in Table 3. Study characteristics are summarized in Table 4.

Table 3: Data Collection Methods of the Included Studies

Data Collection Method	Study Number	# of Studies
Interviews	1,2,3,4	4
Questionnaires/Surveys	5, 6,11,13,14,15,16	7
Administrative/Health Database	7, 9, 12	3
Telephone Interviews	8	1
Focus Groups	10	1
		16

### ***PTSD diagnostic tools***

In all studies, diagnostic tools were based on the Diagnostic and Statistical Manual of Mental Disorders-Fourth Edition (DSM-IV). Only one study employed what is considered the “gold standard” for making “a categorical PTSD diagnosis as well as to provide a measure of PTSD symptom severity” (International Society for Traumatic Stress Studies [ISTSS], n.d.), the Clinician Administered PTSD Scale (CAPS). Other studies applied the PTSD Checklist-Military version (PCL-M) (n=5), the PTSD Checklist-Civilian version (PCL-C)(n=1), the Mini International Neuropsychiatric Interview (MINI)(n=2), a chart diagnosis (n=1), a short screening scale adapted to the study (n=1), and diagnosis through a benefits claim (n=1).

Table 4: Study Characteristics

Primary Author (Date)	Location (Country) of Study	Study Period #mo. (yr-yr)	Sample Size (n)	Sample Population	Study Type	Data Collection	Study Objective To examine:
Murphy, Dominic (2014)	England	3 (2012)	8	UK military personnel	QL	Semi-structured interviews	The factors that facilitate UK military personnel with PTSD to engage in help-seeking behaviours.
Jankovic, Jelena (2011)	England, Germany, Croatia & Serbia	-	212	Mixed, following war	QL	Interviews (Open questions)	Why people suffering from PTSD following war do not receive treatment.
Sayer, Nina (2009)	United States	18 (2005-2007)	44	Military	QL	In-depth interviews	The utility of a general framework for identification of specific determinants of treatment initiation among treatment-seeking and non-treatment-seeking veterans with PTSD.
Topper, Kegan (2015)	South Africa	4 (2012)	106	PTSD in low/middle-income country	QL	Face-to-face interviews	Barriers to care and help-seeking behavior among people with PTSD in a low- (to middle-) income country.
Blais, Rebecca (2014)	United States	-	153	Military	QN	Study questionnaires	PTSD and anticipated enacted stigma (AES) as correlates of the likelihood of seeking support from family and friends.
Blais, Rebecca (2014)	United States	-	189	Military	QN	Surveys/questionnaires	PTSD cluster severities of avoidance, re-experiencing, dysphoria, and hyperarousal as predictors of intention to seek mental health care and prospective treatment utilization.
Spoont, Michele (2014)	United States	13 (2008-2009)	7,645	Military	QN	National Patient Care database (NPCD), National Pharmacy Extract database	Social and attitudinal factors influencing treatment initiation, especially the affects of encouragement to seek mental health treatment by significant people in veterans' social networks on the odds of treatment initiation.
Stecker, Tracy (2013)	United States	27 (2009-2012)	143	(Combat) Military	QL	Telephone interviews	Barriers (beliefs associated with not seeking treatment) associated with the decision not to seek treatment for symptoms of combat-related PTSD.

Primary Author (Date)	Location (Country) of Study	Study Period #mo. (yr-yr)	Sample Size (n)	Sample Population	Study Type	Data Collection	Study Objective To examine:
Lehavot, Keren (2013)	United States	2008-2009	766	U.S. women veterans	QN	Computer-assisted telephone interviews	Barriers to care among a nationally representative sample of women veterans by self-reported PTSD and depressive symptoms.
Mittal, Dinesh (2013)	United States	-	16	(Combat) Military	QL	Focus groups	Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) veterans' perceptions of public stigma.
Interian, Alejandro (2012)	United States	1 (2009)	157	Military	QN	Anonymous and self-administered surveys	Readjustment stressors (marital, family, and employment) and their relationship to early mental health treatment seeking among returning National Guard soldiers with PTSD.
Sayer, Nina (2007)	United States	15 (2001-2003)	154	Military (Veterans)	QN	VA administrative databases used to supplement self-report data	Predisposing, enabling, and need factors that predicted ongoing treatment for a mental health concern among veterans filing disability claims for PTSD.
Deniz Fikretoglu (2006)	Canada	8 (2002-2002) (Original Study)	509	Canadian military (veterans)	QN	Canadian Community Health Survey–Canadian Forces Supplement (CCHS-CF)	Predictors of PTSD-specific treatment seeking in a large, active, military sample within the behavioral model of health service use.
Meis, Laura (2010)	United States	-	223	OIF/OEF veterans	QN	Self-report surveys (longitudinal sample)	How PTSD symptoms and relationship distress uniquely and jointly predict utilization of a range of mental health services.
Koenen, Karestan C. (2003)	United States	One (1) national screening day (1996)	2,713	Self-selected general public	QN	National survey data, questionnaires	The contribution of predisposing, enabling, perceived need, and evaluated need factors to treatment seeking and treatment readiness for individuals with PTSD.
Ouimette, Paige (2011)	United States	20 (2006-2008)	490	OEF/OIF military	QN	National sample survey	Institutional and stigma-related barriers to care among a large, diverse national sample of VA outpatients with PTSD.

### Quality of Evidence

Each of the selected articles was assessed with respect to quality using a quality assessment tool according to study type. Qualitative studies were assessed utilizing a JBI QARI Critical Appraisal Checklist for Interpretive and Critical Research; quantitative studies were assessed through the completion of the EBLIP critical appraisal tool.

Overall validity scores ranged from 67-100% for qualitative studies (scored consistently out of 9) and 36-55% for quantitative studies (scored on a denominator ranging from 21 to 25 depending on the number of assessment questions applicable to each study). A summary of overall validity scores is presented in Table 5.

Table 5: Quality Assessment Scores of Selected Studies

Study #	Study Type	Tool Utilized	Score	Overall Validity Calculation (%)
1	Qualitative	JBI	8/9	89
2	Qualitative	JBI	7/9	78
3	Qualitative	JBI	9/9	100
4	Qualitative	JBI	6/9	67
5	Quantitative	EBLIP	9/25	36
6	Quantitative	EBLIP	9/21	43
7	Quantitative	EBLIP	11/22	50
8	Qualitative	JBI	6/9	67
9	Quantitative	EBLIP	11/22	50
10	Qualitative	JBI	8/9	89
11	Quantitative	EBLIP	11/22	50
12	Quantitative	EBLIP	10/22	45
13	Quantitative	EBLIP	12/22	55
14	Quantitative	EBLIP	12/23	52
15	Quantitative	EBLIP	11/23	48
16	Quantitative	EBLIP	11/21	52

### Conceptual and Operational Definitions of Help-Seeking

A conceptual definition was not explicitly offered for help-seeking with respect to individuals with PTSD within the selected articles. Only one study specified “help-seeking behaviour as equal to seeking help from health care professionals” (Topper, Van rooyen,

Grobler, Van rooyen, & Andersson, 2015). Conceptual definitions were enveloped in terms utilized to describe the focus of studies, or what studies aimed to measure, making them more operational in nature. These varied across studies and included “engaging in help-seeking behaviours” (Murphy, Hunt, Luzon, & Greenberg, 2013), “treatment initiation” (Sayer et al., 2009; Spont et al., 2014), “care and help-seeking behaviour” (Topper et al., 2015), “seeking support” (Blais et al., 2014a), “intention to seek mental health care” or “prospective treatment utilization” (Blais et al., 2014b), “seek treatment” (Stecker et al., 2013), “treatment-seeking” (Mittal et al., 2013; Fikretoglu et al., 2006), “(early) mental health treatment seeking” (Interian, Kline, Callahan, & Losonczy, 2012; Ouimette et al., 2011; Koenen, Goodwin, Struening, Hellman, & Guardino, 2003), “(current) mental health service use” (Sayer et al., 2007), “utilization of mental health services” (Meis, Barry, Kehle, Erbes, & Polusny, 2010), and “treatment readiness” (Koenen et al., 2003).

Table 6 summarizes operational descriptions used to define what help-seeking meant for each study in terms of meeting its objective(s) and/or to derive measurable study data. Also drawn from each study and included within Table 6 for comparison was whether study participants received treatment and/or are currently receiving treatment.

#### **Measurement instruments for help-seeking for persons with PTSD**

Only one article (Blais et al., 2014a) applied a measurement tool, though it was not focused specifically on help-seeking; it was utilized to assess the likelihood of seeking support for psychological distress or difficult negative emotions from romantic partners, family, friends, and other relatives, utilizing four items from the General Help-Seeking Questionnaire (GHSQ) (Wilson, Deans, Ciarrochi, & Rickwood, 2005) and measured on a 7-point Likert scale (p. 117).

Table 6: Measurements of Help-Seeking in Selected Articles

Study No.	Received Treatment		Receiving Treatment		Measure of Help-Seeking
	Yes	No	Yes	No	
1			Yes		Multiple terminology: accessing mental health services; accessing care; engaging in help-seeking behaviors; accessing mental health services
2		No		No	Have never received psychiatric treatment
3			Yes	No	Current mental health treatment status (yes/no)
4	Yes	No	NS	NS	Help-seeking behavior=seeking help from health care professionals.
5	NS	NS	NS	NS	Measured "likelihood of seeking support from family and friends."
6	NS	NS	NS	NS	"Intention to seek mental health care was assessed via a single item that asked participants why they were seeking care during the intake visit. "Mental health concerns" or "both medical and mental health concerns" were collapsed and measured against "only medical care."
7	Yes	No	Yes	No	"Three dichotomous outcome measures of treatment initiation in the six months after receipt of a PTSD diagnosis: 1) receipt of any guideline-recommended antidepressant, 2) receipt of any psychotherapy, and 3) receipt of either antidepressants or psychotherapy."
8	No	No	No	No	No treatment initiated; no details given as to treatment/help sought. Reference to "PTSD treatment" but did not specify what this was.
9			Unclear		"VA health care"/"medical care"; VA care, non-VA care, or both.
10			Yes		Treatment-seeking OEF/OIF veterans receiving mental health care through a specified system/centre.
11		Measured by two binary questions			Study defined any mental health visit postdeployment as either having a mental health visit postdeployment or receiving a prescription for a psychotropic postdeployment.
12		Users and non-users			Participants were asked to indicate whether they were currently in treatment for an emotional or psychiatric problem. The definition of treatment was not restricted to receipt of specialty mental health services.
13		Binary question (yes/no)			Respondents were asked the following question about treatment: "Did you ever in your life see, or talk on the telephone, to a medical doctor or other professional about your reactions related to traumatic events?" Responses (yes or no) to this question were used to index lifetime treatment seeking for PTSD.
14		Binary question (yes/no)			Participants were asked (at time 2): "In the past year ... have you received any of the following mental health services?" Items included: 1) "medications, such as antidepressants," 2) "one to one counseling," 3) "group counseling," 4) "marriage or family counseling," and 5) "chemical dependency treatment." PTSD specialty treatment was not specified.
15		Ever/ Never			Self-reported treatment history. Mental health treatment seeking was measured by asking participants one question with respect to ever versus never having been in mental health treatment (and for which disorders the treatment was sought). Readiness for treatment was measured by participant's response to the question: "How ready are you to get professional help?" on a 5-point Likert scale.
16			No		"VA mental health treatment"- Never in the previous 2 years.

NS=Not specified

**Conceptual frameworks of help-seeking for persons with PTSD**

Eight of the selected articles (two (2) qualitative and six (6) quantitative) applied

Andersen's behavioural model of health service utilization (1973, 1995), though their application varied greatly from simply guiding selection of measured data, such as predictors, need and enabling factors (Jankovic et al., 2011; Blais et al., 2014a; Blais et al., 2014b; Sayer et al., 2007; Fikretoglu et al., 2006; Meis et al., 2010; Koenen et al., 2003), to adapting the model to create one best suited to treatment initiation for individuals with PTSD (Sayer et al., 2009).

**Barriers and Facilitators to Help-Seeking for Persons with PTSD**

One article of the sixteen selected studies explicitly identified both barriers and facilitators to help-seeking, or "treatment initiation" (Sayer et al., 2009), while the others identified barriers (n=7), or facilitators (n=2), or "predictors" (n=5) or "motivators" (n=1). Appendix VI summarizes barriers, facilitators, predictors and motivators derived from each of the selected articles by study/author.

For the purpose of analysis within this systematic review, principal barriers, facilitators, predictors, motivators, and enabling factors from the selected studies have been categorized thematically, guided largely by overarching themes presented by Sayer and colleagues (2009) in studying the determinants of PTSD treatment initiation in veterans, and organized into a synoptic master barrier and facilitator table (Table 7). Eight principal barrier themes and seven principal facilitator themes were identified, under which supportive subthemes were categorized. Major barrier themes include: avoidance of trauma-related feelings and memories (Sayer et al., 2009)/emotional readiness for treatment (Stecker et al., 2013); treatment-discouraging beliefs; invalidating post-trauma socio-cultural environment, values and priorities that conflict with treatment-seeking; health care system concerns (Sayer et al., 2009)/concerns about treatment

(Stecker et al., 2013); knowledge barriers; access barriers (Sayer et al., 2009), and PTSD symptoms and/or symptom severity (Blais et al., 2014a; Blais et al., 2014b).

Facilitators, also termed predictors, motivators, enablers, and ‘other factors’ by the selected studies, fell under seven major facilitator themes, including: recognition and acceptance of PTSD and availability of help; beliefs that encourage treatment-seeking; social network facilitation and encouragement; system facilitation (Sayer et al., 2009); enabling factors (Fikretoglu et al., 2006; Koenen et al., 2003); trauma-related factors (Fikretoglu et al., 2006); and PTSD symptoms and/or symptom severity (Murphy et al., 2013; Blais et al., 2014b, Fikretoglu et al., 2006; Meis et al., 2010).

Additional themes identified by the included articles were gathered and organized within related major themes as subthemes. They are presented together in the following section, accompanied by narrative quotes, where possible, to reflect the outcomes of the studies, as well as the experiences and feelings of study participants when expressed therein.

### **Barriers**

*Avoidance of trauma-related feelings and memories (Sayer et al., 2009)/Emotional readiness for treatment (Stecker et al., (2013)).* Persistent avoidance of trauma-related thoughts, feelings, or memories, as well as reminders that arouse or “trigger” distressing memories is a characteristic symptom of PTSD, and is recognized by Sayer et al. (2009) and Stecker et al. (2013) as a barrier to treatment initiation or seeking. Participants assumed that treatment would involve discussion about their traumatic experiences and “described fear that such discussion would trigger intense negative feelings and that these feelings might interfere with functioning” (Sayer et al., 2009, p. 244). “I don’t want to dredge up the past anymore. I’m trying to put that to rest” (p. 244).

Over one-third of participants in the Stecker et al. study reported that they were not emotionally ready for treatment, even though they were suffering from the symptoms of PTSD (p. 281). One-quarter of participants felt that it would be too difficult to talk to someone about their PTSD symptoms – they didn't want to be “emotionally triggered” or “relive the trauma”, or believed that they would “go crazy” if they talked about it (Stecker, 2013, p. 282).

***PTSD Symptoms, Symptom Severity.*** Blais et al. (2014b) found that PTSD dysphoria symptoms, which include emotional numbing and interpersonal detachment, were negatively associated with the likelihood of seeking support, where higher avoidance symptom severity predicted lower utilization.

***Treatment-Discouraging Beliefs (Sayer et al., 2009).*** Study participants provided descriptions of fears and beliefs about general mental health treatment, as well as PTSD treatment that led them to believe that providers would not understand their problems or believe their trauma narratives (Sayer et al., 2009, p. 245).

