Understanding and Measuring Barriers to Help-Seeking after Trauma

Survivor-Centered Mixed Methods Validation Study

Doctoral Dissertation

Karen Birna Þorvaldsdóttir

University of Akureyri
Health Sciences
2022

Understanding and Measuring Barriers to Help-Seeking after Trauma

Survivor-Centered Mixed Methods Validation Study

Karen Birna Þorvaldsdóttir

Doctoral Dissertation

Health Sciences

Doctoral Committee:
Dr. Sigríður Halldórsdóttir, main supervisor

Dr. Denise M. Saint Arnault, co-supervisor
Dr. Rhonda M. Johnson, co-supervisor
Dr. Sigrún Sigurðardóttir, co-supervisor

**Háskólinn
á Akureyri**
University
of Akureyri

Að skilja og mæla hindranir þess að leita sér hjálpar eftir áfall

Þróun á mælitæki með blönduðum aðferðum

Karen Birna Þorvaldsdóttir

Doktorsritgerð

Heilbrigðisvísindi

Doktorsnefnd:
Dr. Sigríður Halldórsdóttir, aðalleiðbeinandi

Dr. Denise M. Saint Arnault, leiðbeinandi
Dr. Rhonda M. Johnson, leiðbeinandi
Dr. Sigrún Sigurðardóttir, leiðbeinandi

Háskólinn á Akureyri
University of Akureyri

Dedication

This thesis is dedicated to the survivors interviewed and surveyed through the project who trusted and inspired me with their stories of hurt, loss, strength, and hope for a future of trauma recovery.

— Recovery begins with my voice —

Acknowledgments

Throughout my doctoral journey, I have received tremendous support, help, and inspiration.

First, I would like to express my deepest thanks to the women participating in the studies who trusted and shared their experiences and perspectives with me. Their strength and hope for a future of trauma recovery inspired me and this work.

To all of my amazing supervisors, Dr. Sigríður Halldórsdóttir, Dr. Denise M. Saint Arnault, Dr. Rhonda M. Johnson, and Dr. Sigrún Sigurðardóttir, whom I have learned so much from, I am deeply grateful. Thank you for your excellent guidance; for supporting and inspiring me every step of the doctoral journey. For sharing your wisdom, experiences, and insights with me. For helping me up when I was kicked down. For believing in me and pushing me to strive for excellence. For encouraging my independence, supporting my changes of plans, and trusting me. Allowing me to grow. I am also immensely thankful to Dr. Yvonne Höller and Dr. Anke Lipinsky for their valuable insights and advice. I thank you all for being great academic role models; your constructive feedback and discussions challenging my thinking brought my work to a higher level and profoundly impacted me as a scholar and a person.

I thank the University of Akureyri, the School of Health Sciences, the Centre for Doctoral Studies, the University of Michigan, the Michigan Mixed Methods Program, and the Fulbright Visiting Scholar Program for providing me with a supportive, challenging, and inspiring academic and learning environment. Special thanks to Dr. Guðrún Rósa Þórsteinsdóttir for always welcoming me and my many questions with open arms; I am deeply grateful for our talks and your valuable support in a time of need.

To my mom, who has been there for me all this time, believing in me, and perhaps overly invested, going with me through the rollercoaster of emotions that this journey has been. Thank you for always being my rock.

Finally, to my dad, you give me strength every day; because I know I never walk alone. I hope you are proud.

Ágrip

Markmið: Meginmarkmið ritgerðarinnar var að þróa íslenskt mælitæki sem metur hindranir þess að leita sér hjálpar eftir áfall. Nánar tiltekið að þýða og staðfæra *Barriers to Help-Seeking for Trauma Scale* (BHS-TR) og kanna próffræðilega eiginleika íslenskrar útgáfu BHS-TR.

Aðferðir: Blandaðar aðferðir voru notaðar í ferli sem fól í sér þýðingu–bakþýðingu, rýni sérfræðihóps, forprófun með ítarviðtölum (rannsókn I), áreiðanleika- og réttmætisathugun (rannsókn II) og samþættingu eigindlegra og megindlegra gagna (rannsókn III). Þátttakendur voru alls 154 íslenskar konur sem höfðu verið beittar ofbeldi í nánu sambandi, þar af 17 í eigindlega hlutanum og 137 í megindlega hlutanum.

Niðurstöður: BHS-TR var þýtt úr ensku yfir á íslensku og sýndu niðurstöður *rannsóknar I* samhljóm íslensku útgáfunnar við upprunalegu útgáfuna. Forprófun á BHS-TR meðal þolenda sýndi fram á mikilvægi mælitækisins og veitti vísbendingar um innihaldsréttmæti þess. Þó voru nokkrar hindranir sem þátttakendum fannst vanta á mælitækið. Í *rannsókn II* voru ný atriði þróuð byggð á reynslu þátttakenda; allt hindranir sem höfðu haft veruleg áhrif á að þær leituðu sér ekki hjálpar og tengdust því að vilja ekki sýna veikleika, hræðast berskjöldun og vernda sig frá því að endurupplifa áfallið. Próffræðilegir eiginleikar mælitækisins héldust að mestu í íslenskri þýðingu. Innri áreiðanleiki var góður (α = 0.87) og veittu niðurstöðurnar sterkar vísbendingar um gott hugsmíðaréttmæti, samleitniréttmæti og aðgreinandi réttmæti. Samþætting eigindlegra og megindlegra gagna í *rannsókn III* leiddi í ljós mikið samræmi milli

niðurstaðna sem gaf fyllri mynd af réttmæti íslenska BHS-TR. Ósamræmi milli eigindlegra og megindlegra niðurstaðna varðandi atriði á mælitækinu var kannað í gagnrýnni greiningu sem leiddi í ljós mögulegar umbætur svo mælitækið geti náð sem best utan um þær hindranir sem þolendur á Íslandi mæta.

Ályktanir: Heildarniðurstöður rannsóknanna benda til þess að íslenska BHS-TR sé áreiðanlegt, réttmætt og áfallamiðað mælitæki. Niðurstöðurnar sýna fram á gagnsemi notkunar blandaðra aðferða fyrir þróun og staðfærslu mælitækja. BHS-TR, sem er fyrsta sinnar tegundar á Íslandi, er framlag til rannsókna og þjónustu við þolendur ofbeldis og áfalla hér á landi. Það getur veitt mikilvægar upplýsingar sem hægt er að nýta til þess að takmarka hindranir og auðvelda þolendum að leita sér hjálpar.

Lykilorð: Hindranir að hjálp; Áföll; Ofbeldi í nánu sambandi; Þýðing og staðfærsla; Blandaðar aðferðir

Abstract

Aim: The overarching aim of this thesis was to create the first Icelandic trauma-specific and survivor-centered help-seeking barriers instrument. More specifically, to cross-culturally adapt, validate, and legitimate the Barriers to Help-Seeking for Trauma Scale (BHS-TR) among intimate partner violence (IPV) survivors in Iceland.

Methods: A combined etic–emic strategy using mixed methods was employed, involving forward–backward translation, expert committee review, cognitive interviews with 17 IPV survivors (study I), psychometric examination in a sample of 137 IPV survivors (study II), and legitimation strategy of integration (study III). Data were analyzed using qualitative content analysis, statistical analysis, and joint display analysis.

Results: The translation and adaptation process of *study I* led to an Icelandic version, which appears to be semantically and conceptually equivalent to the original BHS-TR; additionally, the findings provided evidence of the relevance and content-related validity. Still, the Icelandic survivors mentioned a few but significant barriers missing from the scale. The new BHS-TR items developed in *study II* based on the participants' lived experiences represented barriers related to viewing help-seeking as a sign of weakness and safeguarding efforts. The psychometric evaluation of the scale supported an eight-factor structure which, when grouped, comprised two indices of Structural and Internal Barriers. Further, the scale's internal consistency was high ($\alpha = 0.87$), and the

results provided evidence of convergent, discriminant, and known-groups validity. The integration of the qualitative and quantitative data in *study III* revealed mainly complementarity findings, strengthening the BHS-TR's overall legitimation evidence. Divergent findings involved items that were significant help-seeking barriers in the survivors' narratives, whereas factor analysis indicated their removal. These items were critically evaluated in a spiraling process that supported the barriers' influence, illuminated core issues, and guided potential refinements.

Conclusions: The overall findings indicate that the Icelandic BHS-TR is a culturally sensitive, trustworthy, and valid instrument but deserves continuing attention for refinements. This thesis contributes to the growing literature supporting the advantages of applying mixed methods for instrument development and cross-cultural adaptation. The BHS-TR can be used to provide valuable information that may guide the development of evidence-based interventions to break down barriers and help survivors find their way to trauma recovery.

Keywords: Help-Seeking Barriers; Trauma Recovery; Intimate Partner Violence; Cross-Cultural Adaptation and Validation; Mixed Methods Research

Contents

List of Abbreviations

GBV:	Gender-Based Violence
EIGE:	European Institute for Gender Equality
WHO:	World Health Organization
IPV:	Intimate Partner Violence
IPVAW:	Intimate Partner Violence Against Women
EU:	European Union
FRA:	European Union Agency for Fundamental Rights
DSM-5:	Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition)
PTSD:	Post-Traumatic Stress Disorder
SOC:	Sense of Coherence
SAMHSA:	Substance Abuse and Mental Health Services Administration
ATSPPHS:	Attitudes Toward Seeking Professional Psychological Help Scale
BHS-TR:	Barriers to Help-Seeking for Trauma Scale
CDHS:	Cultural Determinants of Help-Seeking Theory
AERA:	American Educational Research Association
APA:	American Psychological Association
NCME:	National Council on Measurement in Education
MiStory:	Multicultural Study of Trauma Recovery
PHQ-8:	Patient Health Questionnaire-8
PCL-5:	Post-Traumatic Stress Disorder Checklist for DSM-5
BTMI:	Beliefs Toward Mental Illness Scale
SOC-13:	Sense of Coherence Scale-13
QCA:	Qualitative Content Analysis
PCA:	Principal Component Analysis
MDS:	Multidimensional Scaling

List of Figures

List of Tables

Overview of Original Articles

This doctoral thesis is based on the following original publications, which will be referred to in the text by their Roman numerals:

I. Thorvaldsdottir, K. B., Halldorsdottir, S., Johnson, R. M., Sigurdardottir, S., & Saint Arnault, D. M. (2021). Adaptation of the Barriers to help-seeking for trauma (BHS-TR) scale: A cross-cultural cognitive interview study with female intimate partner violence survivors in Iceland. *Journal of Patient-Reported Outcomes, 5*(22), 1–13. https://doi.org/10.1186/s41687-021-00295-0

II. Thorvaldsdottir, K. B., Halldorsdottir, S., & Saint Arnault, D. M. (2022). Understanding and measuring help-seeking barriers among intimate partner violence survivors: Mixed methods validation study of the Icelandic Barriers to help-seeking for trauma (BHS-TR) scale. *International Journal of Environmental Research and Public Health, 19*(1), 1–21. https://doi.org/10.3390/ijerph19010104

III. Thorvaldsdottir, K. B., Halldorsdottir, S., & Saint Arnault, D. M. (2022). Using mixed methods integration to evaluate the structure of help-seeking barriers scale: A survivor-centered approach*. International Journal of Environmental Research and Public Health, 19*(7), 1–21. https://doi.org/10.3390/ijerph19074297

All articles are re-printed with the kind permission of the publishers.

Additional publication related to the thesis:

– Rodelli, M., Koutra, K., Thorvaldsdottir, K. B., Bilgin, H., Ratsika, N., Testoni, I., & Saint Arnault, D. M. (2022). Conceptual development and content validation of a multicultural instrument to assess the normalization of gender-based violence against women. *Sexuality & Culture, 26*, 26–47. https://doi.org/10.1007/s12119-021-09877-y

Declaration of Contribution

Karen Birna Thorvaldsdottir (KBT), Sigridur Halldorsdottir (SH), Denise M. Saint Arnault (DMSA), Rhonda M. Johnson (RMJ), and Sigrun Sigurdardottir (SS) contributed to the planning, designing, and implementation of this doctoral thesis.

Study I: KBT, SH, DMSA, RJ, and SS were involved in the study design. KBT and SH obtained ethical approval. Literature search, data collection, and data analysis were performed by KBT, supervised by SH and DMSA. KBT applied for funding under the supervision of SH. The first draft of the manuscript was written by KBT, and SH, DMSA, RJ, and SS critically revised it. All authors read and approved the published version of the manuscript.

Study II: KBT, SH, and DMSA were involved in the study design. KBT and SH obtained ethical approval. Literature search, data collection, and data analysis were performed by KBT, supervised by SH and DMSA. KBT applied for funding under the supervision of SH and DMSA. The first draft of the manuscript was written by KBT, and SH and DMSA critically revised it. All authors read and approved the published version of the manuscript.

Study III: KBT, SH, and DMSA were involved in the study design. KBT and SH obtained ethical approval. Literature search, data collection, and data analysis were performed by KBT, supervised by SH and DMSA. KBT applied for funding under the supervision of SH and DMSA. The first draft of the manuscript was written by KBT, and SH and DMSA critically revised it. All authors read and approved the published version of the manuscript.

Thesis: KBT wrote the thesis under the supervision of SH and DMSA. SH, DMSA, RJ, and SS reviewed and approved the final version of the thesis.

1 Introduction

1.1 Gender-Based Violence

Gender-based violence (GBV) is a public health crisis of pandemic proportions and one of the most prevalent human rights violations worldwide (European Institute for Gender Equality [EIGE], 2017; World Health Organization, 2021). *GBV* refers to harmful acts directed against an individual because of their biological sex or gender identity. It is deeply rooted in gender inequality and cultural norms that uphold male domination and female subordination. While people of all genders may experience GBV, it disproportionately impacts women-identifying individuals (EIGE, 2017; UN Women, 2020). Historically, violence against women has been accepted, ignored, and shrouded in a culture of silence; thus, in many parts of the world, not addressed, uncounted, and under-researched (García-Moreno, Zimmerman, et al., 2015; United Nations Population Fund, 2020).

Recent estimates from the World Health Organization (WHO), based on analysis of prevalence data from studies across 161 countries and areas conducted between 2000 and 2018, found that worldwide, nearly one in three women have experienced GBV in their lifetime (WHO, 2021b). A landmark multi-country study led by the WHO (2005) showed that women are more at risk of being subjected to violence in intimate relationships than anywhere else. To date, intimate partner violence (IPV) remains the most widespread form of violence against women, making it the most common form of GBV globally (UN Women, 2020; WHO, 2021b).

Intimate Partner Violence against Women

IPV has been defined as any behavior by a current or former intimate partner that causes physical, sexual, psychological, or economic harm, including physical and psychological aggression, sexual coercion, emotional abuse, and other controlling actions (EIGE, 2017; WHO, 2012). The most widely used approach for understanding the occurrence of IPV against women (IPVAW) is an ecological framework. It proposes that violence against women is a multifaceted phenomenon grounded in an interplay among factors at the individual, relationship, community, and societal levels operating in a mutually reinforcing way (Heise, 1998; UN Women, 2015; WHO, 2012).

Most IPVAW prevention interventions today utilize this framework, acknowledging the importance of taking into considerations factors at each of the ecological levels. These interventions seek to promote early education and challenge gender-inequitable attitudes; improve interpersonal communication skills and address gender-stereotypical roles within families; promote women's empowerment and strengthen their rights; reform discriminatory laws and policies, eliminate gender discrimination in institutions, and transform social norms that foster and perpetuate violence against women. In implementing such interventions, it is urgent to work simultaneously to prevent IPV from happening and ensure that those suffering from it have access to comprehensive survivor-centered services and receive the support they need (UN Women, 2015; WHO 2019; WHO, 2021b).

Prevalence of IPVAW

Estimates from WHO indicate that the lifetime prevalence of IPVAW ranges from 16% to 37%, depending on the region, with the global average at 27%; indicating that up to 753 million ever married or partnered women had been subjected to physical or sexual violence, or both, at the hands of an intimate

partner. Due to a lack of agreement on conceptualizing psychological IPV and limited standardized measures, estimates on that form, including emotional abuse and coercive control, could not be reported (WHO, 2021b). One of the most extensive studies in this regard in Europe, among 42,000 women across the 28 European Union (EU) Member States, found that the average lifetime prevalence of physical and/or sexual IPV across the countries was 22%, ranging from 13% to 32%. Furthermore, the average lifetime prevalence of psychological IPV was 43%, ranging from 31% to 60% (EU Agency for Fundamental Rights [FRA], 2014).

This literature review will focus on IPVAW in the Nordic countries in general and Iceland in particular. Thus, when available, evidence on the Nordic context will be highlighted. In the EU study mentioned above, the prevalence of physical and/or sexual IPV and psychological IPV, respectively, was in Denmark (32%/60%), Finland (30%/53%), and Sweden (28%/51%). Hence, among the highest of the EU countries (FRA, 2014). In Iceland (a non-EU member), a national survey on violence against women showed that of the 2,050 women participating, 22.4% had at some point in their lives experienced physical and/or sexual IPV (Karlsdóttir & Arnalds, 2010). Unfortunately, other types of IPV were not measured in that study. Similar results were found in a recent Icelandic study amongst nearly a third of the country's entire adult female population, where about 22% of the women who had been subjected to violence in their lifetime reported that it was at the hands of an intimate partner (Guðmundsdóttir, 2022).

Consequences on Health and Well-Being

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), a *traumatic event* is defined as exposure to actual or threatened death, serious injury, or sexual violence (American Psychiatric Association, 2013). IPV

is a form of *interpersonal trauma*, i.e., the direct result of actions by another person, and often includes a series of traumatic events that repeatedly occur over an extended period of time (Pill et al., 2017). A review of the WHO world mental health surveys in 24 countries (n = 68,894) showed that of the 29 trauma types assessed, interpersonal traumas carried the highest post-traumatic stress disorder (PTSD) risk, and IPV had the highest PTSD burden (Kessler et al., 2017). One reason for this may be related to the devastating betrayal within IPV (Lutwak, 2018; Platt et al., 2009; Tirone, 2021). *Betrayal trauma* refers to a trauma perpetrated by someone with whom the survivor is close to, reliant upon, and supposed to trust (Freyd et al., 2007). Betrayal trauma theory (Freyd, 1996; Freyd et al., 2007) is an approach to conceptualizing trauma that emphasizes the role of social relationships in understanding post-traumatic outcomes. Freyd (1999, 2001) hypothesized that separate clusters of post-traumatic symptoms arise from two independent dimensions of harm (life threat/terror and social betrayal) and that the most severe traumas involve high levels of both, which later studies have supported (Kelly et al., 2012; Marriott et al., 2016; Martin et al., 2013; Tang & Freyd, 2012; Wills et al., 2022).

In addition to PTSD, the high prevalence of various adverse health outcomes associated with IPV is well documented. These include physical injuries, somatic symptoms, depression, anxiety disorders, substance abuse, eating disorders, and suicide ideation (Bacchus et al., 2018; Dutton et al., 2006; García-Moreno et al., 2013; Sigurdardottir & Halldorsdottir, 2021). This suffering is associated with functional impairment, difficulties forming new healthy intimate relationships, social isolation, a low sense of coherence (SOC), and substantially reduced quality of life (Alsaker et al., 2018; Daneshvar, 2020;

Hisasue et al., 2020; St. Vil et al., 2021), even years after leaving the abusive relationship (Bonomi et al., 2006; Saint Arnault & O'Halloran, 2016).

The Nordic Gender (In)Equality Context

The Nordic countries are often considered the most gender-equal countries in the world (EIGE, 2021; United Nations, 2020). According to the Global Gender Gap Index, Iceland had in 2021 closed 89.2% of its overall gender gap, holding the top spot for 12 years in a row (World Economic Forum, 2021). While critical domains are used to measure gender equality (e.g., health and survival, educational access and attainment, economic participation, political power, and time allocation), these indices do not take GBV into account (EIGE, 2021; United Nations, 2020; World Economic Forum, 2021). As noted, previous research has reported a high prevalence of IPVAW in Iceland and other Nordic countries. The coexistence of high country-level gender equality and high rates of violence against women is a surprising finding to many (Gracia & Merlo, 2016; Hardesty & Ogolsky, 2020; Wemrell et al., 2019). Further, at odds with earlier population-based surveys at the global level, suggesting that when societal norms become more gender-egalitarian, IPVAW decreases (Heise & Kotsadam, 2015).

The complex relationship between gender equality and violence against women is widely recognized, and more research is needed for better understanding (Humbert et al., 2021; Ivert et al., 2020; Kearns et al., 2020; Wemrell et al., 2019). Still, several possible explanations for high IPVAW rates in the Nordic countries have been proposed, including greater awareness of violence in the society, backlash effects, high prevalence of union formation and dissolution, different alcohol consumption patterns, measurement issues, and reporting biases (Gracia & Merlo, 2016; Gracia et al., 2019; Humbert et al., 2021; Permanyer & Gomez-Casillas, 2020; Wemrell et al., 2019). A commonly

mentioned explanation is that Nordic survivors might be more empowered and willing to talk about and report the violence as IPVAW is less normalized or tolerated in Nordic societies than in many other countries (EIGE, 2017; FRA, 2014). Regardless, this 'higher disclosure' explanation has been challenged (Gracia & Merlo, 2016; Wemrell et al., 2021), and for example, Gracia and Merlo (2016) pointed out evidence of lower levels of IPV disclosure to the police among women in Nordic countries compared to other EU countries. Other studies support this claim, indicating that only a fraction of Nordic women who have been victimized by an intimate partner seek help from the police (Andersson et al., 2014; Bergsdóttir et al., 2020; Grøvdal, 2019). Help-seeking after IPV is however more than reporting the violence and getting help leaving the abusive situation.