For me, it's really difficult to get to some of the issues that I feel are personal. I never talked about it much with my family, anyway, but then to talk to a total stranger was even harder... I think it was the (fear) that if I tell a stranger, how are they going to react? Are they going to believe everything you say? – female, in treatment (p. 245)

These beliefs are echoed within Stecker et al.'s study (2013), where participants expressed beliefs that providers would not understand their situation; for example, only those who had also been deployed to war would understand (p. 281), as well by Mittal et al. (2013), where “participants talked about the importance that other people understood the mental health difficulties they were experiencing. Participants spoke about how this had helped them not feel alone as they could share their experiences with someone who understood them” (p. 6).

With respect to treatment itself, Sayer et al. (2009) identified themes, such as: treatment is not helpful; treatment involves loss of control/autonomy; and treatment is for those who are weak, crazy, or incompetent, or only for extreme problems (p. 244). Participants demonstrated a negative attitude towards psychiatric treatment (Jankovic et al., 2011), and towards pharmacological treatments – believing a provider would prescribe a medication without listening to the patient’s story was a primary barrier to seeking help (Stecker et al., 2013, p. 281).

***Health care system concerns (Sayer et al., 2009)/concerns about treatment (Stecker et al., 2013).*** Concerns about treatment and the health care system came largely from a military perspective and included: the VA and VA providers cannot be trusted; the VA has limited resources; the VA is for war-fighters from prior wars; VA is for veterans with severe and visible disabilities; and providers outside the VA do not have expertise in military-related PTSD (Sayer et al., 2009, p. 244). Other articles highlight varied, but important health care system and/or treatment concerns, such as: fears around confidentiality (Topper et al., 2015); wanting individual treatment versus group treatment (Stecker et al., 2013); and concern about treatment requiring prescription of a medication (2013). Younger age and female sex were associated with greater perceptions of not fitting into the VA (Ouimette et al., 2011).

***Invalidating post-trauma socio-cultural environment (Sayer et al., 2009).*** Where Sayer et al. (2009) identify themes of societal rejection, negative homecoming experiences, social network discouragement of help-seeking, and withdrawal from social network or society (p. 244), Koenan et al. (2013) similarly find participants “afraid of what others might think” (p. 12).

Stigma-related beliefs included both public and self-stigma. Mittal et al. (2013) reported that participants were “concerned that the public would consider them responsible for their own illness because they had volunteered for military duty” (p. 91), while other studies reported

participant concerns that treatment would result in consequences (Topper et al., 2015; Stecker et al., 2013), such as the loss of their security clearance, loss of future deployments, or adverse actions from commanding officers and could limit future employment prospects (Stecker et al., 2013, p. 282). Stigma, including anticipated enacted stigma (AES) from family and friends (Blais et al., 2014a) and "perceived stigmatizing attitudes on the part of the public, their families, and to some extent themselves" (Mittal et al., 2013) impeded help-seeking, as well as the stigma associated with having to take psychiatric medication (2013).

Study participants recognized that stigmatizing labels exist, such as "crazy", "violent" or "dangerous" and avoided treatment to avoid the label (p. 88). Receiving, or the fear of receiving (Stecker et al., 2013), a label of mental illness was in itself a barrier (Mittal et al., 2013). Participants in Mittal et al. (2013) linked the perception or stereotype of "crazy" to a diminished public appreciation for veterans (p. 88). Murphy et al. recognized the theme of overcoming internal stigma: "participants spoke about feeling concerned that they would experience stigma, in particular, being perceived as "weak" by their peers. However, it appeared that for the majority their fears were not realized, but rather it was internal stigma they were experiencing" (2014, p. 4).

*Values and priorities that conflict with treatment-seeking (Sayer et al., 2009).* The theme of pride in self-reliance (Sayer et al., 2009) is reflected in multiple articles – that participants didn't need treatment (Stecker et al., 2013) or help (Jankovic et al., 2011), they could "handle it on their own" (Koenen et al., 2003), or that they had "personal ways of coping" (Jankovic et al., 2011). Jankovic et al. (2011) found that participants demonstrated "comparative insignificance" (p. 103), believing that others (family members or members of the community) needed more help than they did, which was a barrier to their own treatment seeking. "It was not necessary, at least we are all alive, other people had worse losses" – 42-year-old female civilian, Croatia (p. 103)

Family issues (Stecker et al., 2013) or focusing on job and family functioning (Sayer et al., 2009) also took precedence over treatment seeking.

***Knowledge barriers (Sayer et al., 2009).*** Lack of knowledge and/or understanding of PTSD or services (Jankovic et al., 2011; Sayer et al., 2009), the nature and treatment of mental illness (Topper et al., 2015), that sexual trauma can cause PTSD (Sayer et al., 2009), or where to get help (2009) were reported knowledge barriers to care.

***Access barriers (Sayer et al., 2009).*** Access barriers varied and were many. Cost, expense, and affordability of treatment as a barrier was captured by a number of authors (Koenen et al., 2003; Sayer et al., 2009; Topper et al., 2015; Lehavot, Der-Martirosian, Simpson, & Washington, 2013). Lehavot et al. (2013) found that affordability impacted women veterans with PTSD and depressive symptoms due to their disproportionate lack of health insurance (p. 208). Health insurance, or lack thereof, particularly outside the VA (Topper et al., 2015) was an issue. The VA enrollment process itself presented barriers to care (Sayer et al., 2009), such as a perceived lack of eligibility for VA care without cost (2009). Low income (Topper et al., 2015), financial problems (Jankovic et al., 2011), time constraints – such as being unable to take time off work (Lehavot et al., 2013) or not having time for treatment (Stecker et al., 2013), being too far away from treatment (2013)/distance (Sayer et al., 2009), and transportation issues (2009; Stecker et al., 2013), as well as language barriers (Jankovic et al., 2011), wait times at clinics (Topper et al., 2015), and lack of referral by General Practitioner (GP) or family doctor (Jankovic et al., 2011) were also reported to impede utilization.

**Facilitators**

***Recognition and acceptance of PTSD and the availability of help (NS, 2009).*** In order to seek help, participants had to first recognize something was wrong. Finding a psychological explanation for their symptoms and having an internal locus of control helped them to initiate treatment seeking (Mittal et al., 2013). Koenen et al. (2003) recognized the “perceived need factor of interference of daily life by symptoms” (p. 10) as an enabling need factor to help-seeking.

***Trauma-related factors.*** Index traumatic event type and cumulative lifetime trauma exposure were both significantly and positively associated with treatment seeking (Fikretoglu et al., 2006).

***PTSD symptoms, symptom severity.*** Higher levels of PTSD symptomatology were associated with greater odds of treatment use (Blais et al., 2014b; Meis et al., 2010), where participants reported having to reach a crisis point before accepting the need for help (Mittal et al., 2013). The “perceived need factor of PTSD symptom interference was significantly associated with treatment seeking” (Fikretoglu et al., 2006, p. 854). Dysphoria severity positively correlated with intention to seek mental health care (Blais et al., 2014b) and higher re-experiencing symptom severity predicted higher utilization (2014b).

***Treatment-encouraging beliefs (Sayer et al., 2009).*** A number of beliefs that encouraged treatment seeking were identified by participants in Sayer et al’s 2009 study, such as: believing that getting help is socially acceptable, that treatment itself is helpful, that other people’s negative views do not matter and that the system and those encouraging help-seeking are trustworthy (p. 247). VA service users who had positive treatment beliefs (Spoont et al., 2014) and perceived a need for treatment were much more likely than those who did not to get mental health care (2014). Overcoming feelings of shame (internal stigma) (Mittal et al., 2013), or

“shame at being emotionally troubled” (Topper et al., 2015) helped to facilitate treatment-seeking.

***Social network facilitation and encouragement*** from spouses or partners (Sayer et al., 2009), or strong social support from family members, other veterans, non-veteran peers, employers (Mittal et al., 2013) had a positive effect on treatment initiation. Social encouragement to get mental health care increased the odds of treatment receipt, even after the analysis controlled for beliefs, particularly if encouragement was received both from family members and from friends or other veterans (Spoont et al., 2014); to some, the most valued support came from peers (Mittal et al., 2013). Findings from Meis et al. (2010) “highlight the power of supportive intimate relationships in promoting treatment utilization for those with symptoms of PTSD” (p. 564).

Readjustment stressors, such as marital and/or family and/or employment issues (lost job or business) act as "motivators" to treatment seeking (Interian et al., 2012). Meis et al. (2010) refer to this motivator as relationship distress (p. 561).

***System facilitation (Sayer et al., 2009)***. Procedures to reduce stigma, improve access, and promote PTSD recognition (2009) were recognized as facilitators to mental health treatment use, especially in terms of particular individuals involved in the help-seeking process promoting help-seeking, such as Veterans Service Officers (VSOs), primary care providers, and disability examiners (p. 247). Dependence on public insurance was also associated with mental health treatment use (Sayer et al., 2007, p. 21).

***Other enabling factors***. Income (Fikretoglu et al., 2006), employment status, specifically, being unemployed or disabled (Koenen et al., 2003) were found to be enabling factors for treatment seeking.

Table 7 summarizes the principal and sub-ordinate barrier and facilitator themes defined within the included articles, and juxtaposes them for further consideration and discussion.

Table 7: Barriers and Facilitators of Selected Studies

Barriers	Facilitators
<b>Avoidance of Trauma-Related Feelings and Memories (Sayer et al., 2009)/Emotional Readiness for Treatment (Stecker et al., 2013)</b>	<b>Recognition and Acceptance of PTSD and Availability of Help (Sayer et al., 2009)</b>
<ul style="list-style-type: none"> <li>➤ “I don’t have an anxiety disorder” and “I can handle it on my own.” (Koenen et al., 2003)</li> <li>➤ Too difficult to talk to someone about their symptoms of PTSD. Participants didn’t want to be “emotionally triggered” or “relieve the trauma”, or they would “go crazy” if they talked about it (Stecker et al., 2013)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Recognizing something is wrong (Murphy et al., 2014)</li> <li>➤ Finding a psychological explanation for their symptoms (Murphy et al., 2014)</li> <li>➤ The importance of having an internal locus of control (Murphy et al., 2014)</li> <li>➤ Interference of daily life by symptoms (Koenen et al., 2003)</li> </ul>
<b>Treatment-Discouraging Beliefs (Sayer et al., 2009)</b>	<b>Treatment-Encouraging Beliefs (Sayer et al., 2009)</b>
<ul style="list-style-type: none"> <li>➤ Providers won’t understand or believe trauma (Sayer et al., 2009)</li> <li>➤ Feeling misunderstood (Mittal et al., 2013)</li> <li>➤ Treatment is not helpful (Sayer et al., 2009)</li> <li>➤ Negative attitude towards psychiatric treatment (Jankovic et al., 2011)</li> <li>➤ Treatment involves loss of control/autonomy (Sayer et al., 2009)</li> <li>➤ Treatment is for those who are weak, crazy, or incompetent (Sayer et al., 2009)</li> <li>➤ Treatment is only for extreme problems (Sayer et al., 2009)</li> <li>➤ Believing a provider would prescribe a medication without listening to the patient’s story was a primary barrier to seeking help (Stecker et al., 2013)</li> <li>➤ Belief that providers would not understand their situation (only those who had also been deployed to war would understand) (Stecker et al., 2013)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Getting help is socially acceptable (Sayer et al., 2009)</li> <li>➤ Other people’s negative views do not matter (Sayer et al., 2009)</li> <li>➤ Treatment is helpful (Sayer et al., 2009)</li> <li>➤ The system and those encouraging help-seeking are trustworthy (Sayer et al., 2009)</li> <li>➤ Overcoming feelings of shame (internal stigma) (Murphy et al., 2014)</li> <li>➤ VA service users who perceived a need for treatment were much more likely than those who did not to get mental health care (Spoont et al., 2014)</li> <li>➤ Overcoming feelings of shame (Murphy et al., 2014)</li> <li>➤ Positive treatment beliefs (Spoont et al., 2014)</li> </ul>
<b>Invalidating Post-Trauma Socio-Cultural Environment (Sayer et al., 2009)</b>	<b>Social Network Facilitation and Encouragement (Sayer et al., 2009)</b>
<ul style="list-style-type: none"> <li>➤ Negative homecoming experiences (Sayer et al., 2009)</li> <li>➤ Withdrawal from social network or society (Sayer et al., 2009)</li> <li>➤ Social network discouragement of help-seeking (Sayer et al., 2009)</li> <li>➤ Societal rejection (NS, 2009); “Afraid of what others might think” (Koenen et al.,</li> </ul>	<ul style="list-style-type: none"> <li>➤ Readjustment stressors (marital, family, and employment) act as “motivators” to treatment seeking (Interian et al., 2012)</li> <li>➤ Having strong social support (from other family members, other veterans, non-veteran peers, and employers) (DM)</li> <li>➤ Beliefs about treatment and social network factors, such as encouragement to seek</li> </ul>

<p>2003)</p> <ul style="list-style-type: none"> <li>➤ Stigma, including anticipated enacted stigma (AES) from family and friends (Blais et al., 2014a) and "perceived stigmatizing attitudes on the part of the public, their families, and to some extent themselves" (Mittal et al., 2013)</li> <li>➤ Receiving a label of mental illness (Mittal et al., 2013)</li> <li>➤ Fear of a label (Stecker et al., 2013); Recognize stigmatizing labels, such as "violent" or "dangerous" (Mittal et al., 2013)</li> <li>➤ Linked perception or stereotype of "crazy" to diminished public appreciation for veterans (Mittal et al., 2013)</li> <li>➤ Higher anticipated enacted stigma (AES) was associated with lower likelihood of support seeking (Blais et al., 2014a)</li> </ul>	<p>treatment by others (Spoont et al., 2014) – spouses or partners, other family members, other veterans, non-veteran peers, employers (Sayer et al., 2009) – increased the odds of treatment (Spoont et al., 2014)</p> <ul style="list-style-type: none"> <li>➤ Most valued support came from peers (Mittal et al., 2013)</li> <li>➤ Relationship distress positively correlated with likelihood of seeking treatment (Meis et al., 2010)</li> <li>➤ Supportive intimate relationships promote treatment utilization (Meis et al., 2010); marital status significantly associated with treatment seeking (Fikretoglu et al., 2006)</li> <li>➤ Readjustment stressors as motivators for seeking healthcare (such as, marital problems, lost job or business) (Interian et al., 2012)</li> </ul>
<p><b>Values and Priorities That Conflict with Treatment-Seeking (Sayer et al., 2009)</b></p>	
<ul style="list-style-type: none"> <li>➤ Pride in self-reliance (Sayer et al., 2009)</li> <li>➤ Family issues (Stecker et al., 2013) and focus on job and family functioning (NS, 2009)</li> <li>➤ "Need no help" (Jankovic et al., 2011); "personal ways of coping" (Jankovic et al., 2011); "I can handle it on my own" (Koenen et al., 2003)</li> <li>➤ Comparative insignificance (Jankovic et al., 2011)</li> <li>➤ Believe they don't need treatment (Stecker et al., 2013)</li> </ul>	
<p><b>Health Care System Concerns (Sayer et al., 2009)/Concerns About Treatment (Stecker et al., 2013)</b></p>	
<ul style="list-style-type: none"> <li>➤ VA and VA providers cannot be trusted (Sayer et al., 2009)</li> <li>➤ VA has limited resources (Sayer et al., 2009)</li> <li>➤ VA is for war-fighters from prior wars (Sayer et al., 2009)</li> <li>➤ VA is for veterans with severe and visible disabilities (Sayer et al., 2009)</li> <li>➤ Providers outside the VA do not have expertise in military-related PTSD (Sayer et al., 2009)</li> <li>➤ Concern about treatment requiring prescription of a medication (Stecker et al., 2013)</li> <li>➤ Wanting individual treatment versus group</li> </ul>	<p><b>System Facilitation (Sayer et al., 2009)</b></p> <ul style="list-style-type: none"> <li>➤ Veterans Service Officers promote help-seeking (Sayer et al., 2009)</li> <li>➤ Disability examiners promote help-seeking (Sayer et al., 2009)</li> <li>➤ Primary care providers promote help-seeking (Sayer et al., 2009)</li> <li>➤ Procedures to reduce stigma, improve access, and promote PTSD recognition (Sayer et al., 2009)</li> </ul>