1.2 Seeking Help after IPV

The majority of the IPVAW help-seeking literature to date focuses on escaping the violence and attending to the immediate harm caused, primarily on seeking formal help, e.g., women's shelters, the police, or medical services (Cho et al., 2021; Lelaurain et al., 2017; Wolf et al., 2003). While these studies are critical, it is essential to move beyond the often first steps of the help-seeking journey to an increased focus on survivors' pathways for trauma recovery (Heywood et al., 2019; Lelaurain et al., 2017; Sinko, Goldner, et al., 2021). Help-seeking after IPV is a complex journey involving a series of meaning-making judgments, socially engaged and culturally informed actions (Liang et al., 2005; Saint Arnault, 2018; Schreiber et al., 2009), and the road to recovery is often challenging (Bryngeirsdottir & Halldorsdottir, 2022; Flasch et al., 2017; Melgar Alcantud et al., 2021).

Help-seeking behavior has been defined as a process prompted by the perception of need or problem and is characterized by problem-focused

intentional action that involves interpersonal interaction (Cornally & McCarthy, 2011). However, others have argued that help-seeking is broader and may also involve intrapersonal, lifestyle, and spiritual actions, defining it as any attempt to mitigate or eliminate distress and maximize wellness (Saint Arnault, 2009; Saint Arnault, 2018; Sinko, Goldner, et al., 2021). Because help-seeking occurs in a social and cultural context and involves culturally based meaning-making (Sinko, Burns, et al., 2021), examination of cultural differences and similarities in help-seeking can be useful in understanding Icelandic IPV survivors' recovery journey.

Cultural Influences on Help-Seeking

Across the literature, culture has been defined in numerous different ways. Seventy years ago, Kroeber and Kluckhohn (1952) famously found 164 definitions of culture, and more recent reviews indicate that the number continues to increase (Braithwaite et al., 2017; Napier et al., 2014; Tarasa et al., 2009). In Tarasa and colleagues' (2009) review, they found that while the existing definitions at that time varied considerably, it was generally agreed that culture is a complex multi-level construct; is shared among people belonging to a group or society; is formed over a relatively long period of time; and is relatively stable. In 2014, the Lancet Commission on Culture and Health, which brought together experts from different fields, including anthropologists, social scientists, and medical professionals, defined *culture* as: "the shared, overt and covert understandings that constitute conventions and practices, and the ideas, symbols, and concrete artifacts that sustain conventions and practices, and make them meaningful" (Napier et al., 2014, p. 1610).

Cultures are systems of knowledge and practice that give people's lives purpose, meaning, and identity influence every aspect of the human

experience (Kirmayer et al., 2014). Culture internalized as a set of perspectives, proclivities, and motivations underlies human behavior (Saint Arnault & Sinko, 2021; Williams, 1995), including help-seeking. There is a large body of evidence on the impact of culture on health and illness; the perception of it, the explanations for it, and the behavioral options to optimize health or ameliorate suffering (Hernandez & Gibb, 2020; Kirmayer et al., 2014; Kleinman et al., 2006; Saint Arnault, 2018). Notably, there is far less research on how cultural influences affect trauma recovery, especially how culture silences the sufferer (Sinko, Burns, et al., 2021).

Seeking Help for Trauma Recovery

In her influential work, Herman (1997) theorizes that there are three stages of *trauma recovery*: establishing safety, remembrance and mourning, and reconnection. Building on Herman's work, focusing on the final stage, Sinko and Saint Arnault's (2020) analysis of the nature of recovery among GBV survivors revealed three main objectives: reconnecting with the self, others, and the world. Similarly, a recent review that synthesized the qualitative literature to date found that healing after GBV was composed of trauma processing and reexamining, managing negative states, rebuilding the self, connecting with others, and regaining hope and power. Moreover, a key finding was that the recovery journey among survivors is a nonlinear, iterative experience that requires courage, patience, and active engagement (Sinko, James, et al., 2021).

Help-seeking for trauma recovery can include a wide range of informal and formal sources of help, including seeking advice, social and emotional support from friends and family, traditional healing, spiritual guidance, and seeking treatment from medical or mental health providers (Liang et al., 2005; Melgar Alcantud et al., 2021; Saint Arnault & Zonp, 2022). In addition to

engaging in diverse self-care, lifestyle, and social actions that survivors hope can increase meaning and life satisfaction, strengthen their relationships, and improve overall health and well-being (Sinko, Goldner, et al., 2021; Sinko, James, et al. 2021).

Rates of Help-Seeking

Despite the high rates of adverse outcomes related to IPV, previous research has shown that help-seeking among survivors is low. Many survivors never disclose the violence to anyone and those who do mainly choose informal sources and are substantially less likely to seek professional help from formal sources, even despite their perceived need for such support (Cho et al., 2020; Goodson & Hayes, 2021; Lövestad et al., 2021; WHO, 2005). These findings may reflect the limited availability or accessibility of services for abused women in some countries. However, low rates of formal help-seeking are also common in countries that are relatively well supplied with resources for survivors (Barrett et al., 2020; Fanslow & Robinson, 2010; FRA, 2014). The Nordic countries included (Andersson, 2014; Lövestad et al., 2021; Ministry of Welfare, 2012), renowned for their universal welfare-state model with a broad scope of public social and healthcare services emphasizing equal accessibility (Nordic Council of Ministers, 2020).

The earlier mentioned extensive EU study showed that the prevalence of IPV women survivors seeking help after the most severe physical violence incident was: health centers or other healthcare institutions (15%), police (14%), hospitals (11%), legal services (10%), social services (5%), victim support organizations (4%), and women's shelters (3%). While help-seeking was low in all the 28 countries, the rates varied widely across the countries. The authors of that study concluded that socioeconomic status or gender equality indicators did not adequately explain these differences, surmising culture to

play a key role (FRA, 2014). Studies on help-seeking among IPV survivors in Iceland are scant. Nonetheless, one survey found that almost 80% of the women who had been subjected to IPV did not seek help from agencies or services available for survivors. Half of them had either told a friend or a close family member about the violence, and around 18% of the women did not seek help from any formal or informal source (Karlsdóttir & Arnalds, 2010).

It should be pointed out that a significant body of international literature suggests that women with a history of IPV use healthcare services more than non-abused women, especially primary care and emergency departments (Bonomi et al., 2009; Daoud et al., 2020; García-Moreno, Zimmerman, et al., 2015). Still, these women rarely disclose the violence and often do not receive the support and appropriate care they need (Heron & Eisma, 2021; McCloskey et al., 2006; Palmieri & Valentine, 2021). A study in Iceland showed that the number of new hospital visits due to IPV at the National University Hospital between 2005–2014 was in total 1454, and the prevalence was 1.69 visits per 1000 women in the capital area. Yet, as Jónasdóttir and colleagues acknowledge, these numbers only represent the visits where women disclosed that their injuries were caused by an intimate partner and, therefore, most likely display only the tip of the iceberg (Jónasdóttir et al., 2021).

Screening for IPV in the Health Sector

One important space where one might expect disclosure to occur is indeed within the healthcare system, and the health sector has a vital role in a multisectoral response to IPVAW (Alvarez et al., 2017; García-Moreno, Hegarty, et al., 2015; WHO, 2013). While identifying survivors is essential, there has long been debate about the effectiveness of screening for IPV in healthcare settings (Guček et al., 2016; Feder et al., 2006; Svavarsdottir et al., 2015; Taket et al., 2004). In many countries, governments and health

professional organizations have published clinician guidelines on identifying abused women, e.g., by performing universal screening, selective screening, routine inquiry, or case finding. Moreover, health professionals are increasingly instructed to undertake such screening per national health policies (García-Moreno, Hegarty, et al., 2015; O'Doherty et al., 2014). Yet, evidence on the effectiveness of IPV screening is insufficient (Klevens et al., 2012; Miller et al., 2021; O'Doherty et al., 2014), and clear that even with screening, many survivors experience hindrances that influence their capacity to disclose the violence (Heron & Eisma, 2021; O'Doherty et al., 2014). However, previous studies have found that disclosure is more likely if survivors are asked in a compassionate, nonjudgmental, and nondirective manner; and they feel safe and trust that confidentiality will be maintained (Feder et al., 2006; García-Moreno, Hegarty, et al., 2015).

It is important to note that detecting IPV is only the first step, and screening cannot be effective or safe unless followed by an appropriate response. The healthcare system needs to enable providers to address IPV and provide trauma-informed care. Regular training on how to ask and respond to IPV, standardized protocols and procedures, and referral networks must be in place (Alvarez et al., 2017; García-Moreno, Hegarty, et al., 2015; Palmieri & Valentine, 2021; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). Furthermore, there remains an urgent need for studies assessing the effectiveness of screening to focus on other outcomes than identification, e.g., by examining if screening leads to appropriate care, increased referral to support agencies, additional help-seeking, and services utilization, a decreased likelihood of further violence, and improved survivors' long-term health and well-being (Miller et al., 2021; O'Doherty et al., 2014; Wathen & MacMillan, 2012).

Barriers to Seeking Help

As we have seen, literature on low help-seeking rates indicates that IPV survivors experience hindrances to seeking help. That is consistent with other studies reporting that survivors are faced with a wide range of barriers on sociocultural, structural, interpersonal, and individual levels, e.g., normalization of violence, access challenges, fearing the consequences of disclosure, beliefs that IPV is a private matter, and self-blame (Heron & Eisma, 2021; Overstreet & Quinn, 2013; Robinson et al., 2021; Rodelli et al., 2022).

Furthermore, studies have indicated that survivors with depression, PTSD, and low SOC face even more significant barriers as symptom burden and seeing the world as unpredictable and meaningless can make it more challenging to take action (Fleming & Resick, 2017; Hien & Ruglass, 2009; Saint Arnault & O'Halloran, 2016). The burden of mental illness stigma, e.g., concerns for negative stereotyping, status loss, and discrimination, is also a significant deterrent to help-seeking and service utilization (Clement et al., 2015; Dockery et al., 2015; Schreiber et al., 2009). Much of this literature is qualitative, and both quantitative and mixed methods studies examining help-seeking barriers among survivors are a needed addition. However, it appears there is a dearth of trauma or GBV-specific measures that assess barriers to seeking help.

1.3 Measuring Help-Seeking Barriers

Measurement has been defined as assigning numbers to observations in an effort to quantify phenomena (Kimberlin & Winterstein, 2008). In health, social, and behavioral sciences, these phenomena are often abstract concepts known as theoretical constructs. These constructs need to be operationalized in defined variables for the development of measurement instruments to

quantify these variables. *Instruments* are typically used to capture constructs, such as attitude, feeling, or behavior that cannot be captured in a single variable or item (Boateng et al., 2018; Kimberlin & Winterstein, 2008). The use of *self-report instruments* is widespread across various fields of empirical research. It refers to obtaining data using instruments, e.g., in surveys where participants are asked to report something about themselves and complete it themselves (Chan, 2008).

As the findings from the studies previously introduced demonstrate, help-seeking after trauma is a complex process influenced by an array of sociocultural, interpersonal, and individual factors. Help-seeking-related constructs can therefore be challenging to measure. Despite the rapidly growing research and intervention interest in help-seeking in the field of mental health, there appears to be no consensus on its definition or measurement (Divin et al., 2018; Rickwood & Thomas, 2012; Wei et al., 2015).

Existing Measures

A systematic review (Rickwood & Thomas, 2012) on how help-seeking for mental health problems has been conceptualized and measured in the field showed that of the 316 help-seeking studies included, overwhelming was descriptive, applied no conceptual framework (81%), and no psychometrically sound measures were routinely used. The most commonly applied conceptual framework was the Theory of Reasoned Action/Planned Behavior (Ajzen & Fishbein, 1980; Ajzen & Madden, 1986). Thereafter came the Behavioral Model of Health Services Utilization (Aday and Andersen, 1974; Andersen, 1995), the Stages of Help-Seeking Model (Rickwood et al., 2005), and the Network Episode Model (Pescosolido, 1992; Pescosolido & Boyer, 2010). A minority of the studies (31%) used a standardized measure, and the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPHS; Fischer &

Turner, 1970) was the most widely used standardized measure. In a scoping review on mental health related-measures, Wei and colleagues (2015) identified 35 help-seeking measures, of which only ten were validated. Most of the identified measures focused on attitudes towards help-seeking or intentions to seek help, and very few assessed actual help-seeking behaviors. The ATSPPHS was again the most used measure, and no reports on the psychometric properties of the help-seeking behaviors measures were found.

Most health behavior theories predict that attitudinal and intention variables are among the most proximal influences on behavior (Noar, 2004; Sheeran et al., 2017). However, empirical evidence is somewhat mixed. While there is support, many studies have also found the strength of associations between attitudes, intentions, and health behavior to be weak (Armitage & Conner, 2001; McDermott & Sharma, 2017; Sheeran et al., 2017; Steinmetz et al., 2016), and clear that attitudes and intentions do not necessarily translate into help-seeking actions (see Gulliver et al., 2012 for review). Still, self-report instruments measuring help-seeking attitudes and intentions are important, and for example, negative attitudes toward seeking help can serve as significant barriers to help-seeking (Fischer & Farina, 1995; Mackenzie et al., 2014; Ægisdóttir & Gerstein, 2009). It has been argued that the strength of barrier-based measures is that they are more tied to behavior than attitudinal measures (Clement et al., 2012). In a more recent review, help-seeking measures were classified into the common attitudes and intentions categories but added a specific barriers category that included five measures (Divin et al., 2018). Nevertheless, most of these measures solely focus on barriers to seeking formal help, primarily mental health treatment, and none are trauma-specific.

Barriers to Help-Seeking for Trauma Scale

The *Barriers to Help-Seeking for Trauma Scale* (BHS-TR) was developed from an existing self-report barriers measure, the Barriers to Seeking Care Scale used in the mental health supplement of the Ontario epidemiology study (Boyle et al., 1996). The original scale included barriers to service use for mental disorders. Besides Canada, these barriers have been examined in large population-based studies in the United States and the Netherlands and found relevant, despite differing healthcare systems in these countries (Sareen et al., 2007). Based on an international literature review about barriers to seeking help after trauma and findings from focus groups and individual interviews with American and Irish GBV survivors, the original scale was adapted for GBV survivorship and trauma recovery. Moreover, new items about shame, feeling frozen and confused, mistrust, perceived rejection, being afraid of the consequences of disclosure, and normalization were added, creating the BHS-TR (Saint Arnault & O'Halloran, 2016; Saint Arnault & Zonp, 2022).

While there has been qualitative research examining why GBV survivors do not seek help, Saint Arnault and colleagues' (2016, 2022) studies are among the first to propose a survivor-specific quantitative instrument to examine this phenomenon. The framework that guided the development of the BHS-TR was the Cultural Determinants of Help-Seeking (CDHS) theory, where *help-seeking* is defined as "the experiences, expectations, and interpretations that interact with structural variables, as well as context, to influence behavior aimed at reducing suffering and promoting health" (Saint Arnault, 2018, p. 163). The aim was to create a measure allowing for a wider variety of help needed than in most existing measures, prompting survivors to consider the possible types of help-seeking they wanted to try. Of course, professional psychological help is one of their options (Saint Arnault & Zonp, 2022). However, as noted, there

are many other help-seeking choices a person can try to ameliorate their distress and gain well-being, such as informal social support, self-care, and spiritual activities (Sinko, Goldner, et al., 2021). The BHS-TR scale has been found to be reliable, valid, and helpful in understanding some aspects of the GBV survivor's help-seeking journey (Saint Arnault & Zonp, 2022). BHS-TR is, to the best of the author's knowledge, the first trauma-specific and survivor-centered instrument that assesses barriers to help-seeking.

1.4 Translation and Cross-Cultural Adaptation

With the cross-cultural and international research expansion over the past years, researchers are increasingly turning their attention to best practices for instrument translation and adaptation (Beaton et al., 2000; International Test Commission, 2017). When researchers decide to translate and use a pre-existing measure developed in another country, they need to ensure that the target culture is relatively similar to the source one and that the construct being measured is functionally equivalent across the cultures. Still, when choosing this approach, researchers run the risk of incomplete coverage of the construct in the target culture (Lonner, 1985; Van de Vijver, 2015). Thus, to limit construct bias, a rigorous translation and cross-cultural adaptation methodology must be followed (Beaton et al., 2000; International Test Commission, 2017; Ægisdóttir et al., 2008).

Best Practices for Instrument Cultural Adaptation

Several principles, standards, and guidelines for translation and adaptation of instruments have been developed (e.g., Beaton et al., 2000; International Test Commission, 2017; Squires et al., 2013; Wild et al., 2005). There is a broad agreement that a multistep process employing qualitative and quantitative methods involving individuals with diverse expertise and experiences is

needed to produce a high-quality and valid translation target version that is equivalent to the source version. It is recognized that if measures are to be used in different countries, the items must not merely be translated well linguistically but also adapted culturally to maintain the content validity at a conceptual level across different cultures. Moreover, the new measure needs to be pretested with the target population, and researchers should ensure that it has demonstrated the measurement properties required for the intended use (Beaton et al., 2000; International Test Commission, 2017; Squires et al., 2013; Wild et al., 2005).

Emic and Etic Approaches

Traditionally, when investigating cultural influences on behavior, researchers have approached their topic from three different angles using indigenous, cultural, or cross-cultural approaches. The *emics* or factors unique to a culture are examined in the former two. Scholars using these approaches usually reject claims that constructs are universal, focusing on the local context and the meaning of constructs in the particular culture under study. In contrast, the *etics* or factors common across cultures are examined in the cross-cultural approach. Scholars using this approach assume the constructs exist in all the cultures studied, and the focus is on understanding similarities and differences across cultures (Brislin et al., 1973; Tanaka-Matsumi, 2019; Triandis, 2000; Ægisdóttir et al., 2008).

These approaches are often applied when translating and adapting pre-existing measures. In an etic strategy, when the cultures are relatively similar, and the construct is deemed functionally equivalent, the measure goes through mainly a literal translation, and the item content is not changed to a new context. However, if there is a concern with construct bias, an emic strategy might be required to make the measures more appropriate and

meaningful to the new culture. Then items are modified for wording and content, and even new items might be needed to be added to the measure (Brislin, 1986; Van de Vijver, 2015; Ægisdóttir et al., 2008).

Both strategies have strengths and weaknesses; the etic one may offer high levels of equivalence between the language versions allowing for a direct cross-cultural comparison. Still, researchers may fail to capture the culturally specific nuances of the construct, and highly likely that some aspects may be lost or not captured by the measure. The emic one offers a more culturally sensitive approach, but then cross-cultural comparison becomes more challenging and not as direct (Berry, 1989; Brislin, 1976; Ægisdóttir et al., 2008). Therefore, a combined etic–emic strategy has been recommended to counteract the weaknesses of both approaches. Then some items can be literally translated (potentially etic items), some required adaptation to the new context, and additional items unique to the target culture (emic) possibly developed. The adapted and potential new items may enhance cross-cultural validity, and for comparison, only shared items would be used (Brislin, 1983; Van de Vijver & Leung, 2021; Ægisdóttir et al., 2008).

Cross-Cultural Cognitive Interviewing

Cognitive interviewing, a psychologically oriented method for empirically studying how respondents mentally process and respond to survey questions (Willis, 2008), has emerged as an essential qualitative method for the pretesting and evaluation of self-report instruments. Its primary value is providing information to uncover potential issues with questions or items and offer recommendations for improvements (Beatty et al., 2020; Miller et al., 2014; Willis & Miller, 2011). However, since cognitive interviewing was derived from the cognitive aspects of the survey methodology movement (Tourangeau, 1984; Willis, 2005), the method has been criticized in the context

of cross-cultural research for lack of focus on sociocultural factors that can influence the survey response process, consistent with the understanding that cognitive processes do not operate within a black box but are shaped by persons' lived experiences (Ridolfo & Schoua-Glusberg, 2011; Willis & Miller, 2011).

Cross-cultural cognitive interviewing is a variant of standard cognitive testing that has increasingly been carried out in an effort to detect issues related to the translation of instruments and establish cultural equivalence (Willis, 2015). This extension of cognitive interviewing, an already interdisciplinary paradigm, has incorporated perspectives from sociology and anthropology (Gerber, 1999; Miller et al., 2014), with an increased emphasis on how members of different cultural groups interpret specific questions and instruments as a whole in the context of their unique viewpoints (Willis, 2015; Willis & Miller, 2011). Conducting such interviews has been shown to be a crucial step in the development of culturally sensitive instruments (Boer et al., 2018; Ingersoll-Dayton, 2011; Van de Vijver, 2015).

1.5 Instrument Validation

According to the widely used and well-established Standards for Educational and Psychological Testing, produced by the American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council on Measurement in Education (NCME), validity is the most fundamental consideration in developing and evaluating measures. Moreover, *validation* is defined as a process that "involves accumulating relevant evidence to provide a sound scientific basis for the proposed score interpretations" (AERA/APA/NCME, 2014, p. 11).

Establishing Evidence of Validity

The conceptualization and treatment of validity in the measurement field has shifted multiple times over the last decades (Campbell & Fiske, 1959; Cronbach & Meehl, 1955; Kane, 2001; Messick, 1988; Shepard, 1993). Today, it is widely accepted that validity is a unitary concept, and various sources of evidence are needed to evaluate it (AERA/APA/NCME, 2014). The term *validity* is often referred to as the extent to which an instrument measures what it claims to measure (Kimberlin & Winterstein, 2008), and according to the previously mentioned Standards, it is defined as "the degree to which evidence and theory support the interpretations of test scores for proposed uses of tests" (AERA/APA/NCME, 2014, p. 11). Validity requires that an instrument is reliable, and the validation process is in large part focused on minimizing measurement error. Moreover, validity evidence of an instrument is built over time, with validations taking place in various populations (Kimberlin & Winterstein, 2008).

In the validation process, the sources of evidence may illuminate different aspects of validity, but they do not represent distinct types of validity (AERA/APA/NCME, 2014). The "trinity" view of content–criterion–construct validity and further categorization or breakdown of validity has been challenged. Therefore, the use of historical nomenclature has been criticized by some researchers (AERA/APA/NCME, 2014; Goodwin & Leech, 2003). While respecting the unified nature of validity, others continue to use these terms or category labels for convenience and clarity (Boateng et al., 2018; Kimberlin & Winterstein, 2008; Onwuegbuzie et al., 2009; Streiner et al., 2015). For example, in the Meta-Validation Model (Onwuegbuzie et al., 2009), the developers combined the traditional notion of validity with Messick's (1989, 1995) conceptualization, thereby generating a re-conceptualization of validity. Although treated as a unitary concept, the model indicates that validity can be

subdivided into several areas of evidence: *Content-related validity* consists of face validity, item validity, and sampling validity. *Criterion-related validity* consists of concurrent validity and predictive validity. *Construct-related validity* consists of substantive validity, structural validity, comparative validity, outcome validity, and generalizability (Onwuegbuzie et al., 2009).

While most of these validity areas lend themselves to quantitative methods, Onwuegbuzie and colleagues showed that they could also be addressed with qualitative methods, creating the Meta-Framework for Instrument Development/Fidelity and Construct Validation (Onwuegbuzie et al., 2010). That continues to be used in the growing field of mixed methods validation (Daigneault & Jacob, 2014; Durham et al., 2011; Koskey et al., 2018). Another mixed methods approach, or the Transformativist Measurement Development Methodology (Sankofa, 2021), includes 'Trustworthiness Validation' as a crucial stage. The approach applies Whittemore's and colleagues (2001) widely used primary criteria for qualitative validity, also termed *trustworthiness*: authenticity, credibility, criticality, and integrity. Sankofa (2021) describes techniques to address the criteria, including data triangulation, expert panel, member checking, audit trail, and ethical considerations, in the context of scale construction.

Use of Mixed Methods for Validation

In a widely used definition based on a review of definitions, *mixed methods research* is defined as "type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration" (Johnson et al., 2007, p. 123). In the mixed methods research field, *meta-inferences* refer to inferences

stemming from both qualitative and quantitative findings integrated into a coherent whole (Onwuegbuzie & Johnson, 2006; Tashakkori & Teddlie, 2003).

One of the earliest examples of using multiple research methods for validation dates to the 1950s, with Campbell and Fiske's (1959) framework giving rise to methodological triangulation and arguing that the convergence of findings derived from more than one method would strengthen the evidence of validity. However, as innovative and valuable their framework has been, it is first and foremost quantitative. To date, in the instrument development and validation literature, construct validation is often conceived as mainly a quantitative endeavor (Daigneault & Jacob, 2014; Johnson et al., 2007; Luyt, 2012; Onwuegbuzie et al., 2010; Sankofa, 2021). When qualitative data are used, it is usually only granted a supplementary role to quantitative data, and often the methods are utilized in isolation rather than fully integrated (Daigneault & Jacob, 2014; Koskey et al., 2018; Luyt, 2012). Still, there is a growing literature on mixed methods validation. A few frameworks have been developed that place equal value on quantitative and qualitative methods, focusing on validity and trustworthiness, and emphasizing the integration or "mixing" of findings from both databases to inform validation evidence for a measure (Dellinger & Leech, 2007; Luyt, 2012; Onwuegbuzie et al., 2010; Sankofa, 2021).

The "fit" of data integration refers to the coherence of quantitative and qualitative findings (Fetters et al., 2013). Such assessment is likely to lead to four possible outcomes: *Confirmation* is when the findings are consistent with each other, supporting drawing the same conclusion from each. *Complementarity* is when the findings tell different but nonconflicting stories (reflecting different sides of the same coin). *Expansion* is when the findings diverge to a certain degree but, when combined, can expand insights.

Discordance is when the findings are inconsistent, contradictory, or disagree with each other (Fetters et al., 2013; Fetters & Molina-Azorin, 2017).

Legitimation

Mixed methods scholars have proposed that the concept *legitimation* should be used to refer to validity and quality in mixed methods studies because it takes into account both quantitative and qualitative research paradigms (Fetters & Molina-Azorin, 2017; Johnson & Christensen, 2017; Onwuegbuzie et al., 2011). It was coined by Onwuegbuzie and Johnson (2006), which further developed a legitimation typology to serve as a guide for those conducting mixed methods research—identifying possible legitimation threats and encouraging researchers to address them (when applicable) in order to ensure design quality and interpretive rigor yielding high-quality meta-inferences. The typology builds the Integrative Model of Quality (Tashakkori & Teddlie, 2006; Teddlie & Tashakkori, 2003) and is grounded on the notion that legitimation is not only an outcome but a continuous iterative, interactive, and dynamic process occurring throughout all stages of the research (Onwuegbuzie et al., 2011; Onwuegbuzie & Johnson, 2006). It includes different legitimation strategy types that have expanded over the years, currently counting 11 types: sample integration, inside-outside (emic–etic), weakness minimization, sequential, conversion, paradigmatic mixing, commensurability approximation, multiple validities, multiple stakeholders, integration, and pragmatic legitimation (Johnson & Christensen, 2017; Onwuegbuzie et al., 2011).

Recently a new type of legitimation was proposed to be added to the typology, 'Divergent Findings Legitimation' (Perez et al., 2022), stemming from the challenge researchers face when quantitative and qualitative findings diverge (Bustamante, 2019; Fetters et al., 2013; Pluye et al., 2009). Failure to

follow up on divergence can threaten legitimation, and this new type is about the extent to which researchers explore and learn from such findings (Perez et al., 2022).

1.6 Rationale for Thesis

Research on seeking help after IPV and other forms of GBV in Iceland is scant, notably the specific focus on trauma-related help-seeking and recovery trajectory. Furthermore, the unique aspects of culture that impact these processes among survivors in Iceland appear to be entirely missing. The international literature reviewed above demonstrates that despite the high prevalence of adverse health and trauma-related outcomes associated with IPV, help-seeking and service utilization among survivors is low in most countries. The existing Icelandic research indicates that Iceland is there no exception. Further exploration of the barriers that IPV survivors face is essential to better understand the gap between needing help and seeking help.

Currently, there is no self-report measure on barriers to seeking help after trauma available in Iceland. Therefore, this doctoral thesis aimed to create the first Icelandic trauma-specific and survivor-centered help-seeking barriers instrument. The following section lays out the thesis' specific aims. The rationale for choosing the BHS-TR was the scale's GBV survivorship and trauma recovery focus. The availability of such an instrument for research and practice in Iceland has value by providing information that can guide the development of evidence-based interventions to break down barriers and facilitate help-seeking among survivors.

This thesis is part of a larger international research project on help-seeking and recovery among GBV survivors, the Multicultural Study of Trauma

Recovery (MiStory). The MiStory network (https://mistory-traumarecovery.org/) is a research collaborative currently working in 15 countries around the world to better understand and use safe and trauma-informed methods that illuminate the interactions among cultural context, the self, gender, and trauma recovery. The vision of MiStory is a world where GBV is not tolerated, and survivors are empowered and supported. The mission is to expose, challenge, and eliminate the sociocultural underpinnings that support GBV and inhibit help-seeking and healing by its survivors. Research with this group has recently turned to the measurement arena because there is a dearth of culturally sensitive measures that can capture aspects of trauma recovery, including help-seeking.

2 Aims

The overarching aim of the doctoral thesis was to create the first Icelandic survivor-centered and trauma-specific help-seeking barriers instrument. More specifically, to use mixed methods to discover culturally specific barriers to help-seeking for IPV survivors in Iceland and to adapt, validate, and legitimate the BHS-TR scale. This work resulted in three independent, but interrelated studies presented in three original articles. The specific objectives of each study were to:

Study I

1. Translate the original BHS-TR from the English language version into the Icelandic language and cross-culturally adapt it for use in the Icelandic context

2. Pretest the Icelandic BHS-TR with IPV survivors in Iceland:

   a. Evaluate the scale's relevance and content-related validity evidence

   b. Discover culturally specific barriers to help-seeking missing from the scale

Study II

1. Develop new BHS-TR items based on the culturally specific barriers identified in study I

2. Evaluate the construct-related validity evidence of the Icelandic BHS-TR in a sample of IPV survivors by examining its:

      a. Factor structure and dimensionality

      b. Convergent and discriminant validity

      c. Known-groups validity

3. Evaluate the reliability of the scale by examining its internal consistency

Study III

1. Use a mixed methods legitimation strategy of integration to evaluate the validation evidence for the Icelandic BHS-TR by merging the qualitative and quantitative findings of studies I and II:

      a. Discover convergent (confirmation or complementarity) and divergent (expansion or discordance) evidence about the BHS-TR structure from this integration

      b. Critically evaluate divergent items by examining the following:

         – influence of the barriers on the survivors' help-seeking

         – factor cross-loadings for the most strongly endorsed items

         – mean score differences for survivors' subsamples

      c. Make recommendations about the benefits of this integration to BHS-TR refinements

3 Materials and Methods

The doctoral thesis consists of three studies using qualitative, quantitative, and mixed methods (see Table 1) that together represent a survivor-centered and mixed methods validation study on the Icelandic BHS-TR. *Study I* describes the translation and initial cross-cultural adaptation of the scale (article I). *Study II* describes the development of culturally specific barrier items and psychometric evaluation of the scale (article II). *Study III* describes the integration of qualitative and quantitative findings to inform the Icelandic BHS-TR validation evidence (article III). This section summarizes the materials and methods used in the thesis. For detailed descriptions, see the previously mentioned articles.

Table 1: Overview of the studies in this thesis

Study	Design	Participants	Data collection	Analysis
I	Translation and cross-cultural adaptation/ Qualitative exploratory study design	Women IPV survivors (n = 17)	Forward translations, back translation, and expert committee review	Review, reconciliation, and synthesis
			Two rounds of in-person cognitive interviews (purposive sampling)	Deductive and inductive qualitative content analysis
II	Exploratory sequential mixed methods study design	Women IPV survivors (n = 17) (n = 137)	Data from study I used	Deductive and inductive qualitative content analysis
			Additional round of in-person cognitive	Descriptive statistics, Principal component

			interviews (purposive sampling)	analysis, multidimensional scaling, Cronbach's alpha coefficient, Pearson's correlation coefficient, independent sample *t*-tests
			Online survey that included demographic questions and self-report instruments (voluntary response sampling)	
III	Integrated spiraling mixed methods study design	Women IPV survivors (*n* = 17) (*n* = 137)	Data from studies I and II used	Fit of data integration, joint display analysis, descriptive statistics, influence analysis, cross-loadings analysis, independent sample *t*-tests

3.1 Design

This thesis was conducted following well-established guidelines and best practices for culturally adapting and validating instruments (Beaton et al., 2000; Boateng et al., 2018; Wild et al., 2005). A combined etic (universal) and emic (culture-specific) strategy using mixed methods was employed as recommended to enhance the construct validity of instruments for use outside their culture of origin (Brislin, 1983; Van de Vijver, 2015; Ægisdóttir et al., 2008).

The overall design guiding the thesis was an integrated mixed methods instrument development design (Creswell & Plano Clark, 2018; Mendlinger & Cwikel, 2008; Onwuegbuzie et al., 2010). The specific study designs for each of the three studies are listed in Table 1. The data collection was conducted in two sequential phases (qualitative → quantitative), and data analysis included qualitative, quantitative, and mixed analyses conducted at different points in

the research process. Integration occurred at the design, methods, and interpretation/reporting levels (Fetters et al., 2013). See Figure 1 for a diagram of the research process and linkages of the three studies; in the boxes are data sources and in the circles are integration types.
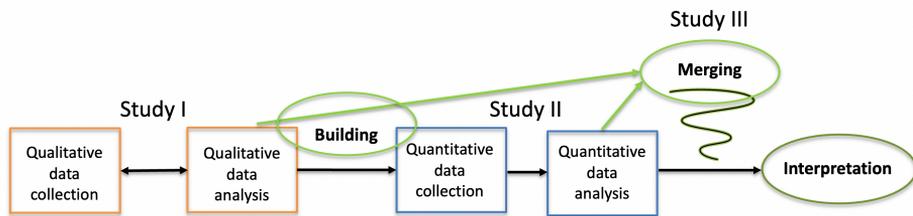
Figure 1: The thesis' research process.

Nine types of legitimation strategies (see Table 2) were implemented to ensure design quality and interpretive rigor to generate high-quality meta-inferences (Johnson & Christensen, 2017; Onwuegbuzie et al., 2011; Perez et al., 2022).

Table 2: Legitimation strategies implemented

Legitimation type	Description	Implementation in the thesis
Sample integration	The extent to which the relationship between the quantitative and qualitative sampling designs is appropriate and can yield quality meta-inferences made from both samples.	A sequential parallel mixed methods sampling design was used. The qualitative and quantitative samples were drawn from the same underlying population, and the inclusion criteria were the same. The reasons why using identical or nested samples was unfeasible were stated.
Inside–outside (emic–etic)	The extent to which researchers accurately present and appropriately utilize the	A well-informed and balanced insiders' (e.g., qualitative and quantitative data from IPV survivors, member checking)

	insider's (emic) and outsider's (etic) perspectives.	and outsiders' (e.g., multidisciplinary researchers, expert committee review) perspectives were strived for.
Weakness minimization	The extent to which weaknesses of one method are compensated by the strengths of another method.	Qualitative and quantitative methods were used in this thesis, drawing upon the strengths of both, which provided in-depth and breadth information on the research topic.
Sequential	The extent to which researchers have minimized the potential issues (e.g., priming effects) of the order of the phases in a sequential design and ensured that the later phase is appropriately built on the earlier phase.	The need for a sequential design starting with the qualitative phase was made explicit, as well as how the qualitative findings informed the data collection (building) in the subsequent quantitative phase.
Commensurability approximation	The extent to which researchers can cognitively switch from quantitative and qualitative lenses ("Gestalt switching") and the meta-inferences made reflect a mixed worldview.	In the research process of this thesis, the author made switches from a qualitative lens to a quantitative lens and vice versa, multiple times, yielding the mixed view presented and meta-inferences drawn.
Multiple validities	The extent to which the validity of the quantitative, qualitative, and mixed components of the study are addressed using the pertinent quantitative, qualitative, and mixed methods "validities."	Multiple strategies were implemented to enhance the legitimation of the whole thesis and each of its components, emphasizing trustworthiness, validity, and legitimation depending on the part.
Integration	The extent to which researchers successfully integrate quantitative and qualitative data, analysis, and inferences.	Integration in this thesis occurred at the design, methods, interpretation, and reporting levels, and the procedures and outcomes described in detail.

Divergent findings	The extent to which researchers explore and learn from inconsistent, disagreeing, or contradictory findings.	An essential final part of the thesis was systematically identifying, exploring, and gaining new insights from divergent findings.
Pragmatic	The extent to which the purpose of the study was met, the research questions answered, the research problem solved, and the results provided have pragmatic utility or usefulness.	The overarching aim of the thesis was met, filling the need for a reliable and valid trauma-specific help-seeking barriers instrument that can be used in research and practice with survivors in Iceland.

Note: The description of the legitimation types is based on Johnson & Christensen (2017), Onwuegbuzie et al. (2011), and Perez et al. (2022).

3.2 Data Collection

Translation and Cross-Cultural Adaptation

The BHS-TR was translated and culturally adapted (study I) following international guidelines and principles of good practice (Beaton et al., 2000; Wild et al., 2005), providing a rigorous process designed to maximize the attainment of semantic and conceptual equivalence between the source and target instruments. It entailed gathering data from various sources (translators[1], back translator[2], expert reviewers[3], and survivors) at multiple points; see Figure 2 for a flowchart of the process. While the translation, pretesting with survivors (study I), and further development and evaluation (studies II and III) of the scale are all part of the overall cross-cultural adaptation process, it is described separately in this thesis.

---

[1] The translators were two native Icelandic speakers fluent in English; one a professional translator and the other a psychologist, both experienced researchers in their field.

[2] The back translator was a native English speaker who was fluent in Icelandic and an experienced researcher in the field of health sciences.

[3] The expert committee consisted of a methodologist and two health professionals (nurse and psychologist) experienced working with GBV survivors.
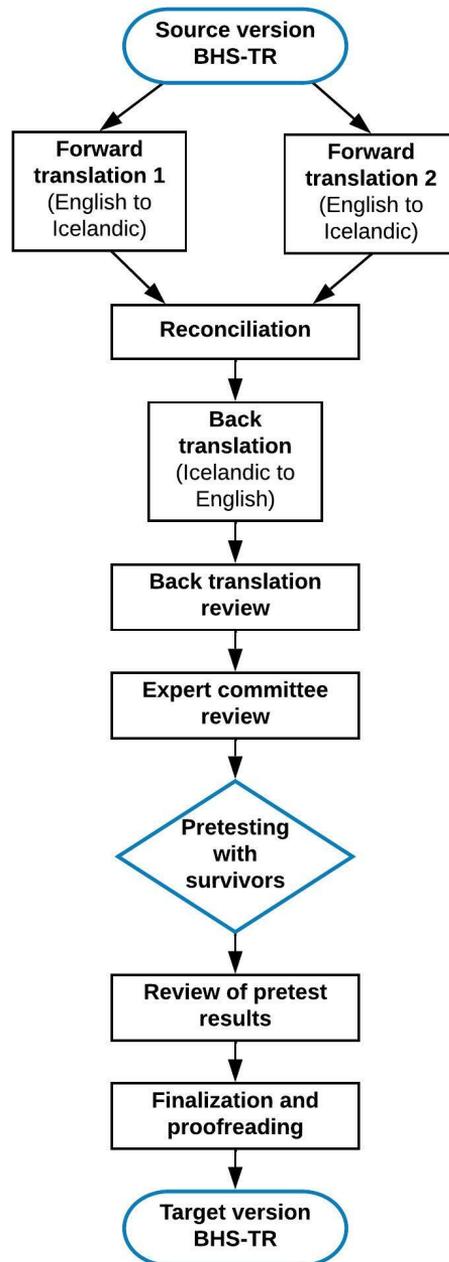
Figure 2: The translation and initial adaptation process.

Validation with Survivors

A sequential parallel sampling design (Collins et al., 2007) was used for the qualitative and quantitative phases. The inclusion criteria for both phases were to self-identify as a woman, be 18 years old or older, live in Iceland, speak Icelandic, and have experienced IPV. Since what constitutes IPV can vary from person to person, participants self-identified as survivors based on the definition and examples of types of IPV provided in the introduction material, including physical, sexual, emotional, financial, and cyber violence. Additionally, for ethical reasons and the women's safety, they had to have been out of the abusive relationship for at least a year.

Qualitative Phase. The qualitative data were gathered in three iterative rounds of cognitive interviews with Icelandic IPV survivors. Participants were recruited from centers and service providers for survivors of violence in North and South Iceland, using purposive sampling. During recruitment, attempts were made to select diverse individuals within the target population. The first two rounds (study I) consisted of 17 in-person interviews conducted between August and October 2019 that were part of the initial cross-cultural adaptation and testing of the scale. Based on this data, new items for the Icelandic BHS-TR were developed, and those pretested in the third round (study II) between December 2019 and January 2020. This final round (member checking) involved a second in-person interview with eight of the 17 women who participated in the earlier rounds.

The interview procedures were guided by standard (Tourangeau, 1984) and cross-cultural (Willis, 2015) cognitive interviewing recommendations. Think-aloud technique and verbal probing were used in conjunction to elicit participants' interpretive process, and the interviews were all audio-recorded with permission. The data collection continued until data saturation was

achieved. All 25 interviews took place in safe locations chosen by participants and were conducted by the author.

Quantitative Phase. The quantitative data were gathered using an anonymous online survey (study II) advertised through social media posts and flyers distributed at various services for survivors of violence in Iceland, located all over the country. Participants accessed the survey by following a link hosted on the Icelandic Directorate of Equality's website, and a voluntary response sampling was applied. Qualtrics, a secure online platform, was used to build the survey that included the measure under study, demographic and help-seeking history questions, and self-report instruments measuring mental health symptoms, stigma beliefs, and SOC (detailed below). The data were collected between February and October 2020, and in total, 168 IPV survivors in Iceland answered the survey. However, the data presented in this thesis include only the 137 participants who completed the entire BHS-TR scale.

3.3 Participants

Qualitative Sample

The qualitative sample included 17 women IPV survivors, ages 18 to 64 years (M = 37.4, SD = 12.2). Most of the women were employed (70.6%), with about half having received a university degree (52.9%), and most had children (70.6%). All had been in a heterosexual relationship when their partner abused them. The majority self-reported a current mental or physical diagnosis (64.7%), and all had been faced with physical, emotional, and social health effects because of their traumatic experiences. About half had received mental healthcare at some point in their life (52.9%), but when asked explicitly about seeking help for trauma recovery, only a few (35.3%) said they had done so.

Further information on the characteristics of the qualitative sample can be found in Table 3.

Quantitative Sample

The quantitative sample included 137 women IPV survivors, ages 19 to 76 years (M = 40.7, SD = 11.7). Most of the women were employed (64.2%), with over half having received a university degree (59.9%), and most had children (76.7%). The majority self-reported a current mental or physical diagnosis (67.9%), and the vast majority had received mental healthcare at some point in their life (81.8%). When asked about needing help for trauma recovery in the last 12 months, 75.9% said they had needed help in general, and 70.1% said they had especially required mental health treatment. Nonetheless, almost half of the women (45.3%) reported not seeking the professional help they needed in the last 12 months. Further information on the characteristics of the quantitative sample can be found in Table 3.