<p>treatment (Stecker et al., 2013)</p> <ul style="list-style-type: none"> <li>➤ Fears around confidentiality (Topper et al., 2015)</li> <li>➤ Younger age and female sex associated with greater perceptions of not fitting into the VA (Ouimette et al., 2011)</li> </ul>	
<b>Knowledge Barriers (NS, 2009)</b>	
<ul style="list-style-type: none"> <li>➤ Lack of knowledge and/or understanding of: PTSD or services (Jankovic et al., 2011; Sayer et al., 2009), the nature and treatment of mental illness (Topper et al., 2015), that sexual trauma can cause PTSD (Sayer et al., 2009), or where to get help (Sayer et al., 2009; Koenen et al., 2003)</li> </ul>	
<b>Access Barriers (Sayer et al., 2009)</b>	<b>Enabling Factors</b>
<ul style="list-style-type: none"> <li>➤ VA enrollment process (Sayer et al., 2009)</li> <li>➤ Perceived lack of eligibility for VA care without cost (NS, 2009), cost – “can’t afford treatment” (Koenen et al., 2003)</li> <li>➤ Expense of treatment (Sayer et al., 2009)/affordability (Topper et al., 2015, Lehavot et al., 2013)</li> <li>➤ Affordability disproportionately impacts women veterans with PTSD due to their disproportionate lack of health insurance (Lehavot et al., 2013)</li> <li>➤ Unable to take time off work (Lehavot et al., 2013)</li> <li>➤ Distance and transportation (Sayer et al., 2009)</li> <li>➤ Health insurance (particularly outside the VA) (Topper et al., 2015)</li> <li>➤ Logistical issues (not having time for treatment, being too far away from treatment, and family issues) (Stecker et al., 2013)</li> <li>➤ Language barriers, financial problems (Jankovic et al., 2011)</li> <li>➤ Lack of referral by General Practitioner or family doctor (Jankovic et al., 2011)</li> <li>➤ “Waiting time at clinic was too long” (Topper et al., 2015)</li> <li>➤ Low income (Topper et al., 2015)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Income (Fikretoglu et al., 2006)</li> <li>➤ Employment status, specifically, being unemployed or disabled (Koenen et al., 2003)</li> <li>➤ Dependence on public insurance was associated with mental health treatment use (Sayer et al., 2007)</li> </ul>
	<b>Trauma-Related Factors (DF)</b>
	<ul style="list-style-type: none"> <li>➤ Index traumatic event type and cumulative lifetime trauma exposure both significantly associated with treatment seeking (Fikretoglu et al., 2006)</li> </ul>
<b>PTSD Symptoms, Symptom Severity</b>	<b>PTSD Symptoms, Symptom Severity</b>
<ul style="list-style-type: none"> <li>➤ PTSD symptoms, particularly dysphoria, are negatively associated with the likelihood of</li> </ul>	<ul style="list-style-type: none"> <li>➤ Dysphoria severity positively correlated with intention to seek mental health care</li> </ul>

<p>seeking support. Dysphoria includes emotional numbing and interpersonal detachment, both of which may impede seeking support (Blais et al., 2014a)</p> <ul style="list-style-type: none"> <li>➤ Higher avoidance symptom severity predicted lower utilization (Blais et al., 2014b)</li> </ul>	<p>(Blais et al., 2014b)</p> <ul style="list-style-type: none"> <li>➤ Higher re-experiencing symptom severity predicted higher utilization (Blais et al., 2014b)</li> <li>➤ Perceived need factor of PTSD symptom interference was significantly associated with treatment seeking (Fikretoglu et al., 2006)</li> <li>➤ Higher levels of PTSD symptomatology were associated with greater odds of treatment use (Meis et al., 2010)</li> <li>➤ Having to reach a crisis point before accepting the need for help (Murphy et al., 2014)</li> </ul>
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## Discussion

### Extent and Nature of Existing Literature

The literature focused on barriers and facilitators to help-seeking for individuals with PTSD is minimal. Though tempered by such few numbers, the distribution of study publication dates demonstrates a positive trend in research in this area of focus over the last five years. The origin of publications is primarily from western, developed countries, dominated by the United States, and is focused almost entirely on the military as a risk group, despite the existence of a number of other populations at risk of developing PTSD. In her 1996 book – still considered a “best overall reference” for PTSD therapists and patients – entitled “I Can’t Get Over It: A Handbook for Trauma Survivors”, Matsakis, a specialist in PTSD, warned that “with the escalation of crime in our country (U.S.A.) and the continued prevalence of domestic violence, war, natural disasters, and vehicular, technological, and occupational accidents, the number of people suffering from PTSD can only be expected to increase” (p. 14) – yet these groups, twenty years into the future, remain absent in the literature in terms of seeking help for PTSD. Survivors of domestic or intimate partner violence, rape or sexual assault or abuse, other random acts of violence, car accidents or fires, natural disasters, catastrophic events such as a plane crash or

terrorist act, disasters caused by human error, such as industrial accidents, as well as professionals who respond to victims in trauma situations (Sidran Institute, 2008, par. 16) are not represented. Add to these the growing numbers of refugees, as well as combatants and civilians of civil wars, unrest and violence around the world. Their absence in the literature represents a sizeable gap in our understanding and consequent care of these at-risk populations.

Another striking omission in measurement was that of culture, despite multiple findings that underscored the significant role played by social supports and networks as both barriers and facilitators to help-seeking for people with PTSD. Instead, race was measured across studies (n=16), even though research has found race to be non-significant in terms of a predictor of help-seeking for people with PTSD (Sayer, 2007, p. 21). The measurement of race was limited in terms of categorizations, yet reflective of the predominantly 'white' overall sample population.

The relatively low ratio of female to male with respect to sample population distribution is not surprising given the concentration of selected studies on the military population. The mean female sample population size in relation to the male sample population is reflective of their comparative population ratio within the military. In 2011, approximately 14.5% of the U.S. active-duty force (Army, Navy, Air Force and Marine Corps together) of nearly 1.4 million was made up of women (Cable News Network [CNN], n.d.).

This is not to say that women are adequately represented within the selected articles, or in existing research. On the contrary, there is a significant gap in existing literature and research regarding the considerable and distinct influence of barriers and facilitators to help-seeking on women with PTSD, as well as the examination of risk groups in which women are disproportionately present in society (and are not present in the literature). To illustrate, women reported all five barriers within Jankovic et al.'s (2011) study disproportionately to men – “comparative insignificance” (83% to 25%), “external barriers” (60% to 9%), “need no help”

(58% to 38%), “personal ways of coping” (54% to 35%) and “negative attitude toward treatment” (34% to 25%) (p. 104). To demonstrate the second point, PTSD is said to develop in 35 to 92% of those who have been raped (Matsakis, 1996), but even though over one in four women will experience sexual assault in their lifetime, and according to the Justice Institute of British Columbia one out of every 17 women is raped, only 6% of sexual assaults are reported to police (Johnson & Sacco, 1995). Staggeringly high numbers of trauma accompanied by dismally low numbers of women seeking support – and no research attempting to find out why or why not, or how this might be remedied.

### ***Implications for research***

Future research must diversify in terms of populations studied and endeavor to examine samples of varying race, ethnicities, countries of origin (developed versus developing), and risk group. Recognizing that women are disproportionately at risk for developing PTSD, as well as how they are differentially affected by barriers to help-seeking, additional gender research in this area is warranted.

### **Quality of Existing Literature**

Critical appraisal checklists were applied to score the overall validity of the selected studies, and assessed principal elements such as study population, methodology, data collection, study design, and analysis or interpretation of data. The scores recorded by the two appraisal tools highlighted strengths and limitations of the studies overall (where study population and data collection reflected particularly low ‘section validity’ scores), as well as a marked distinction in overall validity scores between qualitative and quantitative studies. While the two assessments cannot be compared categorically, as the checklists differ in number and nature of

questions posed, it effectively exposed differential strengths and weaknesses among the study types.

With respect to study populations overall, sample participants were often limited to convenience samples of narrowly defined groups. For example, Mittal et al. (2013) focused on Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF) veterans who had combat-related PTSD and were receiving treatment within Veterans Affairs (VA). They did not include those who were seeking treatment outside the VA or those who were seeking no treatment at all (p. 91). Moreover, participants in a number of the studies were mostly males, predominantly white, military samples (Blais et al., 2014a, p. 118; Blais et al., 2014b; Mittal et al., 2013; Sayer, Clothier, Spont, & Nelson, 2007); therefore, the findings may not be generalizable to female veterans, veterans from other operations, or populations with PTSD outside the military.

Data collection demonstrated the lowest scores in terms of section validity, especially within quantitative studies. Data collection instruments – for PTSD, barriers and/or facilitators, and/or help-seeking – were not validated and a number of the studies did not measure the outcome “at a time appropriate for capturing the intervention’s effect” (Glynn, 2006, p. 1).

Measurements of PTSD varied within and across studies, which applied differing PTSD cut-off scores for sample participants; utilized self-reported data with respect to PTSD symptoms, which can both minimize or exaggerate symptoms (Blais, Hoerster, Malte, Hunt, & Jakupcak, 2014b, p. 173); did not include participants with diagnostic scores high enough to meet diagnostic criteria for PTSD (i.e., participants may not have been experiencing clinical levels of PTSD (Blais, Renshaw, & Jakupcak, 2014a, p. 118)); did not explicitly define participants’ PTSD status; or utilized measures adapted to meet study needs. For example, Fikretoglu and colleagues (2006) adapted the PTSD section of assessment specifically for the Canadian Forces. Validation of these adapted PTSD measures was often unclear, and the

variation within and across studies made hypotheses and findings generated within somewhat less credible and/or comparable across methods and/or studies.

In terms of measuring barriers and facilitators to help-seeking, the qualitative studies within this systematic review generated a comparably more ‘full variation’ of findings, where qualitative methodologies allowed “an opportunity for participants (veterans) with PTSD symptoms to discuss concerns about treatment in their own words, with respect for their own knowledge in understanding what prevents them from seeking treatment” (Stecker, Shiner, Watts, Jones, & Conner, 2013, p. 282), and thereby reflected participants’ actual experiences and perceptions in contrast to the selection, collection and manipulation of secondary data exercised within quantitative studies that often drew from pre-defined lists of barriers and facilitators, from which study participants chose their responses. To illustrate, Ouimette et al. (2011) created twenty-five items “to assess perceived access barriers to care using selected items from the Barriers to Help Seeking Scale (Mansfield, Addis, & Courtenay, 2005) and additional items based on a literature review of reasons that men and women identify for not seeking help (e.g., Vogt, 2011)” (p. 215-216). It remained unclear as to how these lists were created, questions within were selected, or if they were to any degree validated. Further, PTSD is, at its very core, a result of experience; the methods utilized by quantitative studies included in this systematic review were assessed to have not effectively captured the experience of the participants, or the complexity of PTSD.

An additional limitation lied in the manner in which help-seeking was measured and/or generalized. Studies assumed that mental health treatment obtained by soldiers with PTSD meant that participants were seeking treatment for their PTSD. Spont and colleagues (2014) measured ‘at least one’ psychotherapy session as help-seeking for PTSD. It is arguable that these criteria are enough to constitute help-seeking for PTSD.

Only one study (Fikretoglu, Brunet, Schmitz, Guay, & Pedlar, 2006) integrated types of trauma as a variable in treatment seeking, though the selection of the twenty-eight (28) potentially traumatic experiences was not validated, was fairly general and a number of the events listed within were questionable in terms of if they would be considered traumatic in nature by a diagnostic criterion.

Further, measurements within a number of studies did not give due consideration to the individualized progression and timeline for the development of PTSD. For example, Interian et al. (2012) focused outcome measurements for early mental health treatment around the assessment of their sample population three (3) months post-deployment. “Symptoms of PTSD can have a delayed onset – appearing months after exposure to stress” (RAND, 2008). Study measurements only a few months following post-deployment negated two influential realities: 1) that PTSD symptomatology may not yet have developed, and 2) the study period for this particular sample might possibly have been dedicated to competing priorities, such as re-settling, adjusting, and family issues that were likely to take precedence over seeking treatment.

### **Conceptual and Operational Definitions of Help-Seeking**

No standardized definition of help-seeking was presented within the selected studies. Only one article (Topper et al., 2015) offered a definition for help-seeking for the purpose of including it with a study data table: "Help-seeking behaviour=seeking help from health care professionals" (p. 377); yet, within their own study, their findings illustrated that participants largely relied on familial and peer supports before professionals, where most sought help from informal sources, such as “relatives and trusted people in the community (85.6%) or from health care providers, such as a nurse, then medical doctor, then social worker (48.1%)” (p. 377). Traditionally, and as seen in a number of the selected articles, help-seeking behaviour is measured in terms of health

service use; however, “this type of empirical measurement negates to include sources of informal help, the type of help sought or amount of help elicited” (Cornally & McCarthy, 2011, p. 285), as well as self-help. Blais et al. (2014a) measured "likelihood of seeking support from family and friends" but did not specify if participants were or were not seeking help. Lehavot et al. (2013) measured help-seeking as "VA health care"/"medical care", VA care, non-VA care, or both, but was limited in that it did not specify mental health care. Interian et al. (2012) asked first whether participants had a visit with a "mental health professional" for a "mental health problem", i.e., any mental health visit postdeployment; second, if they received a "doctor's prescription for antidepressants, anxiolytics, mood stabilizers, or sedatives” (p. 856) then proceeded to define any mental health visit postdeployment as “either having a mental health visit postdeployment or receiving a prescription for a psychotropic postdeployment”(p. 856) – where this was considered sufficient to warrant help-seeking, though the connection to PTSD was not explicit. Simply because the participant had been diagnosed with PTSD, the assumption was made that any treatment was for PTSD – this is a weak assumption and reflects as such within their findings. Sayer et al. (2007) participants were asked to indicate whether they were currently in treatment for an emotional or psychiatric problem. The definition of treatment was not restricted to receipt of specialty mental health services, nor for PTSD specifically. Meis et al. (2010) participants were asked: “In the past year ... have you received any of the following mental health services?”, where items included, 1) “medications, such as antidepressants,” 2) “one to one counseling,” 3) “group counseling,” 4) “marriage or family counseling,” and 5) “chemical dependency treatment” (p. 563) – again, PTSD specialty treatment was not specified, but treatment being for their PTSD was assumed.

In listing these diverse operational definitions applied within the selected studies, it becomes apparent, as Cornally and McCarthy proposed in help-seeking research for individuals

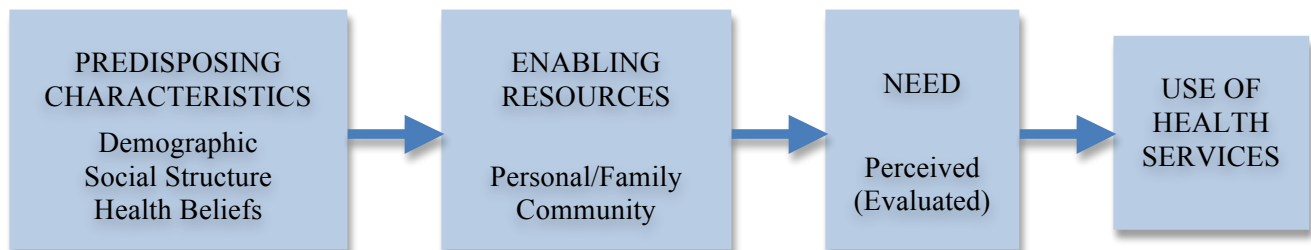
with mental illness (in general), that “concept clarification” would be worthwhile in guiding those in research and practice (health science researchers, health-care professionals, and policy makers, for example) to understand the attributes of help-seeking behaviour so as to guide theory development, practice and research (Cornally & McCarthy, 2011, p. 280).