Table 3: Overview of the participants' demographic characteristics

Characteristics	Qualitative (*n* = 17)	Quantitative (*n* = 137)
Age		
18–29	4 (23.5%)	24 (17.5%)
30–39	7 (41.2%)	34 (24.8%)
40–49	4 (23.5%)	38 (27.7%)
50–59	1 (5.9%)	18 (13.1%)
60+	1 (5.9%)	6 (4.4%)
Not stated	–	17 (12.4%)
Racial and ethnic background		
Caucasian	17 (100%)	–
Iceland-born	16 (94.1%)	–
Foreign-born	1 (5.9%)	–
Level of education		
High school or less	3 (17.6%)	11 (8.0%)
Technical or junior college degree	5 (29.4%)	29 (21.2%)
University degree	9 (52.9%)	82 (59.9%)
Not stated	–	15 (10.9%)
Employment status (not mutually exclusive)		

Working	12 (70.6%)	88 (64.2%)
Unemployed or looking for work	2 (11.8%)	7 (5.1%)
Student	5 (29.4%)	26 (19.0%)
Homemaker	1 (5.9%)	3 (2.2%)
Unable to work due to sickness/disability	3 (17.6%)	20 (14.6%)
Other	–	24 (17.5%)
Number of children		
None	5 (29.4%)	24 (17.5%)
One or two	9 (52.9%)	59 (43.1%)
Three or more	3 (17.6%)	46 (33.6%)
Not stated	–	8 (5.8%)
Years in the abusive relationship		
1–5	4 (23.5%)	–
6–10	9 (52.9%)	–
11–15	2 (11.8%)	–
15+	2 (11.8%)	–
Years out of the abusive relationship		
1–5	10 (58.8%)	–
6–10	6 (35.3%)	–
11–15	1 (5.9%)	–
Current medical diagnosis (mental and/or physical)		
No	6 (35.3%)	44 (32.1%)
Yes	11 (64.7%)	93 (67.9%)
History of receiving mental healthcare		
No	8 (47.1%)	24 (17.5%)
Yes	9 (52.9%)	112 (81.8%)
Not stated	–	1 (0.7%)

3.4 Instruments

Measure under Study

The BHS-TR focuses on barriers to seeking help for trauma recovery and asks how much the barriers on the scale influenced respondents not to seek help. Respondents answer on a 4-point Likert scale anchored at 1 ("Did not influence me") to 4 ("Strongly influenced me"), with a higher total score indicating more help-seeking barriers (Saint Arnault & Zonp, 2022).

As noted in the introduction, the BHS-TR was developed from an existing mental health barriers measure and adapted for use with GBV survivors. The BHS-TR initially included the 25 items from the original measure plus an additional nine trauma-specific and survivor-centered items (34-item version). The early work on the scale indicated that the barriers could be grouped into structural and internal dimensions (Saint Arnault & O'Halloran, 2016), which was later confirmed in a psychometric study among American GBV survivors. Moreover, a seven-factor structure (Unavailable/Not Helpful; Financial Concerns; Discrimination; External Constraints; Shame; Frozen/Confused; and Problem Management Beliefs) was revealed, creating a 24-item version of the English language BHS-TR, which was found to be reliable and valid (Saint Arnault & Zonp, 2022). In order to capture all possible nuances, the full 34-item version was used in the effort to develop the Icelandic BHS-TR.

Other Measures

The *Patient Health Questionnaire-8* (PHQ-8; Kroenke et al., 2009) is a widely used and validated measure consisting of eight items based on the DSM-IV diagnostic criteria for depression. PHQ-8 is identical to the PHQ-9 without the suicidal thoughts item, making it more suitable for general survey use. Respondents are asked to assess the frequency of symptoms in the past two weeks on a 4-point response scale, with a total score range from 0 to 24. A clinical cut-off score of ≥10 has been recommended to indicate probable current depression (Kroenke et al., 2009; Wu et al., 2020). The Icelandic version of the measure (or the PHQ-9) has been shown to have sound psychometric properties (Björnsson et al., 2018). Cronbach's alpha for PHQ-8 in this thesis was 0.87.

The *PTSD Checklist for DSM-5* (PCL-5; Blevins et al., 2015) is a widely used and validated measure consisting of 20 items corresponding to the DSM-5

symptom criteria for PTSD. Respondents are asked to rate how bothered they have been by the symptoms in the past month on a 5-point response scale, with a total score range from 0 to 80. A clinical cut-off score of ≥31 has been recommended to indicate probable current PTSD (Blevins et al., 2015; Bovin et al., 2016). Validation studies on the Icelandic version of the PCL-5 have not been published. The measure is however commonly used in research and clinical work in Iceland and has been shown to have good internal consistency reliability (Ásgeirsdóttir, 2019; Daníelsdóttir et al., 2022). Cronbach's alpha for PCL-5 in this thesis was 0.96.

The *Beliefs Toward Mental Illness Scale* (BTMI; Hirai & Clum, 2000) is a mental illness stigma measure that consists of 21 items assessing negative stereotypical views of psychological disorders and includes four subscales: Dangerousness, Social Dysfunction, Incurability, and Embarrassment. Respondents are asked to rate their level of agreement with the belief statements on a 6-point Likert scale, and higher scores reflect more stigma towards mental illness. The BTMI has been demonstrated to be reliable and valid across cultures (Hirai & Clum, 2000; Hirai et al., 2018; Saint Arnault et al., 2017), but validation studies on the Icelandic version have not been published. Cronbach's alpha for the full BTMI in this thesis was 0.89, with the alpha values for the subscales ranging from 0.71 to 0.81.

The shortened version of the *Sense of Coherence Scale* (SOC-13; Antonovsky, 1993) comprises 13 items about how people view their lives, measuring SOC's three main dimensions: Comprehensibility, Manageability, and Meaningfulness. Respondents are asked to rate their level of agreement or disagreement on a 7-point semantic differential scale. The total score range is from 13 to 91, with a higher score indicating a stronger SOC (low: 13–57, medium: 58–74, and high: 75–91). The measure has been shown to be reliable

and valid in multiple studies conducted across many cultures (Antonovsky, 1993; Eriksson & Lindström, 2005; Holmefur et al., 2015), but validation studies on the Icelandic version have not been published. Both the original full 29-item and the shortened versions have been used in research in Iceland and shown to have good internal consistency reliability (Gudmundsdottir et al., 2011; Svavarsdottir & Rayens, 2005). Cronbach's alpha for SOC-13 in this thesis was 0.85.

3.5 Data Analysis

Qualitative Analyses

The data generated in the translation process (study I) were analyzed in a multistep process (Beaton et al., 2000; Wild et al., 2005), involving reviewing all translation versions of the scale, identifying ambiguities and discrepancies, reconciling, and synthesizing the translations to create the pre-final version for the pretesting with the target population. Each step was thoroughly documented during the process, allowing tracking of all the decisions made.

The qualitative data from the cognitive interviews (transcribed verbatim) were all analyzed using qualitative content analysis (QCA), based on the procedures as described by Elo and Kyngäs (2008). See Figure 3 for an overview of the QCA processes in this thesis. The first two rounds of interviews (study I) were analyzed with the combined deductive and inductive QCA approach using an unconstrained matrix to code the data. The aim was to gain insight into survivors' perspectives and interpretations of the BHS-TR, uncover potential issues and inform needed modifications. The matrix was mainly based on categories frequently reported in the literature (general design, language/wording, and cultural relevance). Still, as it was unconstrained, there

was a possibility of creating a new category (trauma sensitivity) using steps of the inductive approach, including grouping, categorization, and abstraction.

The data from the first two rounds (17 interviews) were also used for the item generation of culturally specific barriers (study II). Yet, the unit of analysis was solely the parts of the interviews where the participants spoke about help-seeking barriers they thought were missing from the instrument. The same framework that guided the development of the original BHS-TR, the CDHS theory (Saint Arnault, 2018), was applied. This theory is not trauma-specific but could encompass barriers to any actions taken by survivors to decrease suffering and improve health and well-being. The data were analyzed using the inductive QCA approach, including making sense of the data to gain a comprehensive understanding of the content, open coding, creating categories, and abstraction. For the third round of interviews (study II), the pretesting of these new items, the combined deductive and inductive QCA approach was utilized again using the categorization matrix developed in the first study to code the data.
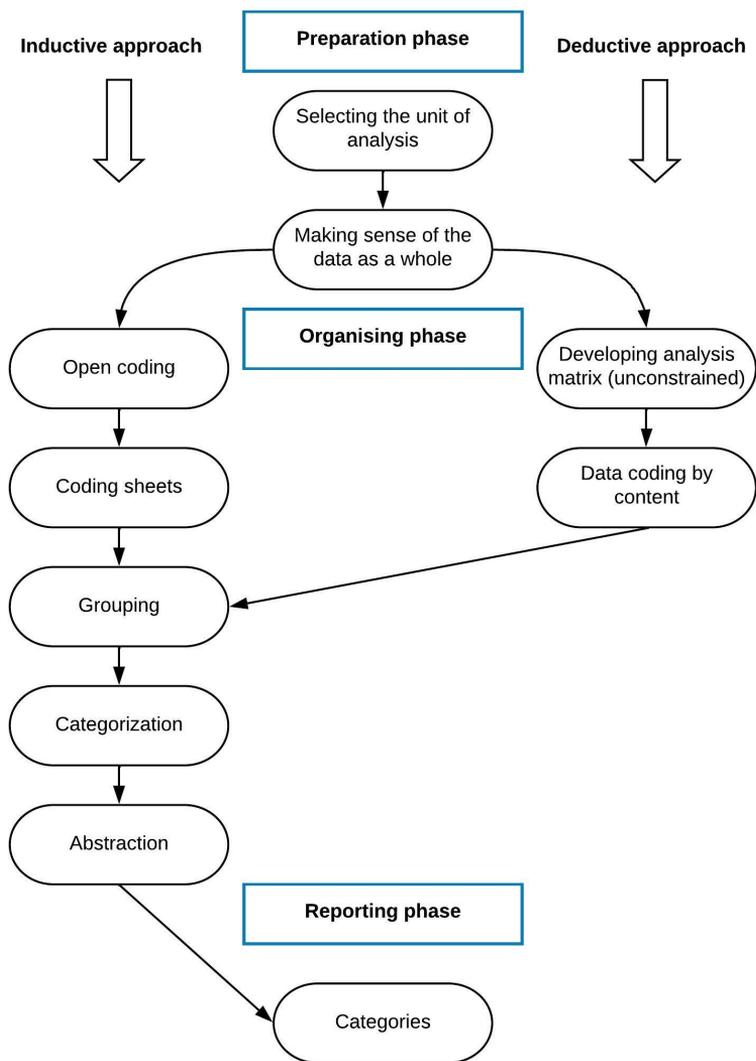
Figure 3: The QCA processes, modified and used with permission (Elo & Kyngäs, 2008).

Quantitative Analyses

First, the survey data were examined to ascertain that the variables' distribution and relationships did not violate the statistical assumptions of the following analyses. There were no missing data for the BHS-TR scale as the

criteria preclude it, and missing data did not exceed 5% on any of the other measures. All statistical analyses were performed using the SPSS Statistics software package (Version 27.0; IBM Corp., Armonk, NY, USA, 2020), and the significance level was set at $p \leq 0.05$.

Descriptive statistics were used to examine the participants' demographic characteristics, health status, need for help, and help-seeking utilization (study II and III). Also, to examine the barriers' level of influence on participants' help-seeking and rank-order the items (study III). The factor structure and dimensionality (study II) of the BHS-TR were explored using principal component analysis (PCA)[4] with direct oblimin rotation and multidimensional scaling (MDS) following rigorous criteria (Cattell, 1966; Costello & Osborne, 2005; Fabrigar et al., 1999; Kaiser, 1974; Yong & Pearce, 2013). The main reason for using PCA instead of a 'true' exploratory factor analysis technique (e.g., Principal Axis Factoring or Maximum Likelihood) was to use the same method as used in the initial testing of the structure of source BHS-TR, strengthening the assessment of cross-cultural construct validity.

The convergent and discriminant validity evidence (study II) was assessed by examining the associations between help-seeking barriers and mental illness stigma beliefs on the one hand and SOC on the other using Pearson's correlation coefficient (>0.10 = weak; >0.30 = moderate; >0.50 = strong; Cohen, 1988). The known-groups validity evidence (study II and III) was assessed by examining whether the BHS-TR could differentiate between groups (depression, PTSD, and low SOC) known to differ on help-seeking barriers using independent sample t-tests. The multiple comparisons were

---

[4] Although PCA is not technically a factor analysis method, it is a psychometrically sound and widely used technique for data extraction and exploring the underlying structure of measures (Field, 2018; Yong & Pearce, 2013). Moreover, to be consistent with the terminology used for the source version of BHS-TR, the term factor instead of component is used in this thesis.

corrected using the Bonferroni method (Bland & Altman, 1995) for the main known-groups validity testing (of the total scale); thus, the level of significance was set at $p \le 0.025$ for that assessment.

The reliability (study II) was assessed by examining the internal consistency of the BHS-TR using Cronbach's alpha coefficient. As recommended (Streiner, 2003; Tavakol & Dennick, 2011), values above 0.70 but not higher than 0.90 were preferred.

Mixed Analyses

The mixed methods analysis (study III) occurred in two stages, each with several steps employed in an iterative spiraling process (Fetters & Molina-Azorin, 2017; Mendlinger & Cwikel, 2008; Onwuegbuzie et al., 2010). First, previous qualitative and quantitative findings were merged using joint display analysis (Guetterman et al., 2015; Haynes-Brown & Fetters, 2021) to assess the coherence of the scale structure. As has been noted, there are four main possible outcomes of comparing data and drawing conclusions about the fit: confirmation, complementarity, expansion, and discordance (Fetters et al., 2013; Fetters & Molina-Azorin, 2017).

Based on the findings in the former stage, the second analytic stage focused on divergent (expansion and discordance) findings on dropped BHS-TR items. The examination was guided by reconciliation and additional validation strategies (Perez et al., 2022; Pluye et al., 2009), where existing data were re-analyzed with a new perspective and the items evaluated. This analysis was driven by a critical examination of quantitative data based on qualitative findings, focusing on the level of influence (mean score of ≥2.00), cross-loadings (conceptually similar or distinct), and additional validity (known-groups differences) evidence.

3.6 Ethical Considerations

This thesis was performed in line with the ethical principles of the Declaration of Helsinki (World Medical Association, 2013). Furthermore, the National Bioethics Committee in Iceland approved all procedures and materials for the three studies, which were as well reported to the Icelandic Data Protection Authority. Reference numbers are listed below.

All participants received detailed information about the pertinent study during recruitment, including the aim of the study, procedures, confidentiality, and potential risks and benefits from participating. Participants were informed that participation was voluntary and that they could withdraw at any time without explanation or consequences. All participants voluntarily gave their informed consent before participation. Written consent was obtained from the interview participants, while the survey participants provided their consent by answering the survey. All participants received a list of local referral resources with the introduction and after participation. They were also offered support from a psychologist if difficult emotional reactions emerged during or after participation.

The data collected was processed and stored in compliance with national and international data protection regulations, and all necessary measures to protect participants' privacy, confidentiality, and safety were taken. As soon as the interviews had been transcribed, the audio recordings were deleted, and all information that could identify participants was removed from the transcripts. The written consents for participation and the transcribed interviews were safely stored in a locked space to which only the author had access. All survey data were anonymous and secured in password-protected servers at the University of Akureyri and the University of Michigan.

Study I

Ethical permission was obtained from the National Bioethics Committee in Iceland (ref. no. VSNb2019060009/03.01), and the study was reported to the Icelandic Data Protection Authority (ref. no. 19–119).

Study II

Ethical permission was obtained from the National Bioethics Committee in Iceland (ref. no. VSNb2019090016/03.01), and the study was reported to the Icelandic Data Protection Authority (ref. no. 19–166).

Study III

Ethical permission was obtained from the National Bioethics Committee in Iceland (ref. no. VSNb2019060009/03.01 and VSNb2019090016/03.01), and the study was reported to the Icelandic Data Protection Authority (ref. no. 19–119 and 19–166).

4 Results

This section summarizes the main findings of the three studies comprising this thesis. See the respective individual articles for a complete description of the results.

4.1 Study I

Translation and Initial Adaptation

The two forward translations were concordant on most items and considered linguistically equivalent in terms of their meaning. Minor differences were in wording, and for the reconciliation version, preference was given to less complicated and semantically equivalent words. A review of the back translation suggested semantic and conceptual equivalence with the source version, as most items were nearly identical. A translation discrepancy was identified for an item about distance or transportation problems which became broader in the Icelandic language than intended and was addressed accordingly.

The expert committee provided remarks on several items, mainly minor grammatical changes, and suggestions for different wording. Special attention was given to producing a translation that the target population would easily understand. Other challenges reported by the committee involved items concerning health coverage, race, and ethnicity, which the committee recommended further adaptation to the Icelandic context. These items were kept unchanged for additional assessment in the pretesting.

Pretesting with Survivors

The Icelandic BHS-TR was generally well-received by the participants, and the findings provided evidence of the relevance and content-related validity of the scale. Still, few issues were uncovered, classified into four categories related to general design, translation, cultural aspects, and post-trauma context. Moreover, most of the survivors mentioned barriers missing from the scale that had strongly influenced them from seeking help. Therefore, revisions were of great importance, which in this study involved making adaptations to the existing items based on the survivors' input while maintaining cross-cultural comparability—resulting in an improved and more trauma-informed Icelandic version of BHS-TR.

4.2 Study II

Item Generation

The help-seeking barriers identified as missing from the scale (all recognized as internal barriers) were conceptually divided into two categories. The first category was "Reveals Weakness," composed of four sub-categories, and the second category was "Safeguard Yourself," composed of three sub-categories (see Figure 4). Based on each sub-category, a new item was developed for the Icelandic BHS-TR. No issues regarding the general design, language, relevance, or lack of trauma sensitivity were identified in the pretesting, and the women confirmed that the items accurately described their experiences. These seven new (emic) items, along with the 34 (etic) items originally on BHS-TR, created the 41-item version of the Icelandic BHS-TR, which was further explored in the subsequent quantitative phase of this study.
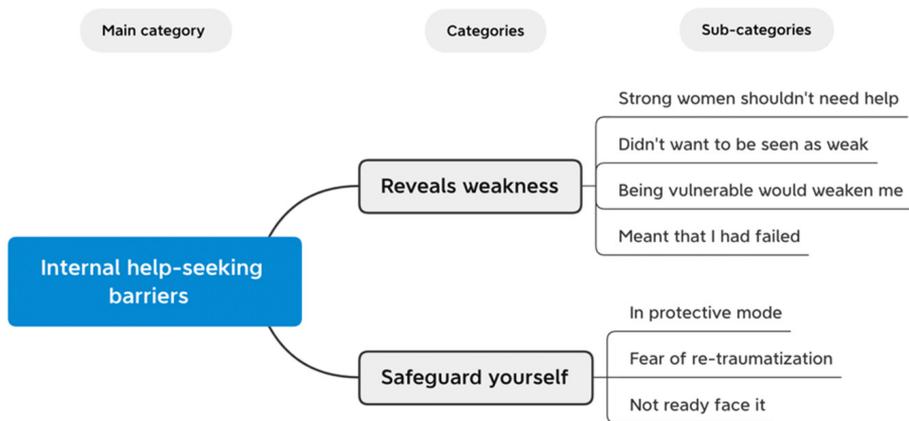
Figure 4: Conceptual diagram of the identified emic barriers.

Construct-Related Validity Evidence

Factor Structure. Exploratory factor analysis using PCA among the 137 survivors revealed eight BHS-TR factors (see Table 4). The initial runs of PCA resulted in 15 items needing to be dropped (see Table 5) due to loading values below 0.35, cross-loadings, or communality values below 0.40. After eliminating these items, the final PCA that revealed the eight-factor structure included 26 items that met the set criteria. These eight factors combined explained 72.14% of the total variance, and the factor loadings after rotation are shown in Table 4. The following analyses further assessed this initial eight-factor solution of the Icelandic BHS-TR, and the factors were labeled and evaluated as potential subscales.

Table 4: The eight-factor solution of the Icelandic BHS-TR scale

Factors Items (Communalities)	1	2	3	4	5	6	7	8
Weakness/Vulnerability (Cumulative % of Variance: 26.47; Eigenvalue: 6.88)								
40. I thought that strong people should not need help (0.84)	0.93							

39. Getting help would mean that I had failed or had been defeated (0.81)	**0.83**			
35. I was scared of being seen as weak (0.79)	**0.72**	0.22		
41. Seeking help would require acknowledging things I did not want to face (0.68)	**0.69**		0.34	
24. I thought my situation was too personal or wanted to keep it private (0.50)	**0.40**	0.27		0.27

Financial Concerns (Cumulative % of Variance: 37.96; Eigenvalue: 2.99)

2. I was concerned that the help I needed would be too expensive (0.80)	**0.87**			
19. The available health insurance would not cover the type of treatment I needed (0.78)	**0.85**		0.28	
18. I did not have adequate financial resources (0.81)	**0.82**			

Unavailable/Not Helpful (Cumulative % of Variance: 45.98; Eigenvalue: 2.07)

15. I was not satisfied with the available services (0.75)	**0.87**		
16. I felt that the help available would not provide the type of treatment or help that was best for the problem (0.72)	**0.85**		
17. I had sought help before, but it did not help (0.60)	**0.61**	0.32	−0.24

External Constraints (Cumulative % of Variance: 53.06; Eigenvalue: 1.84)

14. I was worried that if others discovered my health problems or situation, I could lose my children, security, or housing (0.74)	**0.86**	
34. Others were preventing me from getting the help I needed (0.71)	**0.78**	
25. I was afraid of the consequences for myself, my children, or my family (0.71)	**0.72**	0.32

Problem Management Beliefs (Cumulative % of Variance: 58.38; Eigenvalue: 1.38)

1. I thought the problem would probably get better by itself (0.59)		**0.77**		
11. I thought the situation was normal or was not severe (0.69)	0.21	**0.62**	−0.34	
10. I wanted to or thought I should solve the problems on my own (0.64)		**0.58**		0.31

Frozen/Confused (Cumulative % of Variance: 63.54; Eigenvalue: 1.34)

29. I could not seem to clarify my feelings or know what I needed (0.83)			**−0.91**	
30. I was afraid I could not clearly express what I needed (0.67)		0.22	**−0.61**	
26. I was confused or unable to plan out all the details or steps (0.69)	0.24	−0.20	**−0.56**	0.31
27. I felt paralyzed or frozen and unable to get started (0.70)	0.26	0.30	**−0.43**	0.25

Inconvenience (Cumulative % of Variance: 68.08; Eigenvalue: 1.18)

5. I had distance or transportation problems (0.78)			**−0.83**	
8. I thought getting help would take too much time or was inconvenient (0.64)	0.27	0.22	**−0.60**	

Shame (Cumulative % of Variance: 72.14; Eigenvalue: 1.06)

6. I was concerned about what others might think (0.80)				**0.86**
7. I was ashamed (0.72)				**0.79**
28. I believed that people would judge me (0.75)				**0.75**

Note: The Kaiser–Meyer–Olkin value = 0.79; Bartlett's test of sphericity $\chi 2(325) = 1705.503$, *p* < 0.001; rotation method: oblimin with Kaiser normalization; all loadings below 0.2 were suppressed for readability.