### Measurement Instruments & Conceptual Frameworks for Help-Seeking

The original behavioural model of health service use developed by Andersen in the 1960’s was initially designed to explain the use of formal personal health services rather than to focus on the important interactions that take place as people receive care, or on health outcomes... and suggests that people’s use of health services is a function of their predisposition to use services, factors which enable or impede use, and their need for care.

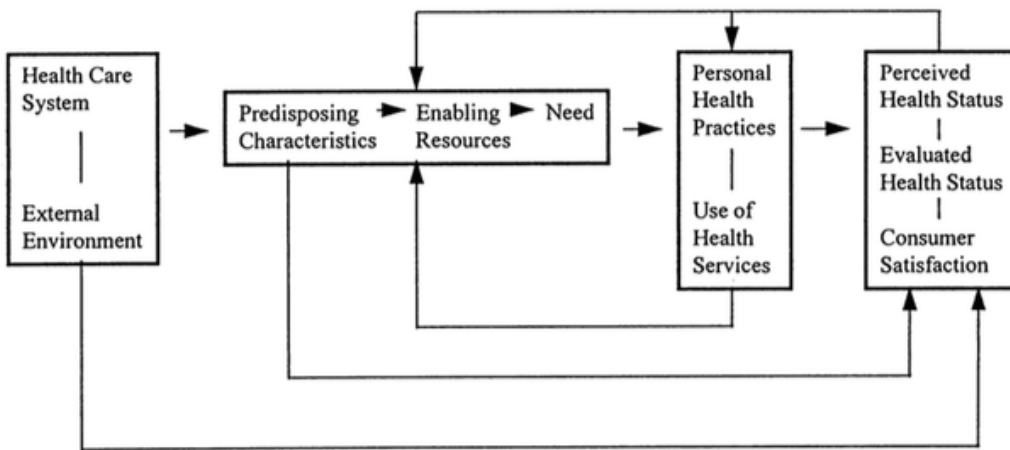
(Andersen, 1995, p. 1)

Figure 7: Andersen’s Original (1960’s) Model of Health Service Utilization



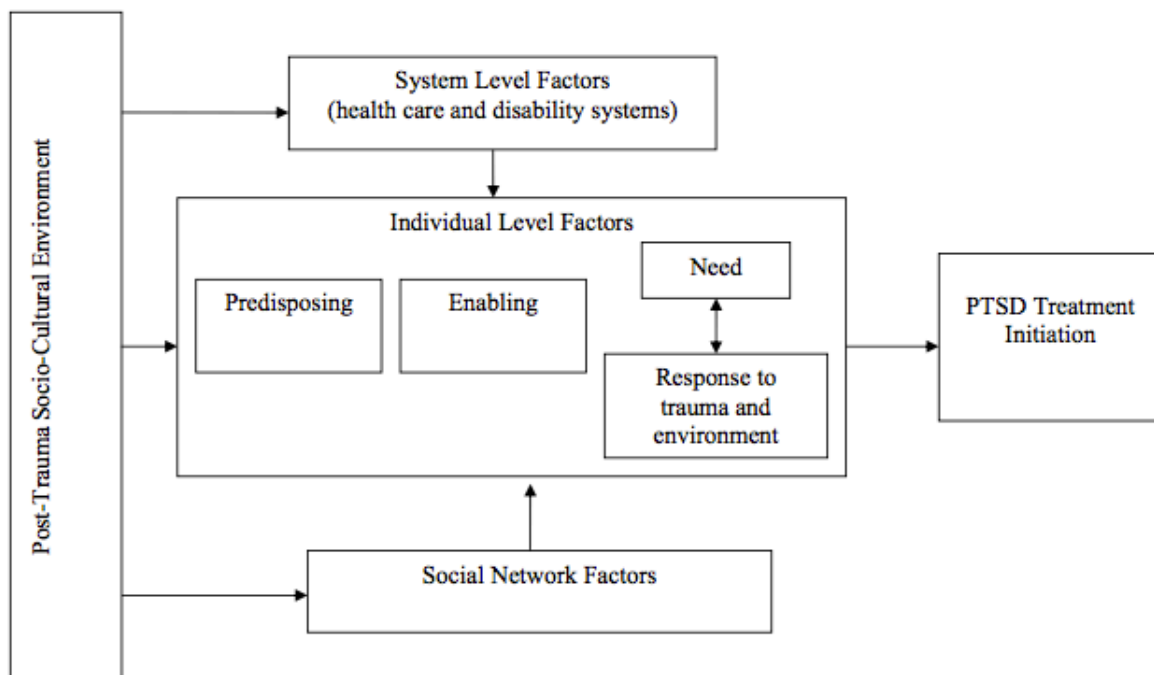
This early (linear) model was adapted over decades to recognize the significance of the health care system and external environment on health behaviour, as well as measure outcomes in terms of health status and consumer satisfaction with respect to health services.

Figure 8: Andersen's "Emerging Model" of Health Service Use (1995)



Eight citations within this systematic review referred to Andersen's model to define study objectives and/or measure study variables, to varying degrees. Sayer et al. (2009) was the only study to effectively adapt Andersen's 1995 behavioural model in the context of PTSD by studying barriers and facilitators as determinants of PTSD treatment initiation in veterans.

Figure 9: Sayer et al.'s Model of PTSD Treatment Initiation (2009)



While the insights of Sayer and colleagues are meaningful, and her model is a valuable progression of Andersen's generalized model, her model – like Andersen's – continues to “relate general health beliefs to global measures of need” (Andersen, 1995). It adheres too closely to Andersen's model, which does not accurately reflect the quintessentially unique feature of PTSD – that its development is dependant on one or more external events. Therefore, where measurements of age, sex, race, educational status, income level and/or pre-existing disorder(s) act as predisposing characteristics to disease or health disparities in Andersen's model, as illustrated when a population ages (e.g., hypertension or cardiovascular disease), or manifested in one particular gender (e.g., breast cancer), large-scale studies have demonstrated that characteristics such as age, race, education, marital status and income do not predict whether one develops PTSD – “that the development of PTSD symptoms, and the severity of those symptoms, has more to do with the intensity and duration of the stressful event” (Matsakis, 1996, p. 15). These characteristics do not impact the development of the illness in the same way they were intended to reflect predisposition within Andersen's generalized model. This differentiation is consequential yet overlooked by present research, as Andersen's early model of health utilization continues to be preserved and adapted without its integration.

The trauma(s) – the external element – is arguably the most essential component of a relevant help-seeking model for PTSD; yet it is presently the most notable omission. A help-seeking model for PTSD recognizes that it is the trauma (the nature of the trauma – severity, number, nature, and consequences of) that is the predisposing factor to the illness as well as the process of help-seeking for people with PTSD. Any model should originate and flow from it and, while generalized, must allow adaptation and variation for each individual if it is to be meaningful for patients with PTSD – keeping in mind that each and every trauma is different in

nature, severity, meaning, and consequence, and so experienced and processed differently by each individual, during and after the trauma(s).

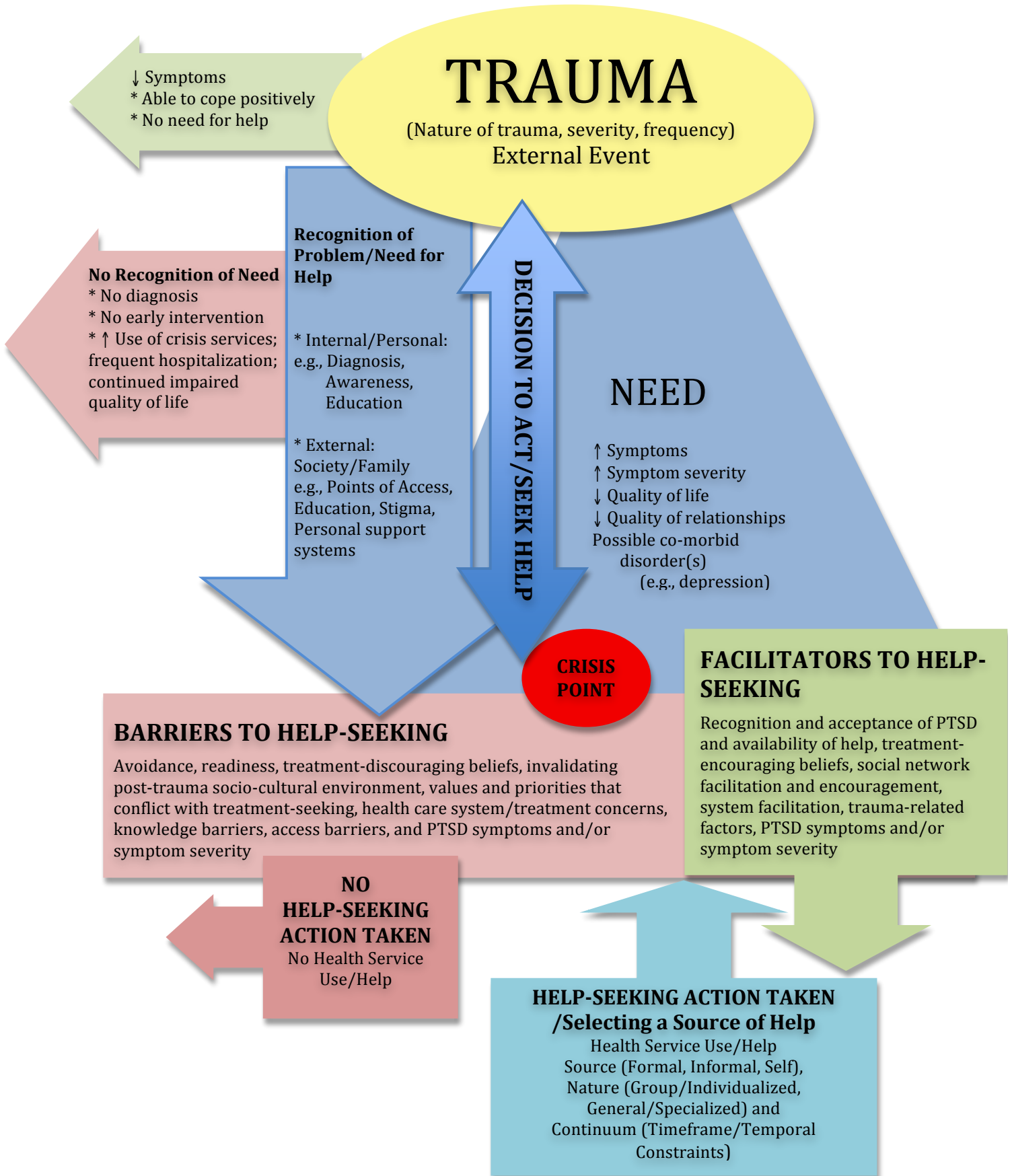
In an attempt to construct a more relevant conceptual framework or model of help-seeking for individuals with PTSD (Figure 10), this review borrowed from models young (Sayer et al., 2009) and old (Andersen, 1995), as well as critical elements of help-seeking behaviour as identified by Cornally and McCarthy (2011) and Rickwood et al. (2005) for individuals with mental illness that are synonymous and/or significant to our target PTSD population, and further integrated the barriers and facilitators reported and collected from within the selected studies of this systematic review.

The proposed model maintains Andersen's core elements of predisposition (now stemming from the trauma(s)), need (placed *before* enablers, defined predominantly by symptoms and symptom severity, decrease in quality of life, and decrease in quality of relationships – increasing as time increases without assistance or support (help)) and enabling factors (facilitators defined within this systematic review). These are augmented to illustrate the process and understanding of help-seeking for individuals with PTSD by points of exit (when symptoms are low, or there is no need for help) or where there is no recognition of need (when symptoms are significant, but the individual has not been diagnosed or does not realize that s/he has a mental illness – this exit point is usually accompanied by increased use of emergency health services and continued impairment or decrease in quality of life). When an individual recognizes the problem or need for help, s/he continues toward help-seeking, being met by barriers or facilitators or a combination of these.

Help-seeking behaviour, as Cornally and McCarthy (2011) suggest, “represents intentional action to solve a problem that challenges personal abilities” and “...once a behavioural intention is formed, the person moves to selecting a source of help, makes contact and discloses the

problem in exchange for help” (p. 286). The “decision to seek help, which is preceded by problem recognition and definition” (Murray, 2005), is central to the help-seeking process, and to the model proposed herein. The decision to act or to seek help is variable for each individual and within each situation, and so is represented by a dual-headed arrow that runs parallel with problem recognition and need. This arrow is also significant in its representation of potential movement toward and away from help-seeking. An individual might decide to seek help but encounter one or more barriers to care, reversing their path along this continuum – potentially exacerbating symptoms (e.g., re-living or re-experiencing the trauma) or reinforcing stigmatizing beliefs. Personal or external awareness, education, or support – or increased symptom severity – might then encourage (or force) progress toward taking action to seek help, perhaps first having to reach a crisis point, where the individual once more decides to act, and are potentially met again by similar or novel barriers and/or facilitators to help-seeking. If they decide to seek help and are able to take action, they would then select an appropriate source and type of help.

Figure 10: Smith’s Model of Help-Seeking for People with PTSD  
 \*All of which occur within a sociocultural environment.



### **Barriers and Facilitators to Help-Seeking**

While relatively few articles exist within the literature that focus on barriers and facilitators to help-seeking for persons with PTSD, together the selected articles offered a rich compilation of barriers and facilitators. In synthesizing barriers and facilitators to help-seeking for people with PTSD, this review provides opportunities to more readily define possible solutions and/or strategies to minimize barriers and maximize facilitators for this particular population in need. Study barriers and facilitators were juxtaposed in a synoptic table (Table 7) to further illustrate the relationship that emerged: where there were barriers defined by the selected studies, often there were corresponding – or counter-acting – facilitators. Further, in organizing the barriers and facilitators in this fashion, both opportunities and gaps became apparent. Implications for future research, as well as policy and/or practice are therefore integrated below.

#### **Avoidance, readiness – Recognition, acceptance**

“One of the greatest obstacles to care is the fact that, despite experiencing the symptoms of PTSD, individuals are unaware of what they are suffering from – and that it is a treatable illness” (I. Manion, personal communication, September 2014). In itself, a diagnosis has been identified as both a facilitator to help-seeking, where individuals diagnosed with PTSD found solace in knowing their symptoms have an explanation, or regained an “internal locus of control” (Murphy et al., 2014); as well as a barrier, paired with stigmatizing labels such as “crazy” or “violent”, which often impeded help seeking. Perceptions around what it means to have a mental ‘disorder’ affect treatment readiness, as well as engaging in the action of seeking help.

Avoidance of trauma-related stimuli is multi-influential for persons with PTSD. “One of the symptoms of the disorder can be at the same time the reason why people do not get treatment” (Jankovic et al., 2011, p. 105). It is a primary symptom and defined as one of the

diagnostic clusters of PTSD, but can also act as a coping strategy for those not wanting to relive the trauma(s), presenting an inherent challenge to the use of services for people with PTSD (Sayer et al., 2009).

Finally, “of all psychiatric disorders, PTSD represents the quintessentially environmental condition because it cannot exist without the exposure” (Yehuda, 2011). It is now defined by distinct symptomatology, but continues in the literature – and in practice – to be grouped together with other psychiatric, depressive, and/or mental disorders.

### *Implications for practice*

Recognizing that one has a problem and/or is in need of help or treatment is recognized as the first and fundamental step in the help-seeking process. The significance of this first step underscores the role of education and awareness – both internal (personal) and external. It is critical for physicians (e.g., General Practitioners (GPs), emergency department physicians), front-line workers, specialized health care providers, and all who work in the field of mental health and PTSD to be sufficiently trained to recognize those vulnerable to the disorder and/or to be able to identify PTSD symptoms in order to best guide PTSD patients to the most appropriate treatment options available – to be the ‘gate-keepers’ – a safety net at the onset. Early recognition and intervention can ensure sufferers receive the treatment they require as soon as possible, lessening the devastating toll on both the individual and their loved ones (MDSC, 2012).

In the same token, those who are vulnerable to the disorder – those at high risk for being exposed to traumatic events by their occupation, such as military, front-line workers, or counselors, and/or by their experience, such as victims of physical or sexual violence, or those involved in accidents or natural and/or community disasters should be screened either routinely (e.g. military or front-line workers) or upon ‘presentation’ to emergency department staff, their

general practitioner (GP), family or friends, or directly following an accident, or assault, or terrifying event. Follow-up is also essential, as individuals present at varying times post-trauma. One's PTSD might develop following a trigger of the event, or they may remit for some time and have symptoms re-present themselves months or even years into the future. Therefore, screening should occur along the continuum of the individualized process of help-seeking for PTSD.

### ***Implications for research***

As the disorder calls for care specialized from other mental illnesses, it similarly calls for targeted examination in research independent of other mental illnesses, in order to meaningfully conceptualize – to map – the help-seeking process for people with PTSD and to understand the individual and societal barriers and facilitators supporting and/or preventing this population from seeking timely treatment.

The definition of PTSD, and its corresponding diagnostic tools, has significance not only for those looking for an explanation for its deleterious effects, but also for those who measure its prevalence and significance (Cornally & McCarthy, 2011). The results drawn from the selected articles within this systematic review are each based on DSM-IV diagnostic tools; outcomes across studies will be increasingly difficult to compare when both clinical diagnosis and the tools that measure it continue to change. These articles, for example, will not be readily comparable to or compatible with results measured through the newest DSM-V (2013) diagnostic tools (PCL-5), as they differ on the number of items scored within (DSM-IV – 17 items; DSM-V – 20 items) (U.S. Department of Veteran Affairs [USDVA], n.d.). It will be important to reexamine the associations found within these studies using the revised model of PTSD (Blais et al., 2014a, p. 118) and the diagnostic tools that accompany it “to best understand how PTSD, as it is now defined, relates to the intention to seek and utilize mental health care” (Blais et al., 2014b, p. 173).

“Future research should focus on samples of veterans with PTSD diagnosed by a structured clinical interview, multidimensional measurement of barriers to care and studies should examine the impact of barriers on multiple parameters of service use (e.g., treatment entry, engagement in treatment, length of treatment) over time” (Ouimette et al., 2011, p. 221).

When and to whom individuals at risk for PTSD present represent critical and recognizable access points to care, though these variables were not identified in the selected studies. Recording and examining these access points to care would facilitate improved recognition within the health care system of who is presenting to whom (identifying both populations at high-risk of developing PTSD as well as those who should be appropriately trained to serve them), and when (post-trauma) they are presenting, so as to ensure individuals at risk for developing PTSD can be best cared for, at the earliest opportunity.

#### **Treatment-discouraging beliefs – Treatment-encouraging beliefs**

Ouimette et al. (2011) found that one’s own beliefs about help-seeking may serve as a barrier to care while Mittal et al. (2013) reported that “participants expressed strong feelings that only other veterans with PTSD could truly understand their experience” (p. 91). This suggests the potential value and effectiveness of interventions targeted at addressing and improving one’s own comfort levels with help-seeking.

#### ***Implication for programming and/or policy***

Treatment-encouraging beliefs, knowledge, and system facilitation together contribute to programming and/or policy progress. First, Ouimette et al. (2011) suggest that “psychoeducation about the potential benefits of treatment by providers and peers may help increase comfort with help-seeking” (p. 220) while Koenen et al. (2003) propose that “public education efforts should aim at reducing stigma surrounding the disorder and increasing knowledge about the availability

and efficacy of current treatments and how to access them – particularly at low or no cost (e.g., sliding scale, treatment outcome studies)” (p. 12). The finding that individuals with PTSD often feel misunderstood (Mittal et al., 2013), or that providers won’t understand or believe their trauma(s) or trauma narrative (Sayer et al., 2009) suggest that “group therapy or peer counseling may be a particularly useful approach in facilitating engagement of PTSD veterans in treatment” (Mittal et al., 2013, p. 91). This finding has been tested and validated in peer-based programs within the military, which have been successful in minimizing the impact of stigma (p. 91).

These insights inform personal and public education and awareness, as well as the kinds of therapies that might prove most effective for individuals with PTSD inside, and outside, the military. Educational programming is essential for the sufferer to understand the syndrome and symptoms, as well as those of the general public, along with family, friends, peers and partners. The military has made great efforts in offering these kinds of educational programs to its veterans to encourage knowledge of and access to the specialized treatment programs it has available to them. Further, resources initially developed by the military (Canadian Armed Forces) are now being utilized by front-line workers (police, paramedics and firefighters) in efforts to prevent and/or mitigate the development of PTSD, address stigma, as well as offer resources around trauma and the mental health risks inherent in these occupations. “Road to Mental Readiness”, one such initiative in Ontario, will include a public awareness campaign, a free online tool kit with educational resources on PTSD, and information on research grants available (O’Brien, 2016). This translation of knowledge and resources is indicative of the potential for transferability outside the military and across multiple PTSD risk groups.

**Invalidating post-trauma socio-cultural environment – Social network facilitation and encouragement**

The disorder itself is rife with negative, trauma-related emotions, such as guilt, shame, fear, anger, and blame (U.S. Department of Veteran Affairs [USDVA], 2014). Added to these is being identified as having a ‘disorder’ or being labelled with a mental illness. Negative personal, emotional, and social reactions to real and perceived stigmas around PTSD act as deterrents to early access to care.

***Implications for practice/programming***

Multiple authors found that PTSD both affects, and is affected by, intimate/partner relationships. Fikretoglu et al. (2006) found that marital status was significantly associated with treatment seeking – “which raises the possibility that having a close relationship with someone who might also be affected by PTSD symptoms increases likelihood of treatment” (2006, p. 857). Those whose lives are affected by the effects of PTSD are motivated to be motivators of help-seeking. Therefore, as Blais et al. (2014a) suggest that, in addition to educating health care professionals and specialists, it is critical to educate one’s support network to reduce stigma associated with support seeking (p.118), and that similar to Spont et al.’s (2014) findings for veterans, involving family members and social networks in encouraging individuals to initiate mental health care “may be an effective treatment marketing strategy” (p.661).

“Involving intimate partners in veterans’ care for PTSD is vital to promoting comprehensive care, addressing clusters of difficulties commonly experienced, and mobilizing the support inherent in intimate relationships” (Meis et al., 2010, p. 566). Study findings also suggest that “family involvement in PTSD treatment could be beneficial not only when families are distressed, but also when they are functioning well, in order to facilitate treatment engagement and perhaps promote treatment retention” (p. 566).

### ***Implications for future research and education***

“Future studies can also examine the role that family members play in encouraging care seeking” (Interian et al., 2012, p. 860). The creation of online educational materials and resources for friends and families of people with PTSD offer invaluable information and guidance on how to help and support and loved ones living with PTSD. HelpGuide.org (Smith, 2016) is one such website and a recommended resource for understanding PTSD and what one can do as a source of support for someone with PTSD.

### **Values and priorities that conflict with treatment-seeking**

Sayer et al. (2009) reported that the value that most reduced participants’ interest in seeking mental health treatment – for participants both in treatment and not in treatment – was ‘pride in self-reliance’, where participants preferred to “take care of problems on their own and viewed professional help as a last resort” (p. 244-245).

### ***Implications for practice***

The health care system, along with the health care providers and experts therein, must meet PTSD patients with patience where they are along the course of their individual PTSD experience. Formal and informal supports should offer help when they are ready, when they are in need and/or when other priorities do not conflict with continued and effective care, and strive to provide individuals first with information and knowledge (in order to recognize what they are suffering from, along with the symptoms that accompany it), followed by options for appropriate care given their unique circumstances.

### **Health care system concerns, concerns about treatment – System facilitation**

Concerns around trust in care providers, limited resources, confidentiality and perceptions of who care is intended for were highlighted within a number of the selected articles (Sayer et

al., 2009; Stecker et al., 2013; Topper et al., 2015). Ouimette et al. (2011) and Fikretoglu et al. (2006) similarly find barriers to care differ across subgroups within their sample populations and highlight the heterogeneity between treatment seekers and non-treatment seekers (Fikretoglu et al., 2006, p. 857).

### ***Implication for practice***

Treatment programs must strive to build trust, empathy and understanding between patient and caregiver, and focus on finding appropriate treatment at the appropriate time and in the appropriate environment for each individual. Peer-based outreach programs to increase treatment seeking and to minimize the impact of stigma have been implemented by the National Guard in Michigan and have been recommended for nation-wide use (Mittal et al., p. 91). Other study findings highlight the preference of its sample participants for individual treatment over group treatment (Stecker et al., 2013). Options should be made available to offer the level of confidentiality desired, and deserved, by the patient.

The recognition of heterogeneity of subgroups (arguably, of individuals) among study populations suggests the need to tailor outreach efforts and treatment-promotion strategies to particular needs and characteristics, such as gender, age, marital status, and insurance type (Ouimette et al., p. 220; Fikretoglu et al., p. 857; Sayer et al., 2007, p. 24), as well as to educate those involved in the diagnosis and treatment of persons with PTSD about barriers to care from these unique perspectives (for example, women, veterans of other combats/wars).

### ***Implication for research***

This expectation of confidentiality should also be assured within research. A number of the studies themselves draw speculation to the issue of anonymity and confidentiality, such as the protocol applied by Spont et al. (2014), where participants received a survey to partake in their

research only two weeks after they received a PTSD diagnosis. This relatively open access to sensitive and personal information is arguably a breach of the patient's right to privacy.

### **Knowledge barriers**

In professions such as the military and front-line workers (fire-fighters, paramedics and social workers, for example), the possibility and probability of this type of health consequence is, by the very nature of the work, imaginable.

### ***Implications for research/policy***

Establishing specialized policies and programs to care for occupational groups at high risk of exposure to traumatic events recognizes and acts on the importance of taking a preventive approach to reducing risk factors and creating protective mechanisms for a population continually exposed to incidents characterized by unpredictability and danger to their personal safety (Marchand, 2013). Online programming, such as Simon Fraser University (SFU)'s "First Responders Trauma Prevention and Recovery Certificate", free to all first-responders, is an example of such proactive education initiatives.

Knowledge barriers to treatment summarized by a number of the authors included lack of knowledge and/or understanding of PTSD or services (Jankovic et al., 2011), the nature and treatment of mental illness (Topper et al., 2015) and where to get help (Sayer et al., 2009).

### ***Implications for policy and/or programming***

These barriers speak to the need for appropriate education and awareness programs – both internal or personal, geared toward the individual with PTSD, as well as external, geared toward peers, family members, and society. Meis et al. (2010) highlight one such program, where "all returning National Guard soldiers were required by their command to participate in educational reintegration programs providing information on available resources and how to access mental health services both within and outside VA" (p.565). Reiterated by Blais et al. (2014a) is the

importance to “educate service members’ support network to reduce stigma associated with support seeking” (p. 118).

Jankovic et al. (2011) recognized the heightened needs of those within her sample who experienced more external barriers to accessing mental health services and recommended information campaigns to GPs, but went further to remind those “creating and delivering such educational campaigns that these make sense only if they are matched by sufficient capacity to provide the appropriate treatment for those who seek treatment in response to them” (p. 106).

### **Access barriers**

Access barriers include cost, distance and transportation, perceived lack of eligibility, logistical issues (not having time for treatment, family issues, unable to take time off work), and language barriers, to name a few.

### ***Implications for programming/policy***

Interian et al. (2012) suggest that “PTSD service delivery models must consider meaningfully integrating interventions that help with marital and family functioning, as well as case management support for addressing financial and occupational stressors” (p. 860).

To contend with various access barriers, such as distance, travel and time issues, new and/or innovative approaches such as the development and utilization of web-based education campaigns and interventions show promise, as highlighted by Lehavot et al (2013). Topper et al.’s (2015) findings suggested that those presenting for other disorders or illnesses be given a brief screening for PTSD – an additional prospect for early identification and intervention.

Stecker et al. (2013) report that military service members returning from a tour of duty are eligible for services at the VA for five years after discharge from military service. Oftentimes, PTSD develops many years post-trauma(s) – this highlights the importance of longitudinal, continuous care – i.e., no temporal constraints on mental health service – for this particular

population to avoid access barriers and to support veterans, as well as other risk populations, into the future.

In Ontario, individuals face multiple access barriers to mental health services. Examples of barriers to services provided by psychiatrists, psychologists and/or counselors and therapists include the necessity of first acquiring a referral by a family physician, high costs, extended wait times, and unavailability of the appropriate mental health care specialist. The Ontario Health Insurance Plan (OHIP) does not pay for psychological services, for example, and most extended health plans limit coverage to \$300-\$1,000 per year (Ontario Psychological Association [OPA], 2016); the hourly rate for psychological treatment as defined by the Ontario Psychological Association Board of Directors in 2013 was \$225 (OPA, 2016); and an individual can wait months for a mental health care professional trained to treat their particular mental illness. The Ontario provincial government is making efforts to accelerate access to mental health care, as well as to provide low-cost alternatives, such as care made available through community health care centres (covered under OHIP for a defined number of sessions) or initiatives such as “tele-psychiatry”, which aims to reach patients in remote and under-served communities through computer-based video conferencing (Taylor, 2015, p.1).

### **Trauma-related factors**

Not surprisingly, given the sensitive nature of examining trauma-related factors for this population, there is a marked gap in identifying and integrating trauma-related factors into the help-seeking process and model, despite their role in defining need and help-seeking behaviours.

### ***Implication for research***

Thoughtful consideration of trauma-related factors must continue to be encouraged in research, guided by the affected population and likely best studied through qualitative methods,

so as to integrate experiences and opinions directly from those who hope to benefit from research findings.

### **PTSD symptoms, symptom severity**

Dysphoria, from the Greek word meaning difficult to bear, is defined as a “state of feeling unwell or unhappy; a feeling of emotional and mental discomfort as a symptom of discontentment, restlessness, dissatisfaction, malaise, depression, anxiety or indifference” (English Dictionary, 2016). Interestingly, Blais et al. found dysphoria was negatively associated with the likelihood of seeking support in their February 2014 article entitled “Posttraumatic stress and stigma in active-duty service members relate to lower likelihood of seeking support,” and reported the opposite – dysphoria severity positively correlated with the intention to seek mental health care – in their April 2014 publication “Unique PTSD clusters predict intention to seek mental health care and subsequent utilization in US veterans with PTSD symptoms.” Upon first inspection, this might seem to be a reflection on the quality of analysis; but rather, it is considered herein as a reflection of the duality of a number of variables affecting help-seeking – which act as both barriers and facilitators (to different people, at different times, in different intensities, for example) – and of the complexity and uniqueness of these symptoms for each individual with PTSD.

### ***Implication for practice***

Blais et al. (2014b) summarized the need for specialized understanding of PTSD and “continuing to study the various symptom clusters of PTSD in place of global severity” (p. 173), highlighting the importance of creating interventions that consider and respond to the multi-dimensional nature of PTSD.

### **Limitations**

Several limitations to the present study need to be considered. The potential limitations of this review include discrepancies in the literature search process – for example, the search strategy and/or methodology applied – such that relevant articles might not have been captured; the choice of databases influenced the coverage of potential journal papers to be included; and the terminology utilized in the search strategy may not have been sufficiently broad to capture all published research on the research question, particularly with respect to barriers and facilitators. Bias might have existed in the selection, extraction and/or translation of primary data chosen from included citations as relevant for further analysis and synthesis, particularly in terms of the retrieved barriers and facilitators, as only one researcher coded these into themes and as such the coding of themes may be biased.

Exclusion criteria also represent limits to the review, as the target population did not include individuals under the age of eighteen, and excluded literature other than English, peer-reviewed publications (for example, grey literature, books and theses were excluded). Finally, not all data extracted was utilized in the critical analyses, particularly quantitative measures drawn from the selected studies, as some of these were not sufficiently homogenous in definition and measurement to allow for meaningful comparison of variables across studies; and, given the nature of the data extracted and summarized, analyses were limited to thematic and content oriented analyses.