Table 5: Items removed in the quantitative phase

Dropped BHS-TR Items
From the original mental healthcare scale
3. I was unsure about where to go for help or how to access help
4. I thought help probably would not do any good

9. I could not get time away from work or my family

12. I was concerned that I would not be able to get help soon enough

13. I was scared about being put into a hospital against my will

20. I felt that my culture, background, or specific situation would not be understood

21. Suitable professionals were not available to me

22. The kind of help I needed was not available

23. I felt that there would be prejudice or discrimination against me

From the trauma-specific additions

31. I was afraid I would explain what I needed, and no one would help me anyway

32. I felt that I could not trust people to help me

33. I felt no one could understand or help me

From the culturally specific additions

36. I was afraid that seeking help would be too emotionally difficult or hurt me even more

37. I did not seek help in an effort to protect or safeguard myself

38. I felt like opening up to my feelings would weaken me

Dimensionality. The results from the MDS showed that the Financial Concerns, Unavailable/Not Helpful, External Constraints, and Inconvenience subscales were a dimension of barriers that, when grouped, comprised the "Structural Barriers Index." The Weakness/Vulnerability, Problem Management Beliefs, Frozen/Confused, and Shame subscales were a separate dimension and, when grouped, comprised the "Internal Barriers Index" (see Figure 5). These two indices were computed to use along with specific barrier subscales sum scores for further validation analyses.
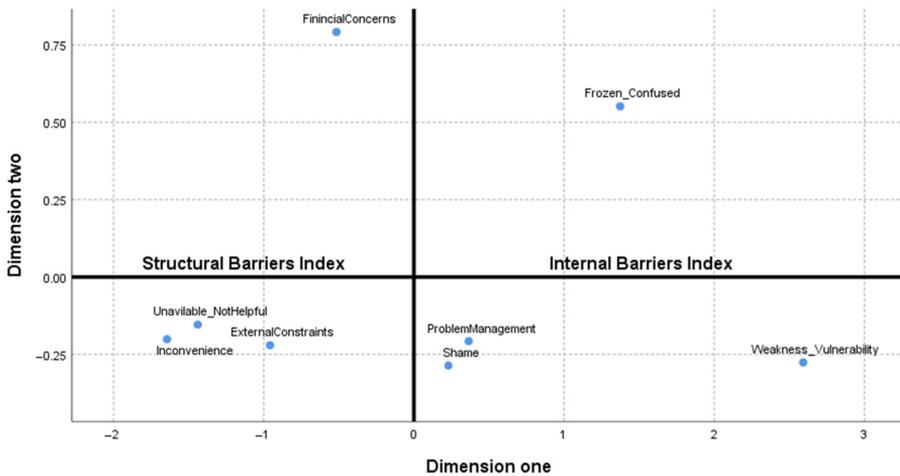
Figure 5: The BHS-TR structural and internal barriers indices.

Convergent and Discriminant Validity. There were no significant correlations between the scores on the BTMI stigma scale and the scores on the Structural or Internal Barriers indices. However, there were weak and moderate significant positive correlations between the scores on the Embarrassment BTMI subscale and the scores for the BHS-TR subscales of Problem Management Beliefs ($r = 0.22$, $p = 0.02$), Shame ($r = 0.38$, $p = 0.00$), and Weakness/Vulnerability ($r = 0.41$, $p = 0.00$). There was no significant correlation between the scores on the SOC-13 scale and the scores on the Structural Barriers Index. However, there was a weak significant negative correlation with the scores on the Internal Barriers Index ($r = -0.21$, $p = 0.02$). The SOC-13 scores were unrelated to most of the BHS-TR subscales. Still, there were weak significant negative correlations for SOC-13 and the Unavailable/Not Helpful ($r = -0.17$, $p = 0.04$), Weakness/Vulnerability ($r = -0.18$, $p = 0.04$), and Frozen/Confused ($r = -0.22$, $p = 0.01$) subscales.

Known-Groups Validity. The total mean score of the BHS-TR scale and mean scores of the Structural and Internal Barriers indices were all significantly higher for the probable depression and probable PTSD groups. In addition, most of the subscales' mean scores were significantly higher for either the probable depression or probable PTSD groups or both (see Table 6).

Table 6: Known-groups validity results (n = 137)

BHS-TR	Depression			PTSD		
Indices and Subscales	No (n = 80)	Probable (n = 57)	p	No (n = 75)	Probable (n = 62)	p
Structural Barriers	20.4 (5.4)	23.7 (7.7)	**0.00**	20.5 (5.5)	23.3 (7.5)	**0.01**
Financial Concerns	7.0 (3.2)	7.3 (3.4)	–	6.9 (3.3)	7.4 (3.2)	–
Unavailable/Not Helpful	4.4 (2.0)	5.5 (2.7)	**0.01**	4.6 (2.2)	5.1 (2.6)	–
External Constraints	5.2 (2.5)	6.7 (3.2)	**0.00**	5.2 (2.6)	6.6 (3.1)	**0.00**
Inconvenience	3.8 (1.8)	4.4 (1.9)	**0.05**	3.7 (1.7)	4.5 (2.0)	**0.02**
Internal Barriers	39.9 (10.5)	43.8 (9.9)	**0.03**	39.8 (10.9)	43.6 (9.5)	**0.04**
Weakness/Vulnerability	12.6 (4.8)	13.9 (4.7)	–	12.6 (4.9)	13.7 (4.7)	–
Problem Management Beliefs	8.7 (2.5)	9.0 (2.4)	–	8.6 (2.7)	9.1 (2.1)	–
Frozen/Confused	10.5 (3.4)	12.3 (3.0)	**0.00**	10.7 (3.6)	12.0 (3.2)	**0.03**
Shame	8.0 (2.9)	8.6 (3.0)	–	7.8 (3.0)	8.8 (2.8)	**0.05**
Total	60.3 (13.2)	67.5 (15.0)	**0.00***	60.3 (13.7)	66.9 (14.3)	**0.00***

Note: Independent sample t-tests; mean score (standard deviation); significance level at $p ≤$ 0.05; *Bonferroni corrected p-value (for the total scale assessment) was 0.025; PHQ-8 cut-off score of ≥10 for probable depression; PCL-5 cut-off score of ≥31 for probable PTSD.

Internal Consistency Reliability

The full 26-item BHS-TR showed good internal consistency with Cronbach's alpha (α) of 0.87, and the values for the Structural and Internal Barriers indices were 0.75 and 0.88, respectively. Moreover, all except two of the subscales had Cronbach's alpha exceeding 0.70 (see Figure 6). By examining the Cronbach's alpha if an item was deleted, all 26 items appeared worthy of retention. Therefore, no items were dropped based on the reliability analysis,

and the items in the subscales with alpha values below 0.70 were retained for continuing research and further evaluation.
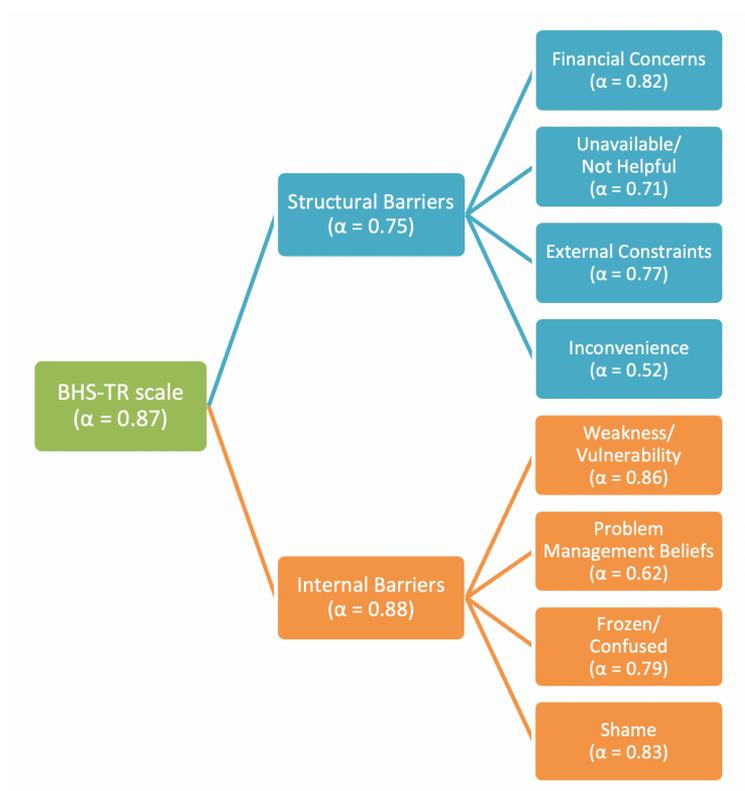
Figure 6: Cronbach's alpha values for the Icelandic BHS-TR scale.

4.3 Study III

Merging of Qualitative and Quantitative Findings

The joint display analysis linking the qualitative and quantitative findings to access the coherence revealed evidence of complementarity, expansion, and discordance. The items referred to below can be found in Table 4.

Complementarity Evidence. Most of the qualitative and quantitative findings were congruent, reinforced one another, were deemed

complementary, and strengthened the overall validation evidence of the BHS-TR. This complementarity applied to the BHS-TR Structural and Internal Barriers indices, as well as for the following specific factors (subscales) of barriers: Financial Concerns, Unavailable/Not Helpful, External Constraints, Problem Management Beliefs, Frozen/Confused, and Shame.

Expansion Evidence. Two factors (Inconvenience and Discrimination) and one category (Reveals Weakness) were found to need expansion. First, the Inconvenience factor revealed in the quantitative phase was missing a key inconvenience item (#9) identified in the qualitative phase. Secondly, while a few issues with the Discrimination factor were identified in the qualitative phase, these items were recognized as essential. Still, all these items (#20, 21, and 23) need to be dropped in the quantitative phase. Thirdly, the Reveals Weakness category from the qualitative phase expanded into the Weakness/Vulnerability factor with additional safeguard and shame items in the quantitative phase. Yet, it was missing a vulnerability barrier (#38) that had been central in the survivors' narratives.

Discordance Evidence. One factor (Mistrust/Rejection) and one category (Safeguard Yourself) were revealed to be discordant. First, despite the qualitative evidence of the relevance and content-related validity, the quantitative phase showed that all the items (#31, 32, and 33) on the Mistrust/Rejection factor should be dropped. Secondly, despite the support for three new items from the qualitative phase in the Safeguard Yourself category, two of them (#36 and 37) were dropped in the quantitative phase.

Examination of Divergent Findings

The ten expansion and discordance dropped items identified in the coherence assessment were focused on in this analytic stage. Most of these items had initially been dropped due to cross-loadings with different BHS-TR factors.

Level of Influence. The rank order analysis of BHS-TR items (26 retained and 10 dropped) revealed that of the ten expansion and discordance items, seven were above the threshold (mean score of ≥2.00) and are shown in Table 7. Of these items, one was in the top 10, and five were in the top 20. For most of these items, more than 50% of survivors reported the barrier as somewhat or strongly influencing them in not seeking help (range 35.8% to 62.8%).

Table 7: The identified influential dropped items (*n* = 137)

Ranking	Dropped Items (Cross-Loadings)	M	SD	*n* (%)*
8	38. I felt like opening up to my feelings would weaken me (Weakness/Vulnerability 0.44 and Shame 0.43)	2.78	1.11	86 (62.8%)
16	33. I felt no one could understand or help me (Frozen/Confused −0.41 and Unavailable/Not Helpful 0.37)	2.58	1.13	76 (55.5%)
18	32. I felt that I could not trust people to help me (Unavailable/Not Helpful 0.43 and Frozen/Confused 0.39)	2.46	1.04	73 (53.8%)
19	36. I was afraid that seeking help would be too emotionally difficult or hurt me even more (Weakness/Vulnerability 0.56 and Inconvenience 0.50)	2.42	1.15	72 (52.6%)
20	37. I did not seek help in an effort to protect or safeguard myself (Inconvenience 0.53 and Weakness/Vulnerability 0.52)	2.40	1.08	70 (51.1%)
25	31. I was afraid I would explain what I needed, and no one would help me anyway (Frozen/Confused 0.40 and External Constraints 0.36)	2.23	1.13	57 (41.6%)
27	23. I felt that there would be prejudice or discrimination against me (Shame 0.59 and Discrimination 0.46)	2.07	1.15	49 (35.8%)

Note: M = mean; SD = standard deviation; *frequency and percent endorsed as somewhat or strongly influenced me.

Cross-Loadings. The cross-loadings onto BHS-TR factors for the seven influential dropped items are shown in Table 7. The examination of these cross-loadings revealed that the concepts of feeling mistrustful and frozen/confused overlap. Similarly, there was an overlap between the feeling of showing weakness and shame. The analysis further revealed issues with the wording of the safeguard and discrimination items. Nevertheless, none of these items were identified as conceptually covered by retained BHS-TR items.

Known-Groups Validity on Item Level. The known-groups validity results for the seven influential and conceptually distinct dropped items are reported in Table 8. The mean scores for the mistrust and safeguard items were all significantly higher for the probable depression, probable PTSD, and low SOC groups. However, there were no significant differences in the mean scores for the weakness item, and the mean score for the discrimination item was significantly higher for the depression group only.

Table 8: Known-groups validity results for dropped items ($n = 137$)

BHS-TR	Depression			PTSD			SOC		
Dropped Items	No ($n = 80$)	Probable ($n = 57$)	p	No ($n = 75$)	Probable ($n = 62$)	p	M/High ($n = 51$)	Low ($n = 81$)	p
Mistrust/Rejection									
33. I felt no one could understand or help me	2.35 (1.15)	2.88 (1.03)	0.01	2.36 (1.11)	2.82 (1.10)	0.02	2.29 (1.12)	2.75 (1.12)	0.02
31. I was afraid I would explain what I needed, and no one would help me anyway	2.00 (1.13)	2.54 (1.05)	0.00	2.04 (1.12)	2.45 (1.09)	0.03	2.00 (1.09)	2.39 (1.11)	0.05
32. I felt that I could not trust people to help me	2.21 (1.14)	2.80 (1.03)	0.00	2.20 (1.12)	2.75 (1.08)	0.00	2.08 (1.10)	2.70 (1.10)	0.00

Safeguard Yourself

37. I did not seek help in an effort to protect or safeguard myself	2.14 (1.00)	2.68 (1.10)	0.00	2.03 (0.97)	2.76 (1.07)	0.00	2.02 (1.02)	2.58 (1.08)	0.00
36. I was afraid that seeking help would be too emotionally difficult or hurt me even more	2.26 (1.16)	2.65 (1.11)	0.05	2.16 (1.13)	2.74 (1.10)	0.00	2.16 (1.19)	2.60 (1.11)	0.03

Reveals Weakness

38. I felt like opening up to my feelings would weaken me	2.71 (1.08)	2.91 (1.14)	–	2.66 (1.11)	2.95 (1.09)	–	2.62 (1.07)	2.95 (1.11)	–

Discrimination

23. I felt that there would be prejudice or discrimination against me	1.86 (1.09)	2.36 (1.18)	0.01	1.92 (1.17)	2.25 (1.12)	–	1.96 (1.13)	2.14 (1.19)	–

Note: Independent sample *t*-tests; mean score (standard deviation); significance level at $p \leq$ 0.05; PHQ-8 cut-off score of ≥10 for probable depression; PCL-5 cut-off score of ≥31 for probable PTSD; SOC-13 scores of 13–57 for low SOC and scores of 58–91 for medium (M) to high SOC.

5 Discussion

This mixed methods doctoral thesis described the cross-cultural adaptation, validation, and legitimation of the BHS-TR scale in samples of IPV survivors in Iceland, creating the first Icelandic trauma-specific and survivor-centered instrument on help-seeking barriers.

The translation and adaptation process of *study I* led to an Icelandic version, which appears to be semantically and conceptually equivalent to the original BHS-TR; additionally, the findings provided evidence of the relevance and content-related validity of the scale. Still, few issues were uncovered, classified into four categories related to general design, translation, cultural aspects, and post-trauma context. Moreover, the Icelandic survivors mentioned few but significant barriers missing from the scale. Adaptations to address these issues improved the Icelandic BHS-TR, making it more culturally attuned and trauma-informed.

The new BHS-TR items developed in *study II* based on the lived experiences of Icelandic survivors represented barriers related to viewing help-seeking as a sign of weakness and their desire to safeguard themselves from re-traumatization and further harm. The psychometric evaluation of the scale supported an eight-factor structure (Financial Concerns; Unavailable/Not Helpful; External Constraints; Inconvenience; Weakness/Vulnerability; Problem Management Beliefs; Frozen/Confused; and Shame) which, when grouped, comprised two indices of Structural and Internal Barriers. Further, the scale's internal consistency was high ($\alpha = 0.87$), and the results provided evidence of convergent, discriminant, and known-groups validity.

The merging of the qualitative and quantitative data through a joint display analysis in *study III* revealed mainly complementarity findings, strengthening the scale's overall legitimation evidence. Divergent findings involved items about mistrust, perceived rejection, stigmatization, fearing vulnerability, and safeguarding efforts that were significant help-seeking barriers in the survivors' narratives, whereas factor analysis indicated their removal. These BHS-TR items were critically evaluated in an iterative spiraling process that supported the barriers' influence, illuminated core issues, and guided potential refinements.

Taken together, the thesis' findings indicate that while the Icelandic BHS-TR deserves continuing attention for improvement, it is a culturally sensitive, trustworthy, and valid instrument that can be accurately and safely used among IPV survivors in Iceland.

5.1 Translation and Adaptation of BHS-TR

The BHS-TR scale was successfully translated and adapted into the Icelandic language and context. This process followed a series of well-established and rigorous steps, including forward-backward translation, multidisciplinary expert committee review, and pretesting through cognitive interviews with participants drawn from the target population. It was iterative in nature, allowing for testing, making modifications, and retesting multiple times, enhancing the Icelandic version of the scale at each round.

The first steps of the translation went without significant problems, which might have been facilitated due to English and Icelandic both being Germanic languages. Interestingly, only one problematic translation issue emerged during the back translation step. However, few translation issues were independently identified with the expert committee review and the pretesting,

raising the question that the back translation step could have been forgone and potentially adding to the growing body of research indicating the shortcomings of back translation as a quality testing tool (Behr, 2017; Epstein et al., 2015). Still, it could be that the efficacy of the back translation was limited by the nature of this thesis, as back translations can be particularly useful in cases where multiple target languages (Bullinger et al., 1998; Rodelli et al., 2022; Squires et al., 2013) are being developed simultaneously and can therefore be analyzed as a group, and less so when only one target language is being developed. The expert committee provided important remarks strengthening the quality of the translation, which is consistent with other studies demonstrating the value of experts review in the cross-cultural adaptation process, especially for ensuring accurate content (Epstein et al., 2015; Sha & Immerwahr, 2018; Valdez et al., 2021).

5.2 Cognitive Interviewing with Survivors

In line with the survivor-centered approach, much emphasis was placed on testing the BHS-TR with survivors. The pretesting through cognitive interviewing was a particularly valuable step, allowing for gaining insight into their perspectives and interpretations of the scale—which resulted in identifying various types of issues as well as uncovering significant barriers to Icelandic survivors missing from the scale. Cognitive interviews have been successfully used in many areas of health, social, and behavioral research to develop and culturally adapt measures (Boateng et al., 2018; Drennan, 2003; Morris et al., 2017; Rodelli et al., 2022; Wexler et al., 2020).

The theoretical perspective underlying the interviews was from traditional cognitive interviewing (Tourangeau, 1984) with influences from cross-cultural practices (Willis, 2015). Hence, not only focused on what is presumably happening in the "black box" of the mind (Boeije & Willis, 2013) but also on

how these cognitive processes are tied to the sociocultural context, which was necessary to successfully adapt the instrument to the lived reality of Icelandic survivors. During the interviews, the women found it difficult to "think out loud," which is in tune with other studies where difficulties with this technique across diverse linguistic and cultural groups have been reported (Martin et al., 2015; Pasick et al., 2001; Zeldenryk et al., 2013). On the other hand, the concurrent probing functioned well and helped the women elicit their interpretive and meaning processes.

Importance was given to the analysis process of the interviews in the thesis. It has been identified as the most undeveloped area of cognitive interviewing methodology; researchers rarely describe how they moved from data collection to the production of results and revisions (Boeije & Willis, 2013). QCA was believed to be the most suitable method as it represents a systematic way to examine both manifest and latent content to describe a phenomenon and its meaning by classifying it into smaller content categories (Elo & Kyngäs, 2008; Schreier, 2012). This method has been used effectively in other cognitive interviewing studies (Crawford et al., 2017; Fitzgerald et al., 2011).

One challenge in using a deductive approach, however, is deciding how to treat meaningful left-over data (Graneheim et al., 2017). Using an unconstrained matrix gave the flexibility to create the new trauma sensitivity issues category and develop the new BHS-TR items following the principles of an inductive approach (Elo & Kyngäs, 2008), making the left-over data an essential contribution. Such movement back and forth between deductive and inductive approaches, as done in this thesis, has been employed by researchers over the years under many different names, e.g., retroductive (Sayer, 1992), fuzzy logic (Rolfe, 1997), combined (Elo & Kyngäs, 2008),

complementary (Blackstone, 2012), and abductive (Graneheim et al., 2017). While often underused strategy, it is recommended for a more comprehensive understanding (Elo & Kyngäs, 2008; Graneheim et al., 2017).