These limitations were minimized by carrying out a focused yet comprehensive search under the guidance of an information specialist; completing double data extraction to ensure accuracy, which was then verified by a third data extraction on randomly selected articles carried out by the second reviewer to ensure consistency and quality; and amalgamating the most salient points from each study while keeping to their own words, as per the objective of the studies. The

three-step search strategy was rigorous and thorough, where any modifications were thoughtfully recorded and justified.

### **Conclusions**

Ø Few studies exist that identify the barriers and facilitators to help-seeking for people with PTSD; most focus on mental health, in general, which does not effectively address why and/or how this particular population is supported or impeded in their help-seeking. A positive trend (increase) in research over the last five years is a hopeful reflection of increased recognition in the importance of focused research for this particular population.

Ø Existing literature on barriers and facilitators to help-seeking for individuals with PTSD focuses largely on the military population. While this is indeed a population at high risk for developing PTSD and deserves attention, there is a marked absence of research focused on help-seeking among risk groups within the civilian population, such as those who have experienced domestic or intimate partner violence; rape, sexual assault or abuse; survivors of unexpected events, such as car accidents, fires or natural disasters; and first-responders. Women are also notably absent from the literature, especially in view of their disproportionate exposure to trauma, as well as being differentially affected by barriers to help-seeking.

Ø Only one article offered an adaptation of a generalized behavioural model of health service utilization that considered help-seeking for this distinct population, but it did not integrate this population's most distinguishing and significant 'characteristic' in terms of barriers and facilitators to help-seeking – the trauma(s). This population does not fit neatly into the generalized model, and necessitates a model of its own. It is the hope of this review – in fulfilling

the research objectives, and guided by the findings of studies selected for this systematic review, existing behavioural models of health service use, as well as PTSD and help-seeking literature – that the novel model proposed herein will be a catalyst for the creation of progressive, relevant, *specified* generalized behavioural (process) models for help-seeking for individuals with PTSD.

Ø This systematic review represents the first comprehensive synopsis of the barriers and facilitators to help-seeking for individuals with PTSD within existing literature over the last fifteen years. In its compilation, it recognizes this summary as 1) fundamental to gaining a holistic understanding of the multiplicity and variation of the barriers and facilitators experienced uniquely, but also commonly, by those with PTSD, as well as 2) crucial to best helping those who encounter varied combinations of these barriers and facilitators along their healing process.

Ø Understanding the barriers and facilitators to help-seeking for people with PTSD is essential to developing appropriate and effective interventions for all risk groups living with the symptoms of PTSD by: identifying and serving this population at the earliest opportunity; informing policies and procedures that educate and promote PTSD knowledge and recognition; reducing various stigma (e.g., public stigma and self-stigma); improving access and availability of care; encouraging social support and involvement from family, friends, colleagues, peers, and employers; and approaching care with a more complete understanding of what it means to live with the symptoms of PTSD, as well as what particular challenges these individuals encounter in seeking help. Considering the prevalence of PTSD and the proportion of this population who do not seek help, capturing even a fraction of these individuals represents a significant opportunity to encourage the process of help-seeking by individuals with PTSD and, ultimately, to facilitate the process of healing.

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Doi 10.3233/DMA-2011-0785

### Appendix I: Risk Factors

Those at risk for developing PTSD include:

“Anyone who has been victimized or has witnessed a violent act, or who has been repeatedly exposed to life-threatening situations.” This includes survivors of:

- Domestic or intimate partner violence
- Rape or sexual assault or abuse
- Physical assault such as mugging or carjacking
- Other random acts of violence such as those that take place in public, in schools, or in the workplace
- Children who are neglected or sexually, physically, or verbally abused, or adults who were abused as children
- Survivors of unexpected events in everyday life such as:
  - Car accidents or fires
  - Natural disasters, such as tornadoes or earthquakes
  - Major catastrophic events such as a plane crash or terrorist act
  - Disasters caused by human error, such as industrial accidents
- Combat veterans or civilian victims of war
- Those diagnosed with a life-threatening illness or who have undergone invasive medical procedures
- Professionals who respond to victims in trauma situations, such as, emergency medical service workers, police, firefighters, military, and search and rescue workers
- People who learn of the sudden unexpected death of a close friend or relative

Estimated risk for developing PTSD for those who have experienced the following traumatic events:

- Rape (49%)
- Severe beating or physical assault (31.9%)
- Other sexual assault (23.7%)
- Serious accident or injury, for example, car or train accident (16.8%)
- Shooting or stabbing (15.4%)
- Sudden, unexpected death of family member or friend (14.3%)
- Child’s life-threatening illness (10.4%)
- Witness to killing or serious injury (7.3%)
- Natural disaster (3.8%)

*Source:* Sidran Institute for Traumatic Stress Education and Advocacy, 2014

## **Appendix II: Formal Treatments for PTSD**

Several treatment options are available for people experiencing symptoms of posttraumatic stress. Individual psychotherapy, behavioural or cognitive therapy, group therapy, eye movement desensitization (EMDR), and pharmacotherapy (medication) – or a combination of these – have proven to be effective and help a person return to their regular routines and healthy functioning.

### **Types of treatment**

#### **Individual Psychotherapy**

This involves meeting one on one with a licensed Psychologist, Social Worker or Mental Health Counselor. Typically, these meetings are once a week for an hour and focus on talking about the events, one's reactions to them and means of mitigating the effects on one's life. The types of modalities therapists use may include:

#### **I. Behavioural or Cognitive Behavioral Therapy (CBT)**

This treatment approach looks at ways in which a person thinks about a problem, their learned responses to certain triggers associated with that problem and ways in which their thinking affects their emotional state. This treatment often uses a combination of exposure (deliberately thinking about an event or confronting a trigger) and relaxation training along with cognitive restructuring or changing one's thoughts or beliefs about an event or trigger. This process tends to "desensitize" a person's response to reminders of the event so that it no longer carries the same emotional impact. CBT has been well researched and has been shown to be an effective treatment for PTSD.

#### **II. Eye Movement Desensitization and Reprocessing (EMDR)**

This treatment modality uses exposure to the traumatic memory paired with "bilateral stimulation" of the brain by tracking the therapist's finger or string of lights with the eyes or listening to alternating tones. Current thoughts, feelings, physical sensations and beliefs are activated and the tracking helps to reduce emotional and physiological reaction to the memory. This desensitization helps the person to reprocess their negative beliefs about themselves (for example "It was my fault") to adaptive, healthy and more accurate beliefs ("I did the best I could"). There have been numerous studies on EMDR over the past fifteen or more years and it has been shown to be a rapid and effective treatment for PTSD.

#### **Group therapy**

Group therapy can be very helpful following a traumatic event as it provides a safe and supportive environment in which to discuss a shared experience with others. There is often a felt sense that "nobody understands" and a group can help to feel less alienated, normalizing reactions to an abnormal event.

**Medication**

People are often very leery of about medication feeling it signifies that they are “crazy” or out of control. This is, of course, not the case and many people take medication for varying lengths of time following particularly stressful life events. Traumatic events can influence the neurochemistry of the body and brain impacting a person in many ways. Excessive stress hormones can make it difficult to concentrate, relax or even sleep. They can increase blood pressure, muscle tension, skin conductance and general arousal levels. It can impair immune system functioning, making people more vulnerable to illness. Fairly often these changes can lead to depression or anxiety. Medication can be effective in resetting the levels in the brain and may prove to be very helpful for a period of time. Some types of medication may include:

**Anxiolytic (anti-anxiety) Medication.** Include medications such as Xanax or Ativan. These tend to be short lasting medications that help to reduce physiological and emotional arousal and irritability associated with PTSD.

**Antidepressants.** These are medications such as Prozac, Paxil or Zoloft. Research has shown these medications to be effective in helping to reduce overall PTSD symptoms including irritability, depressed or anxious moods, anger, impulsivity and obsessive thoughts.

**Adrenergic agents.** This class of medication includes Propranolol and Clonidine. These act on the adrenal system and help to lower overall arousal levels, control intrusive images, memories and nightmares.

*Source:* The Trauma Center, 2007

### Appendix III: Completed Quality Assessment Forms

<b>JBIR QARI Critical Appraisal Checklist for Interpretive &amp; Critical Research</b>					
Reviewer	JR	Date	10-May-16	Score	8/9
Author	Murphy, Dominic	Year	2014	Record Number	1
		Yes	No	Unclear	N/A
1. Is there congruity between the stated philosophical perspective and the research methodology?		✓			
2. Is there congruity between the research methodology and the research question or objectives?		✓			
3. Is there congruity between the research methodology and the methods used to collect data?		✓			
4. Is there congruity between the research methodology and the representation and analysis of data?		✓			
5. Is there congruity between the research methodology and the interpretation of results?		✓			
6. Is there a statement locating the researcher culturally or theoretically?				✓	
7. Is the influence of the researcher on the research, and vice-versa, addressed?					✓
8. Are participants, and their voices, adequately represented?		✓			
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?		✓			
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?		✓			
Overall appraisal:	Include	✓	Exclude		

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**JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research**


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Reviewer	JRS	Date	30-May-16	Score	7/9
Author	Jankovic, Jelena	Year	2011	Record Number	2
		Yes	No	Unclear	N/A
1. Is there congruity between the stated philosophical perspective and the research methodology?				✓	
2. Is there congruity between the research methodology and the research question or objectives?		✓			
3. Is there congruity between the research methodology and the methods used to collect data?		✓			
4. Is there congruity between the research methodology and the representation and analysis of data?		✓			
5. Is there congruity between the research methodology and the interpretation of results?		✓			
6. Is there a statement locating the researcher culturally or theoretically?				✓	
7. Is the influence of the researcher on the research, and vice-versa, addressed?					✓
8. Are participants, and their voices, adequately represented?		✓			
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?		✓			
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?		✓			
Overall appraisal:	Include	✓	Exclude		Seek further info.

<b>JBIR QARI Critical Appraisal Checklist for Interpretive &amp; Critical Research</b>					
Reviewer	JRS	Date	30-May-16	Score	9/9
Author	Sayer, Nina	Year	2009	Record Number	3
		Yes	No	Unclear	N/A
1. Is there congruity between the stated philosophical perspective and the research methodology?		✓			
2. Is there congruity between the research methodology and the research question or objectives?		✓			
3. Is there congruity between the research methodology and the methods used to collect data?		✓			
4. Is there congruity between the research methodology and the representation and analysis of data?		✓			
5. Is there congruity between the research methodology and the interpretation of results?		✓			
6. Is there a statement locating the researcher culturally or theoretically?		✓			
7. Is the influence of the researcher on the research, and vice-versa, addressed?					✓
8. Are participants, and their voices, adequately represented?		✓			
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?		✓			
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?		✓			
Overall appraisal:	Include	✓	Exclude		Seek further info.

<b>JBI QARI Critical Appraisal Checklist for Interpretive &amp; Critical Research</b>					
Reviewer	JRS	Date	30-May-16	Score	6/9
Author	Topper, Kegan	Year	2015	Record Number	4
		Yes	No	Unclear	N/A
1. Is there congruity between the stated philosophical perspective and the research methodology?		✓			
2. Is there congruity between the research methodology and the research question or objectives?		✓			
3. Is there congruity between the research methodology and the methods used to collect data?		✓			
4. Is there congruity between the research methodology and the representation and analysis of data?		✓			
5. Is there congruity between the research methodology and the interpretation of results?				✓	
6. Is there a statement locating the researcher culturally or theoretically?			✓		
7. Is the influence of the researcher on the research, and vice-versa, addressed?					✓
8. Are participants, and their voices, adequately represented?				✓	
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?		✓			
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?		✓			
Overall appraisal:	Include	✓	Exclude		Seek further info.

EBL Critical Appraisal Checklist S5-Blais, Rebecca (2014)		Yes (Y)	No (N)	Unclear (U)	N/A
Section A: Population	Is the study population representative of all users, actual and eligible, who might be included in the study?		√		
	Are inclusion and exclusion criteria definitively outlined?	√			
	Is the sample size large enough for sufficiently precise estimates?	√			
	Is the response rate large enough for sufficiently precise estimates?	√			
	Is the choice of population bias-free?		√		
	If a comparative study: Were participants randomized into groups? Were the groups comparable at baseline? If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?				√
	Was informed consent obtained?		√		
Section B: Data Collection	Are data collection methods clearly described?			√	
	If a face-to-face survey, were inter-observer and intra-observer bias reduced?				√
	Is the data collection instrument validated?			√	
	If based on regularly collected statistics, are the statistics free from subjectivity?				√
	Does the study measure the outcome at a time appropriate for capturing the intervention's effect?				√
	Is the instrument included in the publication?		√		
	Are questions posed clearly enough to be able to elicit precise answers?			√	
Section C: Study Design	Were those involved in data collection not involved in delivering a service to the target population?	√			
	Is the study type / methodology utilized appropriate?			√	
	Is there face validity?			√	
	Is the research methodology clearly stated at a level of detail that would allow its replication?		√		
	Was ethics approval obtained?	√			
Section D: Results	Are the outcomes clearly stated and discussed in relation to the data collection?	√*			
	Are all the results clearly outlined?	√*			
	Are confounding variables accounted for?	√			
	Do the conclusions accurately reflect the analysis?			√	
	Is subset analysis a minor, rather than a major, focus of the article?				√
	Are suggestions provided for further areas to research?	√			
Is there external validity?		√*			
<b>Calculation for section validity: (Y+N+U=T)</b>  If Y/T <75% or if N+U/T > 25% then you can safely conclude that the section identifies significant omissions and that the study's validity is questionable. It is important to look at the overall validity as well as section validity.		<b>Calculation for overall validity: (Y+N+U=T)</b>  If Y/T ≥75% or if N+U/T ≤ 25% then you can safely conclude that the study is valid.			
<b>Section A validity calculation: 3/6= 50% not valid</b> <b>Section B validity calculation: 1/7= 14% not valid</b> <b>Section C validity calculation: 2/5= 40% not valid</b> <b>Section D validity calculation: 2/5= 40% not valid</b>		<b>Overall validity calculation:</b> <b>9/25 = 36% not valid</b>			

EBL Critical Appraisal Checklist S6-Blais, Rebecca (2014)		Yes (Y)	No (N)	Unclear (U)	N/A
Section A: Population	Is the study population representative of all users, actual and eligible, who might be included in the study?		√		
	Are inclusion and exclusion criteria definitively outlined?			√	
	Is the sample size large enough for sufficiently precise estimates?	√			
	Is the response rate large enough for sufficiently precise estimates?	√			
	Is the choice of population bias-free?		√		
	If a comparative study: Were participants randomized into groups? Were the groups comparable at baseline? If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?				√
	Was informed consent obtained?		√		
Section B: Data Collection	Are data collection methods clearly described?	√			
	If a face-to-face survey, were inter-observer and intra-observer bias reduced?				√
	Is the data collection instrument validated?			√	
	If based on regularly collected statistics, are the statistics free from subjectivity?				√
	Does the study measure the outcome at a time appropriate for capturing the intervention's effect?				√
	Is the instrument included in the publication?	√			
	Are questions posed clearly enough to be able to elicit precise answers?		√*		
Section C: Study Design	Were those involved in data collection not involved in delivering a service to the target population?	√			
	Is the study type / methodology utilized appropriate?	√*			
	Is there face validity?			√	
	Is the research methodology clearly stated at a level of detail that would allow its replication?		√		
	Was ethics approval obtained?	√			
Section D: Results	Are the outcomes clearly stated and discussed in relation to the data collection?			√	
	Are all the results clearly outlined?	√**			
	Are confounding variables accounted for?			√	
	Do the conclusions accurately reflect the analysis?			√	
	Is subset analysis a minor, rather than a major, focus of the article?				√
	Are suggestions provided for further areas to research?	√			
Is there external validity?		√			
<b>Calculation for section validity: (Y+N+U=T)</b> If Y/T <75% or if N+U/T > 25% then you can safely conclude that the section identifies significant omissions and that the study's validity is questionable. It is important to look at the overall validity as well as section validity.		<b>Calculation for overall validity: (Y+N+U=T)</b> If Y/T ≥75% or if N+U/T ≤ 25% then you can safely conclude that the study is valid.			
<b>Section A validity calculation: 2/6= 33% not valid</b> <b>Section B validity calculation: 3/5= 60% not valid</b> <b>Section C validity calculation: 2/5= 40% not valid</b> <b>Section D validity calculation: 2/5= 40% not valid</b>		<b>Overall validity calculation:</b> <b>9/21 = 43% not valid</b> *Yes/No answers – not considered 'precise' **Some results are those of other authors; not directly found within article.			

EBL Critical Appraisal Checklist S7-Spoont, Michele (2014)		Yes (Y)	No (N)	Unclear (U)	N/A
Section A: Population	Is the study population representative of all users, actual and eligible, who might be included in the study?		√		
	Are inclusion and exclusion criteria definitively outlined?	√			
	Is the sample size large enough for sufficiently precise estimates?	√			
	Is the response rate large enough for sufficiently precise estimates?	√			
	Is the choice of population bias-free?		√		
	If a comparative study: Were participants randomized into groups? Were the groups comparable at baseline? If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?				√
	Was informed consent obtained?			√	
Section B: Data Collection	Are data collection methods clearly described?	√			
	If a face-to-face survey, were inter-observer and intra-observer bias reduced?				√
	Is the data collection instrument validated?			√	
	If based on regularly collected statistics, are the statistics free from subjectivity?				√
	Does the study measure the outcome at a time appropriate for capturing the intervention's effect?			√	
	Is the instrument included in the publication?	√			
	Are questions posed clearly enough to be able to elicit precise answers?			√	
Section C: Study Design	Were those involved in data collection not involved in delivering a service to the target population?	√			
	Is the study type / methodology utilized appropriate?			√	
	Is there face validity?			√	
	Is the research methodology clearly stated at a level of detail that would allow its replication?	√			
	Was ethics approval obtained?	√			
Section D: Results	Are the outcomes clearly stated and discussed in relation to the data collection?	√			
	Are all the results clearly outlined?	√			
	Are confounding variables accounted for?			√	
	Do the conclusions accurately reflect the analysis?			√	
	Is subset analysis a minor, rather than a major, focus of the article?				√
	Are suggestions provided for further areas to research?	√			
Is there external validity?		√			
<b>Calculation for section validity: (Y+N+U=T)</b> If Y/T <75% or if N+U/T > 25% then you can safely conclude that the section identifies significant omissions and that the study's validity is questionable. It is important to look at the overall validity as well as section validity.		<b>Calculation for overall validity: (Y+N+U=T)</b> If Y/T ≥75% or if N+U/T ≤ 25% then you can safely conclude that the study is valid.			
<b>Section A validity calculation: 3/6= 50% not valid</b> <b>Section B validity calculation: 3/6= 50% not valid</b> <b>Section C validity calculation: 3/5= 60% not valid</b> <b>Section D validity calculation: 2/5= 40% not valid</b>		<b>Overall validity calculation:</b> <b>11/22 = 50% not valid</b> *Six months (post-diagnosis) does not necessarily capture the target population. **Barriers are determined from a pre-determined list			

<b>JBIR QARI Critical Appraisal Checklist for Interpretive &amp; Critical Research</b>					
Reviewer	JRS	Date	30-May-16	Score	6/9
Author	Topper, Kegan	Year	2015	Record Number	8
		Yes	No	Unclear	N/A
1. Is there congruity between the stated philosophical perspective and the research methodology?					✓
2. Is there congruity between the research methodology and the research question or objectives?		✓			
3. Is there congruity between the research methodology and the methods used to collect data?		✓			
4. Is there congruity between the research methodology and the representation and analysis of data?		✓			
5. Is there congruity between the research methodology and the interpretation of results?		✓			
6. Is there a statement locating the researcher culturally or theoretically?			✓		
7. Is the influence of the researcher on the research, and vice-versa, addressed?					✓
8. Are participants, and their voices, adequately represented?				✓	
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?		✓			
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?		✓			
Overall appraisal:	Include	✓	Exclude		Seek further info.

EBL Critical Appraisal Checklist S9-Lehavot, Keren (2013)		Yes (Y)	No (N)	Unclear (U)	N/A
Section A: Population	Is the study population representative of all users, actual and eligible, who might be included in the study?		√		
	Are inclusion and exclusion criteria definitively outlined?	√			
	Is the sample size large enough for sufficiently precise estimates?	√			
	Is the response rate large enough for sufficiently precise estimates?	√			
	Is the choice of population bias-free?		√		
	If a comparative study: Were participants randomized into groups? Were the groups comparable at baseline? If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?				√
	Was informed consent obtained?			√	
Section B: Data Collection	Are data collection methods clearly described?	√			
	If a face-to-face survey, were inter-observer and intra-observer bias reduced?				√
	Is the data collection instrument validated?			√	
	If based on regularly collected statistics, are the statistics free from subjectivity?				√
	Does the study measure the outcome at a time appropriate for capturing the intervention's effect?			√	
	Is the instrument included in the publication?	√			
	Are questions posed clearly enough to be able to elicit precise answers?			√	
Section C: Study Design	Were those involved in data collection not involved in delivering a service to the target population?	√			
	Is the study type / methodology utilized appropriate?			√	
	Is there face validity?			√	
	Is the research methodology clearly stated at a level of detail that would allow its replication?	√			
	Was ethics approval obtained?	√			
Section D: Results	Are the outcomes clearly stated and discussed in relation to the data collection?	√			
	Are all the results clearly outlined?	√			
	Are confounding variables accounted for?			√	
	Do the conclusions accurately reflect the analysis?			√	
	Is subset analysis a minor, rather than a major, focus of the article?				√
	Are suggestions provided for further areas to research?	√			
Is there external validity?		√			
<b>Calculation for section validity: (Y+N+U=T)</b>		<b>Calculation for overall validity: (Y+N+U=T)</b>			
If Y/T <75% or if N+U/T > 25% then you can safely conclude that the section identifies significant omissions and that the study's validity is questionable. It is important to look at the overall validity as well as section validity.		If Y/T ≥75% or if N+U/T ≤ 25% then you can safely conclude that the study is valid.			
<b>Section A validity calculation: 3/6= 50% not valid</b> <b>Section B validity calculation: 3/6= 50% not valid</b> <b>Section C validity calculation: 3/5= 60% not valid</b> <b>Section D validity calculation: 2/5= 40% not valid</b>		<b>Overall validity calculation:</b> <b>11/22 = 50% not valid</b>			

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**JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research**


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Reviewer	JRS	Date	30-May-16	Score	8/9
Author	Mittal, Dinesh	Year	2013	Record Number	10
		Yes	No	Unclear	N/A
1. Is there congruity between the stated philosophical perspective and the research methodology?		✓			
2. Is there congruity between the research methodology and the research question or objectives?		✓			
3. Is there congruity between the research methodology and the methods used to collect data?		✓			
4. Is there congruity between the research methodology and the representation and analysis of data?		✓			
5. Is there congruity between the research methodology and the interpretation of results?		✓			
6. Is there a statement locating the researcher culturally or theoretically?			✓		
7. Is the influence of the researcher on the research, and vice-versa, addressed?					✓
8. Are participants, and their voices, adequately represented?		✓			
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?		✓			
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?		✓			
Overall appraisal:	Include	✓	Exclude		Seek further info.

EBL Critical Appraisal Checklist S11-Interian, Alejandro (2012)		Yes (Y)	No (N)	Unclear (U)	N/A
Section A: Population	Is the study population representative of all users, actual and eligible, who might be included in the study?		√		
	Are inclusion and exclusion criteria definitively outlined?	√			
	Is the sample size large enough for sufficiently precise estimates?	√			
	Is the response rate large enough for sufficiently precise estimates?	√			
	Is the choice of population bias-free?		√		
	If a comparative study: Were participants randomized into groups? Were the groups comparable at baseline? If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?				√
	Was informed consent obtained?			√	
Section B: Data Collection	Are data collection methods clearly described?	√			
	If a face-to-face survey, were inter-observer and intra-observer bias reduced?				√
	Is the data collection instrument validated?			√	
	If based on regularly collected statistics, are the statistics free from subjectivity?				√
	Does the study measure the outcome at a time appropriate for capturing the intervention's effect?			√	
	Is the instrument included in the publication?	√			
	Are questions posed clearly enough to be able to elicit precise answers?			√	
Section C: Study Design	Were those involved in data collection not involved in delivering a service to the target population?	√			
	Is the study type / methodology utilized appropriate?			√	
	Is there face validity?			√	
	Is the research methodology clearly stated at a level of detail that would allow its replication?	√			
	Was ethics approval obtained?	√			
Section D: Results	Are the outcomes clearly stated and discussed in relation to the data collection?	√			
	Are all the results clearly outlined?	√			
	Are confounding variables accounted for?			√	
	Do the conclusions accurately reflect the analysis?			√	
	Is subset analysis a minor, rather than a major, focus of the article?				√
	Are suggestions provided for further areas to research?	√			
Is there external validity?		√			
<b>Calculation for section validity: (Y+N+U=T)</b>  If Y/T <75% or if N+U/T > 25% then you can safely conclude that the section identifies significant omissions and that the study's validity is questionable. It is important to look at the overall validity as well as section validity.		<b>Calculation for overall validity: (Y+N+U=T)</b>  If Y/T ≥75% or if N+U/T ≤ 25% then you can safely conclude that the study is valid.			
<b>Section A validity calculation: 3/6= 50% not valid</b> <b>Section B validity calculation: 3/6= 50% not valid</b> <b>Section C validity calculation: 3/5= 60% not valid</b> <b>Section D validity calculation: 2/5= 40% not valid</b>		<b>Overall validity calculation:</b> <b>11/22 = 50% not valid</b>			

EBL Critical Appraisal Checklist S12-Sayer, Nina (2007)		Yes (Y)	No (N)	Unclear (U)	N/A
Section A: Population	Is the study population representative of all users, actual and eligible, who might be included in the study?		√		
	Are inclusion and exclusion criteria definitively outlined?	√			
	Is the sample size large enough for sufficiently precise estimates?	√			
	Is the response rate large enough for sufficiently precise estimates?	√			
	Is the choice of population bias-free?		√		
	If a comparative study: Were participants randomized into groups? Were the groups comparable at baseline? If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?				√
	Was informed consent obtained?	√			
Section B: Data Collection	Are data collection methods clearly described?	√			
	If a face-to-face survey, were inter-observer and intra-observer bias reduced?				√
	Is the data collection instrument validated?			√	
	If based on regularly collected statistics, are the statistics free from subjectivity?				√
	Does the study measure the outcome at a time appropriate for capturing the intervention's effect?			√	
	Is the instrument included in the publication?		√		
	Are questions posed clearly enough to be able to elicit precise answers?			√	
Section C: Study Design	Were those involved in data collection not involved in delivering a service to the target population?	√			
	Is the study type / methodology utilized appropriate?			√	
	Is there face validity?			√	
	Is the research methodology clearly stated at a level of detail that would allow its replication?		√		
	Was ethics approval obtained?	√			
Section D: Results	Are the outcomes clearly stated and discussed in relation to the data collection?	√			
	Are all the results clearly outlined?	√			
	Are confounding variables accounted for?			√	
	Do the conclusions accurately reflect the analysis?			√	
	Is subset analysis a minor, rather than a major, focus of the article?				√
	Are suggestions provided for further areas to research?	√			
	Is there external validity?		√		
<b>Calculation for section validity: (Y+N+U=T)</b> If Y/T <75% or if N+U/T > 25% then you can safely conclude that the section identifies significant omissions and that the study's validity is questionable. It is important to look at the overall validity as well as section validity.		<b>Calculation for overall validity: (Y+N+U=T)</b> If Y/T ≥75% or if N+U/T ≤ 25% then you can safely conclude that the study is valid.			
<b>Section A validity calculation: 4/6= 67% not valid</b> <b>Section B validity calculation: 2/6= 33% not valid</b> <b>Section C validity calculation: 2/5= 40% not valid</b> <b>Section D validity calculation: 2/5= 40% not valid</b>		<b>Overall validity calculation:</b> <b>10/22 = 45% not valid</b>			

EBL Critical Appraisal Checklist S13-Fikretoglu, Deniz (2006)		Yes (Y)	No (N)	Unclear (U)	N/A
Section A: Population	Is the study population representative of all users, actual and eligible, who might be included in the study?		√		
	Are inclusion and exclusion criteria definitively outlined?	√			
	Is the sample size large enough for sufficiently precise estimates?	√			
	Is the response rate large enough for sufficiently precise estimates?	√			
	Is the choice of population bias-free?		√		
	If a comparative study: Were participants randomized into groups? Were the groups comparable at baseline? If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?				√
	Was informed consent obtained?	√			
Section B: Data Collection	Are data collection methods clearly described?	√			
	If a face-to-face survey, were inter-observer and intra-observer bias reduced?				√
	Is the data collection instrument validated?			√	
	If based on regularly collected statistics, are the statistics free from subjectivity?				√
	Does the study measure the outcome at a time appropriate for capturing the intervention's effect?			√	
	Is the instrument included in the publication?	√			
	Are questions posed clearly enough to be able to elicit precise answers?			√	
Section C: Study Design	Were those involved in data collection not involved in delivering a service to the target population?	√			
	Is the study type / methodology utilized appropriate?			√	
	Is there face validity?			√	
	Is the research methodology clearly stated at a level of detail that would allow its replication?	√			
	Was ethics approval obtained?	√			
Section D: Results	Are the outcomes clearly stated and discussed in relation to the data collection?	√			
	Are all the results clearly outlined?	√			
	Are confounding variables accounted for?			√	
	Do the conclusions accurately reflect the analysis?			√	
	Is subset analysis a minor, rather than a major, focus of the article?				√
	Are suggestions provided for further areas to research?	√			
	Is there external validity?		√		
<b>Calculation for section validity: (Y+N+U=T)</b> If Y/T <75% or if N+U/T > 25% then you can safely conclude that the section identifies significant omissions and that the study's validity is questionable. It is important to look at the overall validity as well as section validity.		<b>Calculation for overall validity: (Y+N+U=T)</b> If Y/T ≥75% or if N+U/T ≤ 25% then you can safely conclude that the study is valid.			
<b>Section A validity calculation: 4/6= 67% not valid</b> <b>Section B validity calculation: 3/6= 50% not valid</b> <b>Section C validity calculation: 3/5= 60% not valid</b> <b>Section D validity calculation: 2/5= 40% not valid</b>		<b>Overall validity calculation:</b> <b>12/22 = 55% not valid</b>			