The findings from the interviews showed that the women found the Icelandic version of the BHS-TR in general appropriate and understandable, and the cognitive interviews confirmed that they grasped the intended meaning. Moreover, all the women talked about the importance of this measure concerning their own struggles while trying to seek help. A relatively few general design and translation issues were identified, which might have resulted from the rigorous steps in the adaptation process taken before the pretesting. However, several cultural relevance issues were detected in the interviews, mainly about the same items of concern by the expert committee. These observed distinctions were related to Iceland being less ethnically and culturally diverse than Canada and the U.S., where the scale was originally developed. It also concerned different welfare states, including healthcare costs and individual health coverage, critical factors in the formal help-seeking context. Similar cultural issues have been reported in studies adapting measures developed in English speaking countries for use in Nordic countries (Andersson et al., 2022; Fischer-Grönlund & Brännström, 2021; Husebø et al., 2018; Nilsson-Kajermo et al., 2013).

The trauma sensitivity issues included when participants had trouble responding, were sensitive to the wording or were triggered by items due to their lived experiences of trauma. Although not many, these issues were of great importance to address. This category, unlike the others, was not built on common issues identified in previous research. These were nevertheless the ones most associated with participants not wanting to answer and ultimately skipping items, which is noteworthy since one of the aims of cognitive

interviewing is to ensure high response rates from a sample of the target population in the field testing (Drennan, 2003; Miller et al., 2014). More importantly, this category is a valuable finding for those undertaking studies with GBV survivors or other vulnerable populations and highlights the significance of making research instruments trauma-informed. Reference to trauma-informed approaches in research design and procedures is emerging, empathizing protections to avoid re-traumatization and to ensure participants' physical and emotional safety (Isobel, 2021; Voith et al., 2020). Researchers may need to go above and beyond ethical review boards' requirements to develop procedures and materials that fully support survivors' control, choice, and empowerment (Campbell et al., 2019).

Most of the identified issues were resolved by making revisions based on the survivors' and experts' input. In a few instances, adaptations were not possible in order to maintain equivalence between the source and target versions of BHS-TR, allowing for cross-cultural comparison. Revisions included adding a specific time frame, clarifying, and rewording items—improving the Icelandic version and making the instrument more trauma-informed, which is believed to reduce the likelihood of re-traumatizing and triggering negative feelings for respondents. Moreover, to minimize recall and social desirability biases, well-known threats to the validity of self-reported data (Althubaiti, 2016; Johnson & Fendrich, 2005; Nederhof, 1985).

To enhance the trustworthiness of the thesis qualitative component, a joint collaborative analytic process was undertaken, along with maintaining a transparent audit trail, showing the analytical steps, and linking all revisions made to the data as recommended when using QCA (Elo et al., 2014; Elo & Kyngäs, 2008). Representative quotations from the participants were used, further supporting the trustworthiness as well as conformability (Elo et al.,

2014), illuminating the lived experiences of the barriers and showing that the findings reflect the participants' voices.

5.3 Development of new Barrier Items

The combined etic–emic strategy, allowing for the development and adding of the new barrier items, was valuable to enhancing the Icelandic BHS-TR's cross-cultural validity. This approach has been used with good results in other studies adapting measures developed in other countries to the Icelandic context (Einarsdóttir et al., 2015; Ægisdóttir & Einarsdóttir, 2012). The same framework (Saint Arnault, 2018) that guided the development of the original BHS-TR was used, and the new items were generated in collaboration with the BHS-TR developer, strengthening the process. These items were conceptually divided into two barriers categories and possible new BHS-TR factors, the Reveals Weakness and Safeguard Yourself. That represented the commonly mentioned barriers among the participants related to viewing help-seeking as a sign of weakness and wanting to safeguard oneself from re-traumatization and further harm.

It is noteworthy that while these items are labeled culturally specific (emic) as they were developed based on Icelandic survivors' experiences, the author recognizes that these help-seeking barriers are most likely not specific to Iceland. Fearing vulnerability and not wanting to appear weak to others has been reported as a significant challenge for trauma recovery amongst GBV survivors in other countries (Melgar-Alcantud et al., 2021; Sinko, Burns, et al., 2021). Furthermore, barriers similar to the safeguard barriers were identified in a recent systematic review on mental health service use among trauma survivors, where concerns about re-experiencing the traumatic events and avoiding reminders were prominent (Kantor et al., 2017). Nonetheless, it remains an empirical question whether any of the new items have value for

use in other cultures. The author is currently working with the BHS-TR developer to evaluate these items in American GBV samples as possible additions to the English language version. Besides, these items have been translated into Finnish, Greek, Italian, Swedish, and Turkish, as our colleagues in the MiStory research group are testing them on the BHS-TR for use in their countries.

5.4 Construct-Related Validity of BHS-TR

The examination of the Icelandic BHS-TR structure was exploratory following the emic approach, as 'imposed etics' or, in this case, a measure's structure, may obscure culture-specific results (Berry, 1989; Boer et al., 2018; Ægisdóttir et al., 2008). Using PCA, the factor analysis revealed eight underlying factors (possible subscales) of the BHS-TR, explaining 72% of the total variance. This process reduced the number of items to 26, and 20 of those are shared with the 24-item English language version of the scale (Saint Arnault & Zonp, 2022). Six of the eight factors (Financial Concerns, Unavailable/Not Helpful, External Constraints, Problem Management Beliefs, Frozen/Confused, and Shame) were generally identical to the seven-factor model of the English language BHS-TR. Moreover, further supporting the construct validity of the measure, the results also showed two indices of Structural and Internal Barriers.

Interestingly, the Reveals Weakness category became an emic factor but not the Safeguard Yourself category. However, besides the three weakness items, this new Weakness/Vulnerability factor included one safeguard item about acknowledging things one does not want to face and one privacy item that belonged to the Shame factor on the English language BHS-TR. Surprisingly, the weakness item that got dropped was a vulnerability barrier on how opening up to your feelings would weaken you, which was central in the survivors' narratives. Other items that were surprisingly dropped based on the

exploratory factor analysis criteria were the trauma-specific additions about the notion that other people would not understand or could not be trusted to help, even though perceived rejection and mistrust of people or systems are commonly cited barriers in the literature (Fugate et al., 2005; Heron & Eisma, 2021; Robinson et al., 2021; Saint Arnault & O'Halloran, 2016).

Another result from the quantitative phase raising concerns was that the entire Discrimination factor from the English language BHS-TR (Saint Arnault & Zonp, 2022), including items about culture, background, and prejudice, needed to be dropped. The relevance of these items had been questioned in the pretesting, and it is possible that the factor performed poorly because of this Icelandic sample's ethnic and socioeconomic homogeneity. Future studies can examine this by carrying out a sampling of people with more diverse backgrounds and immigrant status, both in Iceland and other countries.

The structural items about distance or transportation problems and seeking help taking too much time hung together as a potential Inconvenience subscale yet were missing a key inconvenience item identified in the qualitative phase about not getting time away from work or family. This factor is not consistent with the structure of the English language BHS-TR scale (Saint Arnault & Zonp, 2022). Nonetheless, it was decided to include it for the Icelandic BHS-TR and continue the research on this concept, as the findings from the cognitive interviews indicated that these barriers are important in the Icelandic help-seeking context. In this regard, it is worth mentioning that the rate of women's labor-force participation in Iceland is among the highest in the world (Organisation for Economic Co-operation and Development, 2022; The Economist, 2022). According to the criteria used, most of the dropped items discussed here were removed from the scale due to cross-loadings with different BHS-TR factors.

The full 26-item Icelandic BHS-TR, the two indices, and most subscales showed good reliability as measured with Cronbach's alpha coefficient. The two subscales (Problem Management Beliefs and Inconvenience) with alpha values below the recommended 0.70 are short subscales with only three and two items, respectively. Cronbach's alpha reliability scores are sensitive to the number of items. It is expected to find relatively low values with short scales, and some researchers claim that the coefficient is inappropriate and even meaningless for two-item scales (Eisinga et al., 2013; Rammstedt & Beierlein, 2014). Still, these results further indicated the need to continue working with the subscales, especially the inconvenience one, as stable factors usually need to include at least three items (Costello & Osborne, 2005; Yong & Pearce, 2013).

The results demonstrated support for the Icelandic BHS-TR convergent and discriminant validity by showing the hypothesized relationships between help-seeking barriers and mental illness stigma beliefs on the one hand and SOC on the other. These relationships have been indicated in the relevant literature (Antonovsky, 1987; Clement et al., 2015; Saint Arnault, 2018; Super et al., 2016) and shown in a recent evaluation of the BHS-TR (Saint Arnault & Zonp, 2022). However, in this thesis, the correlations between the barriers and stigma beliefs were only weak to moderate. It may be desirable in future work evaluating the convergent validity evidence of BHS-TR in samples of IPV survivors to use other instruments along with or instead of BTMI (Hirai & Clum, 2000; Hirai et al., 2018), for example, the newly developed IPV Stigma Scale (Crowe et al., 2021). Besides, instruments of other related constructs because while stigmatization is crucial, barriers to help-seeking include much more than stigma. The thesis results furthermore provided evidence of known-groups validity, as the BHS-TR could differentiate between subsamples of IPV

72

survivors based on the severity of depression and PTSD symptoms, groups known to differ on help-seeking barriers (Fleming & Resick, 2017; Hien & Ruglass, 2009; Saint Arnault & O'Halloran, 2016; Saint Arnault & Zonp, 2022).

Although these quantitative results together provided compelling evidence that the 26-item version of Icelandic BHS-TR (see Appendix) is a reliable and valid instrument, the mismatch between the participants' narratives and the factor analysis results for several items pointed to a legitimation issue—demonstrating the need for further systematic assessment of the coherence of the thesis' qualitative and quantitative findings.

5.5 Legitimation Strategy of Integration

The mixed methods approach applied in this thesis provided a rigorous process, capitalizing on the strengths of both qualitative and quantitative methods while minimizing the weaknesses, which is recognized as one of the many advantages of mixed methods research (Almalki, 2016; Creswell & Plano Clark, 2018; Regnault et al., 2018). The use of mixed methods in instrument development and validation studies has been increasing. It can promote more rigor in the process, optimizing the development of quality, psychometrically sound, and culturally sensitive instruments (Daigneault & Jacob, 2014; Onwuegbuzie et al., 2010; Sankofa, 2021). This thesis focused equally on the credibility/trustworthiness and reliability/validity of the BHS-TR and emphasized the integration of findings from both datasets. Traditionally, and to a large extent still today, instrument development designs place more emphasis on quantitative data and results (Creswell & Plano Clark, 2018; Luyt, 2012; Onwuegbuzie et al., 2010; Sankofa, 2021).

The merging of the qualitative and quantitative findings provided more complete insights into the validation evidence than could be gained by either

alone. A majority of the findings were complementarity, telling different but congruent stories, strengthening the overall legitimation evidence of the Icelandic BHS-TR. The added value of this integration also involved identifying the expansion and discordant findings. Few mixed methods studies examine details of divergence (Perez et al., 2022; Pluye et al., 2009), and in the past, conflicting evidence has often led researchers to ignore or dismiss qualitative findings (Patton, 2002). It is essential to acknowledge and respect the value of divergence as a possible generative of unanticipated insights (Greene, 2007).

The legitimation strategy applying an iterative spiraling process developed and used in this thesis to examine the coherence of the findings and divergence helped illuminate the core issues and inform potential refinements. Spiraling was selected because each revision informed the next step (Mendlinger & Cwikel, 2008; Onwuegbuzie et al., 2010). At the end of this analysis, seven dropped BHS-TR items were identified deserving further attention, representing barriers that had strongly influenced the survivors from seeking help yet are not covered by the scale. These items belonged to four critical factors/categories of barriers (Mistrust/Rejection, Safeguard Yourself, Reveals Weakness, and Discrimination) that still require work to capture these concepts more fully and become BHS-TR subscales.

The findings revealed that the mistrust and perceived rejection items were conceptually overlapping with items related to feeling frozen and confused, indicating the need to rewrite these critical items. This thesis and the results of other studies (Crowe & Murray, 2015; Heron & Eisma, 2021; Saint Arnault & O'Halloran, 2016) show that such barriers are often impacted by past encounters and are therefore central to the survivors' help-seeking experience. Harmful responses (e.g., disbelieving, dismissing, pathologizing, or blaming survivors) from the helpers and helping services are likely to prevent

additional help-seeking (Crowe & Murray, 2015; Liang et al., 2005; Robinson et al., 2021; Wilson et al., 2015). Further, the need to expand the discrimination factor to capture the stigma and prejudice associated with GBV were discovered in this thesis, consistent with previous studies demonstrating that fear of stigmatization is a major barrier among survivors (Heron & Eisma, 2021; Lelaurain et al., 2017). For example, the IPV Stigmatization Model (Overstreet & Quinn, 2013) describes how three components of stigma, cultural, internalized, and anticipated, hinder help-seeking behaviors among survivors.

The perception of harmful responses from helpers was also related to the findings on the safeguarding items, highlighting the importance of nonjudgmental responses and trauma-informed services to avoid unintentionally derailing survivors' trauma recovery processes. In recent years, the emphasis on professional responses has been the focus of IPVAW policies by the WHO, aiming to provide evidence-based guidance for an appropriate health-sector response to violence against women (WHO, 2013; WHO, 2021a). Additionally, there is a rapidly growing literature on the implementation of a trauma-informed approach to survivors' services (Anyikwa, 2016; Drexler et al., 2022; Kulkarni, 2019; Palmieri & Valentine, 2021; Taft et al., 2016), where the SAMHSA's (2014) four trauma-informed assumptions (the 4 R's) of realizing, recognizing, responding, and resisting re-traumatization, play a key role. Still, potential issues involving the safeguarding items being either written too broadly or too specific were detected. Additional analysis will reveal if the reworded items load, along with the third safeguard item currently belonging to the Weakness/Vulnerability subscale, onto a new Safeguarding Efforts subscale.

The weakness item ranked in the top 10 influence rank order for all BHS-TR items and was the most hindering barrier of the dropped items. No significant problems with the wording were detected. Yet, this item loaded onto the Weakness/Vulnerability and Shame factors, which are related but still conceptually distinct, at about the same strength. The author speculates that this may be caused by its relationship to feeling weakness by opening up emotionally, while the other items focus on being seen as weak by others. Interestingly, this item performed worst in the final validity testing step, as it could not differentiate between any of the groups. On average, all the survivors scored high regardless of distress symptoms or their SOC. That might be related to how intertwined beliefs about staying strong and not revealing weakness are in Icelandic culture. As with many other individualistic countries, value is placed on independence and self-reliance (Andrade et al., 2014; Kantor et al., 2017; Ólafsson, 2003).

5.6 Limitations

While the results of this thesis are important, and legitimation strategies to minimize threats to trustworthiness and validity were implemented (see Table 2), they need to be considered alongside several limitations. Such as the relatively small samples selected using non-probability sampling methods, thereby increasing the risk of selection bias. Probability sampling was unfeasible, as is true for many other studies among hidden and vulnerable populations (Ellard-Gray et al., 2015; Shaghaghi et al., 2011). Additionally, using identical or nested samples (Collins et al., 2007) was not possible as the qualitative data collection, with fewer participants, occurred before the quantitative one. That can be a legitimation threat (Onwuegbuzie et al., 2011) to the meta-inferences generated and limits the generalizability.

Cognitive interview studies typically include few participants but strive to conduct interviews with a variety of individuals (Miller et al., 2014; Willis, 1999). The target population in this thesis was Icelandic women IPV survivors. While the qualitative sample contained various important characteristics of that population, the women were all white, predominantly born in Iceland, and in heterosexual relationships, which is a limitation, particularly regarding their view on the discrimination items. The qualitative data collection was stopped after three rounds of interviews when saturation was reached. In one sense, an instrument can be tested forever and still have problems (Miller et al., 2014; Willis, 1999). The BHS-TR was tested until several major issues had been detected and adequately addressed. Source-language cognitive interviews with American survivors were not included in this thesis as the focus at this point was on the Icelandic context. An emerging consensus within the cross-cultural cognitive interviewing literature is that source-language testing should be done parallel with the translation assessment to establish whether the problems identified are general or specific to the target version (Crawford et al., 2017; Levin et al., 2009; Willis, 2015). Presumably, this approach would have provided valuable data, allowing for decentering, which has been defined as the process of modifying the source instrument, when necessary, along with the translated version (Brislin, 1976). As noted, while not part of this thesis, the author is working alongside the instrument developer on modifying the English language version of BHS-TR.

The quantitative sample was drawn from the same underlying population as the qualitative one, and the samples were comparable, although less demographic information was gathered from the quantitative sample, e.g., regarding the time in and out of the abusive relationship, sexual orientation, race, and foreign origin, which is a weakness of this thesis. Since the

participants needed to be able to read and understand Icelandic to take the survey, similar racial and ethnic characteristics as the qualitative sample might be the case for the quantitative sample, which could explain why the Discrimination subscale did not remain a factor. This is noteworthy because women of foreign origin are increasingly making Iceland their home, and it is well-established that immigrants may be particularly at risk for violence in intimate relationships and might have even more difficulties seeking help than their Icelandic-born counterparts (Ministry of Welfare, 2016; Tietgen et al., 2021). Using an online survey also limited the ability to reach individuals without access to a computer or with limited technological literacy. A noticeable difference between the samples was concerning the age and prevalence of receiving mental healthcare. In addition, the qualitative data collection was conducted before the COVID-19 pandemic, while the quantitative data collection occurred in the first months of the pandemic in Iceland. Further, even though participants in both samples had experienced many barriers, most of these women had at some point sought help and care. Considering the literature reviewed in the introduction, demonstrating that many survivors never seek help, despite the perceived need for it, the scale must capture the barriers experienced by an increasingly diverse group of survivors.

Of the 168 survivors that answered the survey, 31 had missing values on the BHS-TR scale. As the primary quantitative analyses for evaluating the scale required no missing data, it was decided to use only data from the 137 survivors who completed the entire BHS-TR. Data imputation via, e.g., expectation-maximization algorithm as recommended when performing factor analysis or PCA (Graham, 2009; Malan et al., 2020; Weaver & Maxwell, 2014) was deemed unacceptable as all 31 had missing values above 50%.

Missing data among the 137 participants in this thesis did not exceed 5% on any of the other measures used. While a larger quantitative sample, especially for examining the BHS-TR structure, would have been preferred, testing the sampling adequacy showed that the sample size was sufficient. Furthermore, previous studies have revealed that exploratory factor analysis techniques can be applied to sample sizes far below what traditional recommendations suggest and still yield reliable results (de Winter et al., 2009; McNeish, 2017).

The strengths of the etic–emic strategy have been pointed out, but it needs to be acknowledged that using this approach for translation and adaptation purposes can limit the equivalence between language versions of a measure, thus making cross-cultural comparisons challenging. One recommendation to address this is to use only shared (etic) items for comparison and the nonshared (emic) items used for a culture-specific understanding of the construct (Van de Vijver & Leung, 2021; Ægisdóttir et al., 2008). For now, the shared BHS-TR items can be used for comparisons, and soon results from the earlier mentioned studies currently testing the new items for use outside of Iceland will reveal if those can be used as well.

Some limitations to the convergent, discriminant, and known-groups validity assessment of the Icelandic BHS-TR must be acknowledged. While the PHQ-8, PCL-5, BTMI, and SOC-13 used for this testing are widely utilized instruments in research across cultures and validated in multiple countries, there is a lack of published studies on the psychometric properties of the Icelandic versions—which is a potential threat to the validity of the assessment. However, it should be noted that these instruments were adapted to the Icelandic language and context by groups of experienced Icelandic researchers and clinicians and are frequently used in research and practice in Iceland. The use of multiple independent t-tests (increasing the chance of a

Type I error) without adjusting the *p*-value for each test performed is also a limitation. The Bonferroni correction was limited to the main comparison of the depression and PTSD groups for the total scale score because the other *t*-tests conducted on the subscales and individual items were (at this point) purely exploratory. Thus, not deemed necessary to limit statistical power (increasing the chance of a Type II error) with a rigorous correction for that purpose. Future assessment of the known-groups validity of BHS-TR and its subscales should, nonetheless, control for the family-wise error rate. Ideally, using a somewhat less conservative method than the Bonferroni correction, e.g., the Holm–Bonferroni variant, which is as robust but retains the statistical power better (Field, 2018; Holm, 1979).

Finally, the largely quantitative approach to examining the divergent findings is a potential weakness. Still, it should be mentioned that this analysis was driven by a critical examination of quantitative data based on qualitative findings. The aim was to understand the issues revealed in the smaller qualitative dataset in the larger quantitative sample, allowing for potentially generalizing those findings. What the mixing methods does, as demonstrated in this thesis, is use the findings from each to validate or legitimate the findings from the other. The former stages of this thesis and previous work on the BHS-TR (Saint Arnault & O'Halloran, 2016; Saint Arnault & Zonp, 2022) had provided strong qualitative evidence for the significance of these barriers and therefore focused on the quantitative data at this stage. The level of influence step was performed to gain information on the significance of the barriers from one view of a quantitative lens. It must be noted that this quantitative data is cross-sectional, providing a point-in-time estimate, and additional qualitative data could give a story of a journey for deeper understanding. Furthermore, it needs to be acknowledged that "mainstream" responses do not account for

individual experiences, and the voices of those who have significantly different experiences of life to most of the population may be lost.

5.7 Implications and Future Directions

Studies on help-seeking among IPV survivors in Iceland are scant, particularly the specific focus on the recovery trajectory, and thus this doctoral thesis is a valuable contribution. The research work resulted in the creation of the first Icelandic trauma-specific instrument that assesses barriers to seeking help. Moreover, the thesis gives insight into the help-seeking barriers that Icelandic survivors face on their journey toward trauma recovery and the unique aspects of culture impacting these processes. Hence, moving beyond solely focusing on barriers to leaving an abusive relationship and attending to the immediate harm caused, as much of the IPVAW help-seeking literature has focused on to date.