EBL Critical Appraisal Checklist S14-Meis, Laura (2010)		Yes (Y)	No (N)	Unclear (U)	N/A
Section A: Population	Is the study population representative of all users, actual and eligible, who might be included in the study?		√		
	Are inclusion and exclusion criteria definitively outlined?	√			
	Is the sample size large enough for sufficiently precise estimates?	√			
	Is the response rate large enough for sufficiently precise estimates?	√			
	Is the choice of population bias-free?		√		
	If a comparative study: Were participants randomized into groups? Were the groups comparable at baseline? If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?				√
	Was informed consent obtained?	√			
Section B: Data Collection	Are data collection methods clearly described?	√			
	If a face-to-face survey, were inter-observer and intra-observer bias reduced?				√
	Is the data collection instrument validated?			√	
	If based on regularly collected statistics, are the statistics free from subjectivity?				√
	Does the study measure the outcome at a time appropriate for capturing the intervention's effect?	√			
	Is the instrument included in the publication?		√		
	Are questions posed clearly enough to be able to elicit precise answers?			√	
Section C: Study Design	Were those involved in data collection not involved in delivering a service to the target population?	√			
	Is the study type / methodology utilized appropriate?			√	
	Is there face validity?			√	
	Is the research methodology clearly stated at a level of detail that would allow its replication?	√			
	Was ethics approval obtained?	√			
Section D: Results	Are the outcomes clearly stated and discussed in relation to the data collection?			√	
	Are all the results clearly outlined?	√			
	Are confounding variables accounted for?			√	
	Do the conclusions accurately reflect the analysis?			√	
	Is subset analysis a minor, rather than a major, focus of the article?				√
	Are suggestions provided for further areas to research?	√			
Is there external validity?		√			
<b>Calculation for section validity: (Y+N+U=T)</b> If Y/T <75% or if N+U/T > 25% then you can safely conclude that the section identifies significant omissions and that the study's validity is questionable. It is important to look at the overall validity as well as section validity.		<b>Calculation for overall validity: (Y+N+U=T)</b> If Y/T ≥75% or if N+U/T ≤ 25% then you can safely conclude that the study is valid.			
<b>Section A validity calculation: 4/6= 67% not valid</b> <b>Section B validity calculation: 4/7= 57% not valid</b> <b>Section C validity calculation: 2/5= 40% not valid</b> <b>Section D validity calculation: 2/5= 40% not valid</b>		<b>Overall validity calculation:</b> <b>12/23 = 52% not valid</b>			

EBL Critical Appraisal Checklist S15-Koenen, Karestan (2003)		Yes (Y)	No (N)	Unclear (U)	N/A
Section A: Population	Is the study population representative of all users, actual and eligible, who might be included in the study?		√		
	Are inclusion and exclusion criteria definitively outlined?	√			
	Is the sample size large enough for sufficiently precise estimates?	√			
	Is the response rate large enough for sufficiently precise estimates?	√			
	Is the choice of population bias-free?		√		
	If a comparative study: Were participants randomized into groups? Were the groups comparable at baseline? If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?				√
	Was informed consent obtained?			√	
	Section B: Data Collection	Are data collection methods clearly described?	√		
If a face-to-face survey, were inter-observer and intra-observer bias reduced?				√	
Is the data collection instrument validated?				√	
If based on regularly collected statistics, are the statistics free from subjectivity?					√
Does the study measure the outcome at a time appropriate for capturing the intervention's effect?				√	
Is the instrument included in the publication?			√		
Are questions posed clearly enough to be able to elicit precise answers?				√	
Were those involved in data collection not involved in delivering a service to the target population?		√			
Section C: Study Design	Is the study type / methodology utilized appropriate?	√			
	Is there face validity?			√	
	Is the research methodology clearly stated at a level of detail that would allow its replication?	√			
	Was ethics approval obtained?			√	
	Are the outcomes clearly stated and discussed in relation to the data collection?	√			
Section D: Results	Are all the results clearly outlined?	√			
	Are confounding variables accounted for?			√	
	Do the conclusions accurately reflect the analysis?	√			
	Is subset analysis a minor, rather than a major, focus of the article?				√
	Are suggestions provided for further areas to research?	√			
	Is there external validity?		√		
<b>Calculation for section validity: (Y+N+U=T)</b> If Y/T <75% or if N+U/T > 25% then you can safely conclude that the section identifies significant omissions and that the study's validity is questionable. It is important to look at the overall validity as well as section validity.		<b>Calculation for overall validity: (Y+N+U=T)</b> If Y/T ≥75% or if N+U/T ≤ 25% then you can safely conclude that the study is valid.			
<b>Section A validity calculation: 3/6= 50% not valid</b> <b>Section B validity calculation: 2/7= 29% not valid</b> <b>Section C validity calculation: 3/5= 60% not valid</b> <b>Section D validity calculation: 3/5= 60% not valid</b>		<b>Overall validity calculation:</b> <b>11/23 = 48% not valid</b>			

EBL Critical Appraisal Checklist S16-Ouimette, Paige (2011)		Yes (Y)	No (N)	Unclear (U)	N/A
Section A: Population	Is the study population representative of all users, actual and eligible, who might be included in the study?		√		
	Are inclusion and exclusion criteria definitively outlined?	√			
	Is the sample size large enough for sufficiently precise estimates?	√			
	Is the response rate large enough for sufficiently precise estimates?	√			
	Is the choice of population bias-free?		√		
	If a comparative study: Were participants randomized into groups? Were the groups comparable at baseline? If groups were not comparable at baseline, was incomparability addressed by the authors in the analysis?				√
	Was informed consent obtained?			√	
Section B: Data Collection	Are data collection methods clearly described?	√			
	If a face-to-face survey, were inter-observer and intra-observer bias reduced?				√
	Is the data collection instrument validated?			√	
	If based on regularly collected statistics, are the statistics free from subjectivity?				√
	Does the study measure the outcome at a time appropriate for capturing the intervention's effect?	√*			
	Is the instrument included in the publication?		√		
	Are questions posed clearly enough to be able to elicit precise answers?	√**			
Section C: Study Design	Were those involved in data collection not involved in delivering a service to the target population?	√			
	Is the study type / methodology utilized appropriate?			√	
	Is there face validity?			√	
	Is the research methodology clearly stated at a level of detail that would allow its replication?	√			
	Was ethics approval obtained?	√			
Section D: Results	Are the outcomes clearly stated and discussed in relation to the data collection?	√			
	Are all the results clearly outlined?	√			
	Are confounding variables accounted for?			√	
	Do the conclusions accurately reflect the analysis?			√	
	Is subset analysis a minor, rather than a major, focus of the article?				√
	Are suggestions provided for further areas to research?	√			
Is there external validity?		√			
<b>Calculation for section validity: (Y+N+U=T)</b> If Y/T <75% or if N+U/T > 25% then you can safely conclude that the section identifies significant omissions and that the study's validity is questionable. It is important to look at the overall validity as well as section validity.		<b>Calculation for overall validity: (Y+N+U=T)</b> If Y/T ≥75% or if N+U/T ≤ 25% then you can safely conclude that the study is valid.			
<b>Section A validity calculation: 3/6= 50% not valid</b> <b>Section B validity calculation: 4/6= 67% not valid</b> <b>Section C validity calculation: 3/5= 60% not valid</b> <b>Section D validity calculation: 1/4= 25% not valid</b>		<b>Overall validity calculation:</b> <b>11/21 = 52% not valid</b>			

### **Appendix IV: JBI Data Extraction Tools**

#### **JBI Data Extraction Tool from the JBI Qualitative Assessment and Review Instrument (QARI)**

JBI Data Extraction Form for Interpretive and Critical Research

Methodology

Method

Phenomena of Interest

Setting

Geographical

Cultural

Participants

Data Analysis

Authors Conclusion

Reviewers Comments

Complete (Yes/No)

#### **JBI Data Extraction Tool from the JBI Meta Analysis of Statistics Assessment and Review Instrument (MAStARI)**

JBI Data Extraction Form for Descriptive/Case Series Studies

Method

Setting

Participants

# Participants

Interventions

Authors Conclusion

Reviewers Comments

Complete (Yes/No)

*Source:* Audrey, Klainin, & Creedy, n.d.

### Appendix V: Systematic Review Selected Studies

Report #	Last Name	First Name	Year	Title	Journal
1	Murphy	Dominic	2014	Exploring positive pathways to care for members of the UK Armed Forces receiving treatment for PTSD: a qualitative study	European Journal of Psychotraumatology
2	Jankovic	Jelena	2011	Reasons for Not Receiving Treatment in People With Posttraumatic Stress Disorder Following War	The Journal of Nervous & Mental Disease
3	Sayer	Nina	2009	A Qualitative Study of Determinants of PTSD Treatment Initiation in Veterans	Psychiatry
4	Topper	Kegan	2015	Posttraumatic Stress Disorder and Barriers to Care in Eastern Cape Province, South Africa	Journal of Traumatic Stress
5	Blais	Rebecca	2014	Posttraumatic Stress and Stigma in Active-Duty Service Members Relate to Lower Likelihood of Seeking Support	Journal of Traumatic Stress
6	Blais	Rebecca	2014	Unique PTSD Clusters Predict Intention to Seek Mental Health Care and Subsequent Utilization in US Veterans with PTSD Symptoms	Journal of Traumatic Stress
7	Spoont	Michele	2014	Impact of Treatment Beliefs and Social Network Encouragement on Initiation of Care by VA Service Users With PTSD	Psychiatric Services
8	Stecker	Tracy	2013	Treatment-Seeking Barriers for Veterans of the Iraq and Afghanistan Conflicts Who Screen Positive for PTSD	Psychiatric Services
9	Lehavot	Keren	2013	Barriers to Care for Women Veterans With Posttraumatic Stress Disorder and Depressive Symptoms	Psychological Services
10	Mittal	Dinesh	2013	Stigma Associated With PTSD: Perceptions of Treatment Seeking Combat Veterans	Psychiatric Rehabilitation Journal
11	Interian	Alejandro	2012	Readjustment Stressors and Early Mental Health Treatment Seeking by Returning National Guard Soldiers With PTSD	Psychiatric Services
12	Sayer	Nina	2007	Use of Mental Health Treatment Among Veterans Filing Claims for Posttraumatic Stress Disorder	Journal of Traumatic Stress
13	Fikretoglu	Deniz	2006	Posttraumatic Stress Disorder and Treatment Seeking in a Nationally Representative Canadian Military Sample	Journal of Traumatic Stress
14	Meis	Laura	2010	Relationship Adjustment, PTSD Symptoms, and Treatment Utilization Among Coupled National Guard Soldiers Deployed to Iraq	Journal of Family Psychology
15	Koenen	Karestan	2003	Posttraumatic Stress Disorder and Treatment Seeking in a National Screening Sample	Journal of Traumatic Stress
16	Ouimette	Paige	2011	Perceived Barriers to Care Among Veterans Health Administration Patients With Posttraumatic Stress Disorder	Psychological Services

**Appendix VI: Summary of Barriers and Facilitators by Author**

Study	Author	Barriers
3	Sayer, Nina	<p>1. Avoidance of Trauma-Related Feelings and Memories</p> <p>2. Values and Priorities That Conflict with Treatment-Seeking Pride in self-reliance Focus on job and family functioning</p> <p>3. Treatment-Discouraging Beliefs Providers won't understand or believe trauma Treatment is not helpful Treatment involves loss of control/autonomy Treatment is for those who are weak, crazy, or incompetent Treatment is only for extreme problems</p> <p>4. Health Care System Concerns VA and VA providers cannot be trusted VA has limited resources VA is for war-fighters from prior wars VA is for veterans with severe and visible disabilities Providers outside the VA do not have expertise in military-related PTSD</p> <p>5. Knowledge Barriers Lack of knowledge/understanding of PTSD or services Lack of knowledge that sexual trauma can cause PTSD</p> <p>6. Access Barriers VA enrollment process Perceived lack of eligibility for VA care without cost Time constraints Expense of treatment Distance and transportation</p> <p>7. Invalidating Post-Trauma Socio-Cultural Environment Societal rejection Negative homecoming experiences Withdrawal from social network or society Social network discouragement of help-seeking</p>
4	Topper, Kegan	<p>Most striking barriers: Stigma and a lack of knowledge regarding the nature and treatment of mental illness</p> <p>Seven most common barriers to seeking care: "long waiting times at the clinic" "receiving help from another source" "belief that the problem did not warrant professional treatment leading to coping on one's own" "belief that the problem would disappear by itself" "shame" "stigma," "lack of trust of health care professionals concerning client confidentiality" (p377)</p>
5	Blais, Rebecca	<p>Higher anticipated enacted stigma (AES) from family and friends was associated with lower likelihood of support seeking. PTSD symptoms, particularly dysphoria, are negatively associated with the likelihood of seeking support</p>

<b>Study</b>	<b>Author</b>	<b>Barriers</b>
8	Stecker, Tracy	Four categories of beliefs were associated with the decision to seek treatment, including: concerns about treatment; emotional readiness for treatment, stigma, and logistical issues
9	Lehavot, Keren	Affordability, health insurance (particularly outside the VA), and eligibility for care
10	Mittal, Dinesh	Stigma - "perceived stigmatizing attitudes on the part of the public, their families, and to some extent themselves, contributed to their initial resistance to seek treatment." (p.90) Receiving a label of mental illness one factor impeding help seeking
15	Koenen, Karestan	"Significantly endorsed barriers to treatment (from a list of 21 items): "afraid of what others might think" "not sure where to get help" "can't afford treatment"
16	Ouimette, Paige	Most significant barriers to VA health care (from a list of 25 items) were stigma-related, "specifically discomfort with help seeking and concerns about social consequences." (p. 219) Younger age was positively associated with greater perceptions of not fitting in to the VA.

		<b>Predictors</b>
6	Blais, Rebecca	Dysphoria severity uniquely and positively correlated with intention to seek mental health care Higher avoidance severity predicted lower treatment utilization
12	Sayer, Nina	Younger age, marriage, and dependence on public insurance were associated with mental health treatment use
13	Fikretoglu, Deniz	Results indicate that trauma-related (index traumatic event type, cumulative trauma exposure), demographic (marital status), enabling (income), and need (PTSD interference) factors predict treatment seeking in military members with PTSD, and that treatment seekers and non-treatment seekers are both comprised of distinct subgroups
14	Meis, Laura	PTSD symptom severity uniquely predicted greater odds of utilizing individual-oriented mental health services (p. 560). PTSD symptoms and relationship distress uniquely and jointly predict utilization of a range of mental health services, where supportive intimate relationships facilitate MH treatment utilization for soldiers with PTSD symptom (p. 560).
15	Koenen, Karestan	Beliefs about one's disorder were negatively associated with treatment readiness: "I don't have an anxiety disorder" and "I can handle it on my own." (p. 12) Predictors of treatment seeking (predisposing, enabling and need factors): enabling factors significantly associated with ever having been in mental health treatment included employment status, specifically being unemployed or disabled, and demonstrating more perceived and evaluated need (ex. more perceived need in terms of interference by symptoms in daily life)

<b>Factors</b>		
Encouraging help-seeking		
7	Spoont, Michele	Beliefs about treatment ("that they needed help for PTSD or other emotional problems") and social network factors, such as encouragement to seek treatment by others, affect engagement, i.e., the "odds of initiating mental health care are greater" (p.1?)
11	Interian, Alejandro	Readjustment stressors (marital, family, and employment) act as "motivators" to treatment seeking
Discouraging help-seeking		
2	Jankovic, Jelena	Five major and not mutually exclusive themes (why people did not receive treatment) were identified: <ul style="list-style-type: none"> <li>a. "need no help"</li> <li>b. "personal ways of coping"</li> <li>c. "negative attitude towards treatment"</li> <li>d. "comparative insignificance"</li> <li>e. and "external barriers"</li> </ul>

<b>Facilitators</b>		
1	Murphy, Dominic	Five themes emerged about how participants were able to access help: <ul style="list-style-type: none"> <li>a. having to reach a crisis point before accepting the need for help</li> <li>b. overcoming feelings of shame</li> <li>c. the importance of having an internal locus of control</li> <li>d. finding a psychological explanation for/understanding of their symptoms</li> <li>e. and having strong social support/well supported by their social networks</li> </ul>
3	Sayer, Nina	<ol style="list-style-type: none"> <li>1. Recognition and Acceptance of PTSD and Availability of Help</li> <li>2. Treatment-Encouraging Beliefs <ul style="list-style-type: none"> <li>Getting help is socially acceptable</li> <li>Other people's negative views do not matter</li> <li>Treatment is helpful</li> <li>The system and those encouraging help-seeking are trustworthy</li> </ul> </li> <li>3. System Facilitation <ul style="list-style-type: none"> <li>Procedures to reduce stigma, improve access, and promote PTSD recognition Veterans Service Officers promote help-seeking</li> <li>Primary care providers promote help-seeking</li> <li>Disability examiners promote help-seeking</li> </ul> </li> <li>4. Social Network Facilitation and Encouragement Spouses or partners <ul style="list-style-type: none"> <li>Other family member, veterans, non-veteran peers, employers</li> </ul> </li> </ol>