The availability of BHS-TR, a culturally sensitive and psychometrically sound instrument, for research and practice in Iceland has value by providing information that can guide the development of evidence-based and culturally meaningful interventions; targeted toward breaking down barriers, increasing help-seeking, and reducing the duration of untreated illness and suffering. Understanding these barriers can also guide trauma-informed practice that integrates a better understanding of trauma responses and sociocultural influencing factors into serveries where survivors might seek support and help. The BHS-TR could then likewise be used to assess changes in barriers after the introduction of such interventions.

The need for an Icelandic help-seeking barriers research instrument and further studies in this area was demonstrated in the thesis. Even though all the women in the qualitative sample had experienced adverse health effects

because of the violence, only a few had sought help to work through their trauma. They all talked about the importance of this measure concerning their efforts in seeking help, strongly relating to most barriers on the BHS-TR. Similarly, despite the high prevalence of psychological distress in the quantitative sample and most of the women reporting needing help for trauma recovery, almost half of them did not seek help. In addition, the quantitative analyses showed high BHS-TR scores on average. Indicating that, like survivors in other countries, as the literature reviewed above demonstrates, IPV survivors in Iceland are faced with an array of barriers to seeking help. Moreover, the mean scores for the subscales showed that the survivors in this Icelandic sample generally experienced more internal barriers than structural, and the level of influence analysis for the items revealed almost a clear-cut ranking between those two groups of barriers.

Examining further the main factors hindering IPV survivors in Iceland from seeking help and the pattern of internal versus structural barriers was beyond the scope of this thesis. Yet, it needs to be explored in future studies, and many research questions remain to be answered. To mention a few, to what extent do these barriers predict non-help-seeking or delayed care-seeking? How do sociocultural factors influence the internal barriers experienced by Icelandic survivors? Is the universal welfare system in Iceland an important variable at play in the pattern of internal and structural barriers? Would a similar pattern be revealed in a sample of immigrants to Iceland? What help-seeking barriers do men, transgender, and genderqueer survivors of IPV experience? How much effect would it have if the national public health insurance covered psychotherapy on the same grounds as other health services? What are the experiences of survivors in Iceland who do seek help? Do their past encounters increase or decrease further help-seeking and other trauma recovery actions?

Are trauma-informed approaches to care applied in health and social services in Iceland? Do IPV survivors in the other Nordic countries face similar help-seeking barriers as survivors in Iceland?

While the BHS-TR can serve as a helpful tool for generating valuable quantitative data, the IPV help-seeking literature in Iceland also needs qualitative studies examining this phenomenon. Using qualitative methods can give more in-depth information to increase knowledge and deepen the understanding of the help-seeking pathways for trauma recovery among survivors in Iceland. Future research would as well benefit from cross-cultural comparison work to discover similarities and differences between Iceland and other countries within and outside the Nordic region. Additionally, examining the facilitators of help-seeking is required; understanding what helps survivors seek help alongside what hinders them is crucial for finding meaningful ways to facilitate help-seeking.

After the author gathered the data used in this thesis, Iceland experienced a resurgence of the #MeToo movement that prompted many survivors, including marginalized women of foreign origin and trans women, to come forward with their experiences of GBV. Following, discussion on misogyny, GBV, and other forms of gender inequality gained significant prominence in Icelandic society. Despite some backlash, it appears that the discourse has overwhelmingly been characterized by zero tolerance for any form of violence, believing, and supporting survivors. That however needs to be scientifically studied, and the potential effects of this ongoing movement on help-seeking barriers among survivors in Iceland would be interesting to explore. Similarly, the long-term effects of the COVID-19 pandemic on IPV and help-seeking among its survivors should be monitored. Thus, longitudinal study designs are necessary, which would also enhance the ability to determine causal

relationships between survivors' distress symptoms, SOC, help-seeking barriers, and trauma recovery actions.

This thesis contributes to the growing field of mixed methods instrument development and cross-cultural adaptation; that places equal status on qualitative and quantitative methods and emphasizes integration to provide more complete insights to inform validation evidence. It also adds to the growing cross-cultural cognitive interviews literature by providing a detailed description of the analysis process, identified as the least developed area of cognitive interviewing methodology. The findings from the interviews provided essential insights into the self-report response process of survivors, highlighting the importance of making research instruments trauma-informed. Further, the work presented here illustrates that the factor analysis of requiring items to load only onto one factor to be considered "valid" may sometimes be troubling, promoting an overly reductionist approach that can oversimplify the complexities of social phenomena. A person's view of the world might not align with the way instruments are developed, and the author believes that the use of mixed methods, especially the legitimation strategy of integration illustrated in this thesis, can help move the field toward the critical examination of including participants' voices throughout the validation process.

Future work on the Icelandic BHS-TR should further examine and develop the crucial expansion and discordant items identified in this thesis. Additional interviewing with survivors to gain in-depth insights into the conceptual overlaps and cultural nuances of these barriers are required to inform BHS-TR refinements further. In addition, assessing floor–and–ceiling effects for all items, examining the BHS-TR structure using confirmatory factor analysis, and evaluating response consistency via test–retest reliability measurement using

larger and representative samples are needed. Finally, future studies with and about the BHS-TR would be greatly enhanced by utilizing recruitment procedures targeting diverse groups of survivors, including gender identity, sexual orientation, ethnic background, socioeconomic status, forms of GBV, and help-seeking attempts or experiences.

5.8 Conclusions

The overall findings of this doctoral thesis indicate that the Icelandic BHS-TR scale is trustworthy, valid, and helpful in understanding aspects of the help-seeking barriers that IPV survivors in Iceland experience. The 26-item version with two indices and eight subscales shows promise but deserves continuing attention for refinement and maximum utility to populations not well-represented in the present samples. Expanding the instrument based on the lived experience of survivors can help BHS-TR better capture the significant hindrances faced, and the immense amount of effort survivors often take to seek help. Measuring the various barriers to seeking help for trauma recovery among survivors can move the IPV help-seeking literature into a more holistic and survivor-centered direction. It is hoped that BHS-TR, which is the first of its kind in Iceland, can serve as a valuable tool in future help-seeking research among Icelandic survivors. The instrument can be used with survivors of IPV and other forms of GBV to provide essential information that may guide the development of evidence-based interventions to break down barriers and help survivors find their way to recovery and thriving.

The studies comprising this thesis contribute to the growing literature supporting the advantages of using mixed methods for instrument development and cross-cultural adaptation. The legitimation strategy of integration illustrated here provided more complete insight into the validation evidence than could be gained by either qualitative or quantitative methods

alone. Moreover, the results highlight the significance of giving attention to the voices of the target population throughout the validation process. At last, the author hopes that this thesis can serve as an exemplar to encourage mixed methods researchers faced with divergent findings to embrace the possibility of expanding insights from additional analyses and developing innovative follow-up strategies for a deeper, more nuanced understanding of complex phenomena.

References

Aday, L. A., & Andersen, R. (1974). A framework for the study of access to medical care. *Health Services Research, 9*(3), 208–220.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Prentice-Hall.

Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology, 22*(5), 453–474. https://doi.org/10.1016/0022-1031(86)90045-4

Almalki, S. (2016). Integrating quantitative and qualitative data in mixed methods research – Challenges and benefits. *Journal of Education and Learning, 5*(3), 288–296. https://doi.org/10.5539/jel.v5n3p288

Alsaker, K., Moen, B. E., Morken, T., & Baste, V. (2018). Intimate partner violence associated with low quality of life – A cross-sectional study. *BMC Women's Health, 18*(148), 1–7. https://doi.org/10.1186/s12905-018-0638-5

Althubaiti, A. (2016). Information bias in health research: Definition, pitfalls, and adjustment methods. *Journal of Multidisciplinary Healthcare, 9*(1), 211–217. https://doi.org/10.2147/JMDH.S104807

Alvarez, C., Fedock, G., Grace, K. T., & Campbell, J. (2017). Provider screening and counseling for intimate partner violence. *Trauma, Violence, & Abuse, 18*(5), 479–495. https://doi.org/10.1177/1524838016637080

American Educational Research Association, American Psychological Association, and National Council on Measurement in Education. (2014). *Standards for educational and psychological testing.* https://www.apa.org/science/programs/testing/standards

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Association.

Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior, 36*(1), 1–10. https://doi.org/10.2307/2137284

Andersson, S., Granat, L., Brännström, M., & Sandgren, A. (2022). Translation, cultural adaptation, and content validation of the Palliative care self-efficacy scale for use in the Swedish context. *International Journal of Environmental Research and Public Health, 19*(3), 1–11. https://doi.org/10.3390/ijerph19031143

Andersson, T., Heimer, G., & Lucas, S. (2014). *Violence and health in Sweden: A national prevalence study on exposure to violence among women and men and its association to health.* The National Centre for Knowledge on Men's Violence Against Women. https://nck.uu.se/en/research-and-development/national-prevalence-study-on-violence

Antonovsky, A. (1987). *Unraveling the mystery of health: How people manage stress and stay well*. Jossey-Bass.

Antonovsky, A. (1993). The structure and properties of the Sense of coherence scale. *Social Science & Medicine, 36*(6), 725–733. https://doi.org/10.1016/0277-9536(93)90033-Z

Anyikwa, V. A. (2016). Trauma-informed approach to survivors of intimate partner violence. *Journal of Evidence-Informed Social*

Work, 13(5), 484–491.
https://doi.org/10.1080/23761407.2016.1166824

Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology, 40*(4), 471–499.
https://doi.org/10.1348/014466601164939

Ásgeirsdóttir, J. (2019). *Does psychological resilience moderate the relationship between chronological age, threat appraisal, number of traumatic events and trauma type and posttraumatic stress symptoms?* [Master's Thesis, University of Iceland].
http://hdl.handle.net/1946/34889

Bacchus, L. J., Ranganathan, M., Watts, C., & Devries, K. (2018). Recent intimate partner violence against women and health: A systematic review and meta-analysis of cohort studies. *BMJ Open, 8*, 1–20.
https://doi.org/10.1136/bmjopen-2017-019995

Barrett, B. J., Peirone, A., & Cheung, C. H. (2020). Help seeking experiences of survivors of intimate partner violence in Canada: The role of gender, violence severity, and social belonging. *Journal of Family Violence, 35*(1), 15–28. https://doi.org/10.1007/s10896-019-00086-8

Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine, 25*(24), 3186–3191.
https://doi.org/10.1097/00007632-200012150-00014

Beatty, P., Collins, D., Kaye, L., Padilla, J. L., Willis, G., & Wilmot, A. (Eds.). (2020). *Advances in questionnaire design, development, evaluation and testing*. Wiley.
https://doi.org/10.1002/9781119263685

Behr, D. (2017). Assessing the use of back translation: The shortcomings of back translation as a quality testing method. *International Journal of Social Research Methodology, 20*(6), 573–584. https://doi.org/10.1080/13645579.2016.1252188

Bergsdóttir, G. S., Baldursdóttir, G. S., & Kristmannsson, F. (2020). *Reynsla landsmanna af afbrotum og öryggistilfinning íbúa 2019* [*Icelanders' experience of crime and the population's sense of security 2019*]. Office of the National Commissioner of the Police. https://www.logreglan.is/wp-content/uploads/2020/03/Reynsla-landsmanna-af-afbrotum-og-öryggi-%C3%ADbúa-2018-spurt-2019.pdf

Berry, J. W. (1989). Imposed etics–emics–derived etics: The operationalization of a compelling idea. *International Journal of Psychology, 24*(6), 721–735. https://doi.org/10.1080/00207598908247841

Björnsson, A. S., Jónsdóttir, K., Sigurðardóttir, S., Wessman, I., Sigurjónsdóttir, Ó., Þórisdóttir, A. S., Harðarson, J. P., & Arnkelsson, G. (2018). Próffræðilegir eiginleikar Sheehan Disability Scale, Quality of Life Scale og Patient Health Questionnaire í íslenskri þýðingu [Psychometric properties of the Icelandic translations of the Sheehan disability scale, Quality of life scale and the Patient health questionnaire]. *Journal of the Icelandic Psychological Association, 23*, 91–100. https://www.hirsla.lsh.is/handle/2336/621138

Blackstone, A. (2012). *Sociological inquiry principles: Qualitative and quantitative methods*. Saylor Academy.

Bland, J. M., & Altman, D. G. (1995). Multiple significance tests: The Bonferroni method. *BMJ, 310*(6973), 170. https://doi.org/10.1136/bmj.310.6973.170

Blevins, C. A., Weathers, F. W., Davis, M. T., Witte, T. K., & Domino, J. L. (2015). The posttraumatic stress disorder checklist for DSM-5 (PCL-5): Development and initial psychometric evaluation. *Journal of Traumatic Stress, 28*(6), 489–498. https://doi.org/10.1002/jts.22059

Boateng, G. O., Neilands, T. B., Frongillo, E. A., Melgar-Quiñonez, H. R., & Young, S. L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. *Frontiers in Public Health, 6*(149), 1–18. https://doi.org/10.3389/fpubh.2018.00149

Boeije, H., & Willis, G. (2013). The cognitive interviewing reporting framework (CIRF) towards the harmonization of cognitive testing reports. *Methodology – European Journal of Research Methods for the Behavioral and Social Sciences, 9*(3), 87–95. https://doi.org/10.1027/1614-2241/a000075

Boer, D., Hanke, K., & He, J. (2018). On detecting systematic measurement error in cross-cultural research: A review and critical reflection on equivalence and invariance tests. *Journal of Cross-Cultural Psychology, 49*(5), 713–734. https://doi.org/10.1177/0022022117749042

Bonomi, A. E., Anderson, M. L., Rivara, F. P., & Thompson, R. S. (2009). Health care utilization and costs associated with physical and nonphysical-only intimate partner violence. *Health Services Research, 44*(3), 1052–1067. https://doi.org/10.1111/j.1475-6773.2009.00955.x

Bonomi, A. E., Thompson, R. S., Anderson, M., Reid, R. J., Carrell, D., Dimer, J. A., & Rivara, F. P. (2006). Intimate partner violence and women's physical, mental, and social functioning. *American Journal of Preventive Medicine, 30*(6), 458–466. https://doi.org/10.1016/j.amepre.2006.01.015

Bovin, M. J., Marx, B. P., Weathers, F. W., Gallagher, M. W., Rodriguez, P., Schnurr, P. P., & Keane, T. M. (2016). Psychometric properties of the PTSD checklist for diagnostic and statistical manual of mental disorders-fifth edition (PCL-5) in veterans. *Psychological Assessment, 28*(11), 1379–1391. https://doi.org/10.1037/pas0000254

Boyle, M. H., Offord, D. R., Campbell, D., Catlin, G., Goering, P., Lin, E., & Racine, Y. A. (1996). Mental health supplement to the Ontario health survey: Methodology. *Canadian Journal of Psychiatry-Revue Canadienne De Psychiatrie, 41*(9), 549–558. https://doi.org/10.1177/070674379604100903

Braithwaite, J., Herkes, J., Ludlow, K., Testa, L., & Lamprell, G. (2017). Association between organisational and workplace cultures, and patient outcomes: Systematic review. *BMJ Open, 7*, 1–11. https://doi.org/10.1136/bmjopen-2017-017708

Brislin, R. W. (1976). Comparative research methodology: Cross-cultural studies. *International Journal of Psychology, 11*(3), 215–229. https://doi.org/10.1080/00207597608247359

Brislin, R. W. (1983). Cross-cultural research in psychology. *Annual Review of Psychology, 34*(1), 363–400. https://doi.org/10.1146/annurev.ps.34.020183.002051

Brislin, R. W. (1986). The wording and translation of research instruments. In W. J. Lonner & J. W. Berry (Eds.), *Field methods in cross-cultural research* (pp. 137–164). Sage Publications.

Brislin, R. W., Lonner, W. J., & Thorndike, R. M. (1973). *Cross-cultural research methods*. Wiley.

Bryngeirsdottir, H. S., & Halldorsdottir, S. (2022). Fourteen main obstacles on the journey to post-traumatic growth as experienced by female survivors of intimate partner violence: "It was all so

confusing". *International Journal of Environmental Research and Public Health, 19*(9), 1–19. https://doi.org/10.3390/ijerph19095377

Bullinger, M., Alonso, J., Apolone, G., Leplège, A., Sullivan, M., Wood-Dauphinee, S., Gandek, B., Wagner, A., Aaronson, N., Bech, P., Fukuhara, S., Kaasa, S., & Ware, J. E. (1998). Translating health status questionnaires and evaluating their quality: The IQOLA project approach. *Journal of Clinical Epidemiology, 51*(11), 913–923. https://doi.org/10.1016/S0895-4356(98)00082-1

Bustamante, C. (2019). TPACK and teachers of Spanish: Development of a theory-based joint display in a mixed methods research case study. *Journal of Mixed Methods Research, 13*(2), 163–178. https://doi.org/10.1177/1558689817712119

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin, 56*(2), 81–105. https://doi.org/10.1037/h0046016

Campbell, R., Goodman-Williams, R., & Javorka, M. (2019). A trauma-informed approach to sexual violence research ethics and open science. *Journal of Interpersonal Violence, 34*(23-24), 4765–4793. https://doi.org/10.1177/0886260519871530

Cattell, R. B. (1966). The Scree test for the number of factors. *Multivariate Behavioral Research, 1*(2), 245–276. https://doi.org/10.1207/s15327906mbr0102_10

Chan, D. (2008). So why ask me? Are self-report data really that bad? In C. E. Lance & R. J. Vandenberg (Eds.), *Statistical and methodological myths and urban legends: Doctrine, verity and fable in organizational and social sciences* (pp. 309–336). Routledge. https://doi.org/10.4324/9780203867266-22

Cho, H., Kwon, I., Shamrova, D., & Seon, J. (2021). Factors for formal help-seeking among female survivors of intimate partner violence. *Journal of Family Violence, 36*(2), 143–152. https://doi.org/10.1007/s10896-019-00107-6

Cho, H., Shamrova, D., Han, J., & Levchenko, P. (2020). Patterns of intimate partner violence victimization and survivors' help-seeking. *Journal of Interpersonal Violence, 35*(21-22), 4558–4582. https://doi.org/10.1177/0886260517715027

Clement, S., Brohan, E., Jeffery, D., Henderson, C., Hatch, S. L., & Thornicroft, G. (2012). Development and psychometric properties the Barriers to access to care evaluation scale (BACE) related to people with mental ill health. *BMC Psychiatry, 12*(36), 1–11. https://doi.org/10.1186/1471-244X-12-36

Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., Morgan, C., Rüsch, N., Brown, J. S. L., & Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine, 45*(1), 11–27. https://doi.org/10.1017/S0033291714000129

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Collins, K. M. T., Onwuegbuzie, A. J., & Jiao, Q. G. (2007). A mixed methods investigation of mixed methods sampling designs in social and health science research. *Journal of Mixed Methods Research, 1*(3), 267–294. https://doi.org/10.1177/1558689807299526

Cornally, N., & McCarthy, G. (2011). Help-seeking behaviour: A concept analysis. *International Journal of Nursing Practice, 17*(3), 280–288. https://doi.org/10.1111/j.1440-172X.2011.01936.x

Costello, A. B., & Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10*(7), 1–9.

Crawford, J., Ahmad, F., Bierman, A., & Beaton, D. (2017). Cognitive testing of the colon cancer screening behaviours survey with south Asian immigrants in Canada. *Journal of Patient-Reported Outcomes, 1*(7), 1–15. https://doi.org/10.1186/s41687-017-0007-4

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Sage Publications.

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*(4), 281–302. https://doi.org/10.1037/h0040957

Crowe, A., & Murray, C. E. (2015). Stigma from professional helpers toward survivors of intimate partner violence. *Partner Abuse, 6*(2), 157–179. https://doi.org/10.1891/1946-6560.6.2.157

Crowe, A., Overstreet, N. M., & Murray, C. E. (2021). The intimate partner violence stigma scale: Initial development and validation. *Journal of Interpersonal Violence, 36*(15-16), 7456–7479. https://doi.org/10.1177/0886260519834095

Daigneault, P., & Jacob, S. (2014). Unexpected but most welcome: Mixed methods for the validation and revision of the participatory evaluation measurement instrument. *Journal of Mixed Methods Research, 8*(1), 6–24. https://doi.org/10.1177/1558689813486190

Daneshvar, S., Shafiei, M., & Basharpoor, S. (2020). Group-based compassion-focused therapy on experiential avoidance, meaning-in-life, and sense of coherence in female survivors of intimate partner violence with PTSD: A randomized controlled trial. *Journal

of *Interpersonal Violence, 37*(7-8), 4187–4211. https://doi.org/10.1177/0886260520958660

Daníelsdóttir, H. B., Aspelund, T., Thordardottir, E. B., Fall, K., Fang, F., Tómasson, G., Rúnarsdóttir, H., Yang, Q., Choi, K. W., Kennedy, B., Halldorsdottir, T., Lu, D., Song, H., Jakobsdóttir, J., Hauksdóttir, A., & Valdimarsdóttir, U. A. (2022). Adverse childhood experiences and resilience among adult women: A population-based study. *eLife, 11*. https://doi.org/10.7554/eLife.71770

Daoud, N., Kraun, L., Sergienko, R., Batat, N., Shoham-Vardi, I., Davidovitch, N., & Cohen, A. (2020). Patterns of healthcare services utilization associated with intimate partner violence (IPV): Effects of IPV screening and receiving information on support services in a cohort of perinatal women. *PLOS One, 15*(1), 1–24. https://doi.org/10.1371/journal.pone.0228088

Dellinger, A. B., & Leech, N. L. (2007). Toward a unified validation framework in mixed methods research. *Journal of Mixed Methods Research, 1*(4), 309–332. https://doi.org/10.1177/1558689807306147

Devries, K. M., Mak, J. Y. T., García-Moreno, C., Petzold, M., Child, J. C., Falder, G., Lim, S., Bacchus, L. J., Engell, R. E., Rosenfeld, L., Pallitto, C., Vos, T., Abrahams, N., & Watts, C. H. (2013). The global prevalence of intimate partner violence against women. *Science, 340*(6140), 1527–1528. https://doi.org/10.1126/science.1240937

de Winter, J. C. F, Dodou, D., & Wieringa, P. A. (2009). Exploratory factor analysis with small sample sizes. *Multivariate Behavioral Research, 44*(2), 147–181. https://doi.org/10.1080/00273170902794206

Divin, N., Harper, P., Curran, E., Corry, D., & Leavey, G. (2018). Help-seeking measures and their use in adolescents: A systematic

review. *Adolescent Research Review, 3*(1), 113–122. https://doi.org/10.1007/s40894-017-0078-8

Dockery, L., Jeffery, D., Schauman, O., Williams, P., Farrelly, S., Bonnington, O., Gabbidon, J., Lassman, F., Szmukler, G., Thornicroft, G., & Clement, S. (2015). Stigma- and non-stigma-related treatment barriers to mental healthcare reported by service users and caregivers. *Psychiatry Research, 228*(3), 612–619. https://doi.org/10.1016/j.psychres.2015.05.044

Drennan, J. (2003). Cognitive interviewing: Verbal data in the design and pretesting of questionnaires. *Journal of Advanced Nursing, 42*(1), 57–63. https://doi.org/10.1046/j.1365-2648.2003.02579.x

Drexler, K. A., Quist-Nelson, J., & Weil, A. B. (2022). Intimate partner violence and trauma-informed care in pregnancy. *American Journal of Obstetrics & Gynecology, 4*(2), 1–8. https://doi.org/10.1016/j.ajogmf.2021.100542

Durham, J., Tan, B. K., & White, R. (2011). Utilizing mixed research methods to develop a quantitative assessment tool. *Journal of Mixed Methods Research, 5*(3), 212–226. https://doi.org/10.1177/1558689811402505

Dutton, M. A., Green, B. L., Kaltman, S. I., Roesch, D. M., Zeffiro, T. A., & Krause, E. D. (2006). Intimate partner violence, PTSD, and adverse health outcomes. *Journal of Interpersonal Violence, 21*(7), 955–968. https://doi.org/10.1177/0886260506289178

Einarsdottir, S., Vilhjalmsdottir, G., Smaradottir, S. B., & Kjartansdottir, G. B. (2015). A culture-sensitive approach in the development of the career adapt-abilities scale in Iceland: Theoretical and operational considerations. *Journal of Vocational Behavior, 89*, 172–181. https://doi.org/10.1016/j.jvb.2015.06.006

Eisinga, R. N., Grotenhuis, H. F. T., & Pelzer, B. J. (2013). The reliability of a two-item scale: Pearson, Cronbach or Spearman-Brown? *International Journal of Public Health, 58*(4), 637–642. https://doi.org/10.1007/s00038-012-0416-3

Ellard-Gray, A., Jeffrey, N. K., Choubak, M., & Crann, S. E. (2015). Finding the hidden participant: Solutions for recruiting hidden, hard-to-reach, and vulnerable populations *International Journal of Qualitative Methods, 14*(5), 1–10. https://doi.org/10.1177/1609406915621420

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Päätalo, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *Sage Open, 4*(1), 1–10. https://doi.org/10.1177/2158244014522633

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing, 62*(1), 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

Epstein, J., Osborne, R. H., Elsworth, G. R., Beaton, D. E., & Guillemin, F. (2015). Cross-cultural adaptation of the health education impact questionnaire: Experimental study showed expert committee, not back-translation, added, value. *Journal of Clinical Epidemiology, 68*(4), 360–369. https://doi.org/10.1016/j.jclinepi.2013.07.013

Eriksson, M., & Lindström, B. (2005). Validity of Antonovsky's Sense of coherence scale: A systematic review. *Journal of Epidemiology and Community Health, 59*(6), 460–466. https://doi.org/10.1136/jech.2003.018085

European Institute for Gender Equality. (2017). *Gender equality index 2017: Measurement framework of violence against women*. Publications Office of the European Union. https://doi.org/10.2839/652585

European Institute for Gender Equality. (2021). *Gender equality index 2021: Health*. Publications Office of the European Union. https://doi.org/10.2839/834132

European Union Agency for Fundamental Rights. (2014). *Violence against women: An EU-wide survey.* Publications Office of the European Union. https://doi.org/10.2811/981927

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods, 4*(3), 272–299. https://doi.org/10.1037/1082-989X.4.3.272

Fanslow, J. L., & Robinson, E. M. (2010). Help-seeking behaviors and reasons for help seeking reported by a representative sample of women victims of intimate partner violence in New Zealand. *Journal of Interpersonal Violence, 25*(5), 929–951. https://doi.org/10.1177/0886260509336963

Feder, G. S., Hutson, M., Ramsay, J., & Taket, A. R. (2006). Women exposed to intimate partner violence: Expectations and experiences when they encounter health care professionals: A meta-analysis of qualitative studies. *Archives of Internal Medicine, 166*(1), 22–37. https://doi.org/10.1001/archinte.166.1.22

Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving integration in mixed methods designs – Principles and practices. *Health Services Research, 48*, 2134–2156. https://doi.org/10.1111/1475-6773.12117

Fetters, M. D., & Molina-Azorin, J. F. (2017). The journal of mixed methods research starts a new decade: The mixed methods research integration trilogy and its dimensions. *Journal of Mixed Methods Research, 11*(3), 291–307. https://doi.org/10.1177/1558689817714066

Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). Sage Publications.

Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development, 36*(4), 368–373.

Fischer, E. H., & Turner, J. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology, 35*(1), 79–90. https://doi.org/10.1037/h0029636

Fischer-Grönlund, C., & Brännström, M. (2021). The Swedish translation and cultural adaptation of the measure of moral distress for healthcare professionals (MMD-HP). *BMC Medical Ethics, 22*(151), 1–7. https://doi.org/10.1186/s12910-021-00722-3

Fitzgerald, R., Widdop, S., Gray, M., & Collins, D. (2011). Identifying sources of error in cross-national questionnaires: Application of an error source typology to cognitive interview data. *Journal of Official Statistics, 27*(4), 569–599.

Flasch, P., Murray, C. E., & Crowe, A. (2017). Overcoming abuse: A phenomenological investigation of the journey to recovery from past intimate partner violence. *Journal of Interpersonal Violence, 32*(22), 3373–3401. https://doi.org/10.1177/0886260515599161

Fleming, C. E., & Resick, P. A. (2017). Help-seeking behavior in survivors of intimate partner violence: Toward an integrated behavioral model of individual factors. *Violence and Victims, 32*(2), 195–209. https://doi.org/10.1891/0886-6708.VV-D-15-00065

Freyd, J. J. (1996). *Betrayal trauma: The logic of forgetting childhood abuse*. Harvard University Press.

Freyd, J. J. (1999). Blind to betrayal: New perspectives on memory for trauma. *The Harvard Mental Health Letter, 15*(12), 4–6.

Freyd, J. J. (2001). Memory and dimensions of trauma: Terror may be 'all-too-well re-membered' and betrayal buried. In J. R. Conte (Ed.), *Critical issues in child sexual abuse: Historical, legal, and psychological perspectives* (pp. 139–173). Sage Publications.

Freyd, J. J., Deprince, A. P., & Gleaves, D. H. (2007). The state of betrayal trauma theory: Reply to McNally – Conceptual issues, and future directions. *Memory, 15*(3), 295–311. https://doi.org/10.1080/09658210701256514

Fugate, M., Landis, L., Riordan, K., Naureckas, S., & Engel, B. (2005). Barriers to domestic violence help seeking – Implications for intervention. *Violence Against Women, 11*(3), 290–310. https://doi.org/10.1177/1077801204271959

García-Moreno, C., Hegarty, K., d'Oliveira, A. F. L., Koziol-McLain, J., Colombini, M., & Feder, G. (2015). The health-systems response to violence against women. *The Lancet, 385*(9977), 1567–1579. https://doi.org/10.1016/S0140-6736(14)61837-7

García-Moreno, C., Pallitto, C., Devries, K., Stöckl, H., Watts, C., & Abrahams, N. (2013). *Global and regional estimates of violence against women: Prevalence and health effects of intimate partner violence and non-partner sexual violence.* World Health Organization. https://www.who.int/publications-detail-redirect/9789241564625

García-Moreno, C., Zimmerman, C., Morris-Gehring, A., Heise, L., Amin, A., Abrahams, N., Montoya, O., Bhate-Deosthali, P., Kilonzo, N., & Watts, C. (2015). Addressing violence against women: A call to action. *Lancet, 385*(9978), 1685–1695. https://doi.org/10.1016/S0140-6736(14)61830-4

Gerber, E. R. (1999). The view from anthropology: Ethnography and the cognitive interview. In M. G. Sirken, D. J. Herrmann, S. Schechter, N. Schwarz, J. M. Tanur & R. Tourangeau (Eds.), *Cognition and survey research* (pp. 217–234). Wiley.

Goodson, A., & Hayes, B. E. (2021). Help-seeking behaviors of intimate partner violence victims: A cross-national analysis in developing nations. *Journal of Interpersonal Violence, 36*(9-10), 4705–4727. https://doi.org/10.1177/0886260518794508

Goodwin, L. D., & Leech, N. L. (2003). The meaning of validity in the new standards for educational and psychological testing: Implications for measurement courses. *Measurement and Evaluation in Counseling and Development, 36*(3), 181–191. https://doi.org/10.1080/07481756.2003.11909741

Gracia, E., Martin-Fernandez, M., Lila, M., Merlo, J., & Ivert, A. (2019). Prevalence of intimate partner violence against women in Sweden and Spain: A psychometric study of the 'Nordic paradox'. *PLOS One, 14*(5), 1–17. https://doi.org/10.1371/journal.pone.0217015

Gracia, E., & Merlo, J. (2016). Intimate partner violence against women and the Nordic paradox. *Social Science & Medicine, 157*, 27–30. https://doi.org/10.1016/j.socscimed.2016.03.040

Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology, 60*(1), 549–576. https://doi.org/10.1146/annurev.psych.58.110405.085530

Graneheim, U. H., Lindgren, B., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today, 56*, 29–34. https://doi.org/10.1016/j.nedt.2017.06.002

Grøvdal, Y. (2019). *"Ikke verdt å gå til politiet med": Om vold i parforhold som ikke er anmeldt* [*"Not worth telling the police":*

Intimate partner violence that has not been reported]. Norwegian Centre for Violence and Traumatic Stress Studies. https://www.nkvts.no/english/report/not-worth-talking-to-police-about-violence-in-close-relationships-that-are-not-reported-to-the-police/

Guček, N. K., Petek, D., Švab, I., & selič, P. (2016). Barriers to screening and possibilities for active detection of family medicine attendees exposed to intimate partner violence. *Slovenian Journal of Public Health, 55*(1), 11–20. https://doi.org/10.1515/sjph-2016-0002

Guðmundsdóttir, L. (2022). *Intimate partner violence and association with psychological well-being and sleep among women: The Saga Cohort* [Master's thesis, University of Iceland]. Skemman. http://hdl.handle.net/1946/41811

Gudmundsdottir, E., Schirren, M., & Boman, K. K. (2011). Psychological resilience and long-term distress in Swedish and Icelandic parents' adjustment to childhood cancer. *Acta Oncologica, 50*(3), 373–380. https://doi.org/10.3109/0284186X.2010.489572

Guetterman, T. C., Fetters, M. D., & Creswell, J. W. (2015). Integrating quantitative and qualitative results in health science mixed methods research through joint displays. *Annals of Family Medicine, 13*(6), 554–561. https://doi.org/10.1370/afm.1865

Gulliver, A., Griffiths, K. M., Christensen, H., & Brewer, J. L. (2012). A systematic review of help-seeking interventions for depression, anxiety and general psychological distress. *BMC Psychiatry, 12*(81), 1–12. https://doi.org/10.1186/1471-244X-12-81

Hardesty, J. L., & Ogolsky, B. G. (2020). A socioecological perspective on intimate partner violence research: A decade in review. *Journal of Marriage and Family, 82*(1), 454–477. https://doi.org/10.1111/jomf.12652

Haynes-Brown, T. K., & Fetters, M. D. (2021). Using joint display as an analytic process: An illustration using bar graphs joint displays from a mixed methods study of how beliefs shape secondary school teachers' use of technology. *International Journal of Qualitative Methods, 20*, 1–14. https://doi.org/10.1177/1609406921993286

Heise, L. L. (1998). Violence against women: An integrated, ecological framework. *Violence Against Women, 4*(3), 262–290. https://doi.org/10.1177/1077801298004003002

Heise, L. L. & Kotsadam, A. (2015). Cross-national and multilevel correlates of partner violence: An analysis of data from population-based surveys. *The Lancet Global Health, 3*(6), 332–340. https://doi.org/10.1016/S2214-109X(15)00013-3

Herman, J. L. (1997). *Trauma and recovery: The aftermath of violence – From domestic abuse to political terror*. Basic Books.

Hernandez, M., & Gibb, J. K. (2020). Culture, behavior and health. *Evolution, Medicine, and Public Health, 1*, 12–13. https://doi.org/10.1093/emph/eoz036

Heron, R. L., & Eisma, M. C. (2021). Barriers and facilitators of disclosing domestic violence to the healthcare service: A systematic review of qualitative research. *Health & Social Care in the Community, 29*(3), 612–630. https://doi.org/10.1111/hsc.13282

Heywood, I., Sammut, D., & Bradbury-Jones, C. (2019). A qualitative exploration of 'thrivership' among women who have experienced domestic violence and abuse: Development of a new model. *BMC Women's Health, 19*(106), 1–15. https://doi.org/10.1186/s12905-019-0789-z

Hien, D., & Ruglass, L. (2009). Interpersonal partner violence and women in the United States: An overview of prevalence rates, psychiatric correlates and consequences and barriers to help seeking. *International Journal of Law and Psychiatry, 32*(1), 48–55. https://doi.org/10.1016/j.ijlp.2008.11.003

Hirai, M., & Clum, G. (2000). Development, reliability, and validity of the Beliefs toward mental illness scale. *Journal of Psychopathology and Behavioral Assessment, 22*(3), 221–236. https://doi.org/10.1023/A:1007548432472

Hirai, M., Vernon, L. L., & Clum, G. A. (2018). Factor structure and administration measurement invariance of the Beliefs toward mental illness scale in Latino college samples: Paper–pencil versus internet administrations. *Assessment, 25*(6), 759–768. https://doi.org/10.1177/1073191116661630

Hisasue, T., Kruse, M., Raitanen, J., Paavilainen, E., & Rissanen, P. (2020). Quality of life, psychological distress and violence among women in close relationships: A population-based study in Finland. *BMC Women's Health, 20*(85), 1–10. https://doi.org/10.1186/s12905-020-00950-6

Holm, S. (1979). A simple sequentially rejective multiple test procedure. *Scandinavian Journal of Statistics, 6*(2), 65–70.

Holmefur, M., Sundberg, K., Wettergren, L., & Langius-Eklöf, A. (2015). Measurement properties of the 13-item Sense of coherence scale using Rasch analysis. *Quality of Life Research, 24*(6), 1455–1463. https://doi.org/10.1007/s11136-014-0866-6

Humbert, A. L., Strid, S., Hearn, J., & Balkmar, D. (2021). Undoing the 'Nordic paradox': Factors affecting rates of disclosed violence against women across the EU. *PLOS One, 16*(5), 1–24. https://doi.org/10.1371/journal.pone.0249693

Husebø, A. M. L., Morken, I. M., Eriksen, K. S., & Nordfonn, O. K. (2018). The patient experience with treatment and self-management (PETS) questionnaire: Translation and cultural adaption of the Norwegian version. *BMC Medical Research Methodology, 18*(147), 1–12. https://doi.org/10.1186/s12874-018-0612-9

Ingersoll-Dayton, B. (2011). The development of culturally-sensitive measures for research on ageing. *Ageing and Society, 31*(3), 355–370. https://doi.org/10.1017/S0144686X10000917

International Test Commission. (2017). *The ITC guidelines for translating and adapting tests*. https://www.intestcom.org/files/guideline_test_adaptation_2ed.pdf

Isobel, S. (2021). Trauma-informed qualitative research: Some methodological and practical considerations. *International Journal of Mental Health Nursing, 30*(1), 1456–1469. https://doi.org/10.1111/inm.12914

Ivert, A., Gracia, E., Lila, M., Wemrell, M., & Merlo, J. (2020). Does country-level gender equality explain individual risk of intimate partner violence against women? A multilevel analysis of individual heterogeneity and discriminatory accuracy (MAIHDA) in the European union. *European Journal of Public Health, 30*(2), 293–299. https://doi.org/10.1093/eurpub/ckz162

Johnson, R. B., & Christensen, L. B. (2017). *Educational research: Quantitative, qualitative, and mixed approaches* (6th ed.). Sage Publications.

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods*

Research, 1(2), 112–133.
https://doi.org/10.1177/1558689806298224

Johnson, T., & Fendrich, M. (2005). Modeling sources of self-report bias in a survey of drug use epidemiology. *Annals of Epidemiology, 15*(5), 381–389.
https://doi.org/10.1016/j.annepidem.2004.09.004

Jónasdóttir, D., Thorsteinsdottir, T., Ásgeirsdóttir, T. L., Lund, S. H., Arnarsson, E. Ö, Ashikali, E., Líndal, Þ., & Mogensen, B. (2021). Women and intimate partner violence: Prevalence of hospital visits and nature of injuries in the Icelandic population. *Scandinavian Journal of Public Health, 49*(3), 260–267.
https://doi.org/10.1177/1403494820916093

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika, 39*(1), 31–36. https://doi.org/10.1007/BF02291575

Kane, M. T. (2001). Current concerns in validity theory. *Journal of Educational Measurement, 38*(4), 319–342.
https://doi.org/10.1111/j.1745-3984.2001.tb01130.x

Kantor, V., Knefel, M., & Lueger-Schuster, B. (2017). Perceived barriers and facilitators of mental health service utilization in adult trauma survivors: A systematic review. *Clinical Psychology Review, 52*, 52–68. https://doi.org/10.1016/j.cpr.2016.12.001

Karlsdóttir, E., & Arnalds, Á. (2010). *Rannsókn á ofbeldi gegn konum – Reynsla kvenna á aldrinum 18-80 ára á Íslandi* [*Research on Violence against Women – The Experience of Women aged 18-80 in Iceland*]. Centre for Children and Family Research.
https://www.stjornarradid.is/media/velferdarraduneyti-media/media/ritogskyrslur2011/26012011_ofbeldi_a_konum.pdf

Kearns, M. C., D'Inverno, A. S., & Reidy, D. E. (2020). The association between gender inequality and sexual violence in the U.S.

American Journal of Preventive Medicine, 58(1), 12–20. https://doi.org/10.1016/j.amepre.2019.08.035

Kelley, L. P., Weathers, F. W., Mason, E. A., & Pruneau, G. M. (2012). Association of life threat and betrayal with posttraumatic stress disorder symptom severity. *Journal of Traumatic Stress, 25*(4), 408–415. https://doi.org/10.1002/jts.21727

Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Benjet, C., Bromet, E. J., Cardoso, G., Degenhardt, L., de Girolamo, G., Dinolova, R. V., Ferry, F., Florescu, S., Gureje, O., Maria Haro, J., Huang, Y., Karam, E. G., Kawakami, N., Lee, S., Lepine, J., Levinson, D., . . . Koenen, K. C. (2017). Trauma and PTSD in the WHO world mental health surveys. *European Journal of Psychotraumatology, 8*(5), 1–16. https://doi.org/10.1080/20008198.2017.1353383

Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American Journal of Health-System Pharmacy, 65*(23), 2276–2284. https://doi.org/10.2146/ajhp070364

Kirmayer, L. J., Rousseau, C., & Guzder, J. (Eds.). (2014). *Cultural consultation: Encountering the other in mental health care*. Springer. https://doi.org/10.1007/978-1-4614-7615-3

Kleinman, A., Eisenberg, L., & Good, B. (2006). Culture, illness, and care: Clinical lessons from anthropologic and cross-cultural research. *Focus – Journal of Lifelong Learning in Psychiatry, 4*(1), 140–149. https://doi.org/10.1176/foc.4.1.140

Klevens, J., Kee, R., Trick, W., Garcia, D., Angulo, F. R., Jones, R., & Sadowski, L. S. (2012). Effect of screening for partner violence on women's quality of life: A randomized controlled trial. *JAMA: The Journal of the American Medical Association, 308*(7), 681–689. https://doi.org/10.1001/jama.2012.6434

Koskey, K. L. K., Sondergeld, T. A., Stewart, V. C., & Pugh, K. J. (2018). Applying the mixed methods instrument development and construct validation process: The transformative experience questionnaire. *Journal of Mixed Methods Research, 12*(1), 95–122. https://doi.org/10.1177/1558689816633310

Kroeber, A. L., & Kluckhohn, C. (1952). *Culture: A critical review of concepts and definitions*. Peabody Museum of Archaeology & Ethnology.

Kroenke, K., Strine, T. W., Spitzer, R. L., Williams, J. B. W., Berry, J. T., & Mokdad, A. H. (2009). The PHQ-8 as a measure of current depression in the general population. *Journal of Affective Disorders, 114*(1), 163–173. https://doi.org/10.1016/j.jad.2008.06.026

Kulkarni, S. (2018). Intersectional trauma-informed intimate partner violence (IPV) services: Narrowing the gap between IPV service delivery and survivor needs. *Journal of Family Violence, 34*(1), 55–64. https://doi.org/10.1007/s10896-018-0001-5

Lelaurain, S., Graziani, P., & Lo Monaco, G. (2017). Intimate partner violence and help-seeking: A systematic review and social psychological tracks for future research. *European Psychologist, 22*(4), 263–281. https://doi.org/10.1027/1016-9040/a000304

Liang, B., Goodman, L., Tummala-Narra, P., & Weintraub, S. (2005). A theoretical framework for understanding help-seeking processes among survivors of intimate partner violence. *American Journal of Community Psychology, 36*(1-2), 71–84. https://doi.org/10.1007/s10464-005-6233-6

Lonner, W. J. (1985). Issues in testing and assessment in cross-cultural counseling. *The Counseling Psychologist, 13*(4), 599–614. https://doi.org/10.1177/0011000085134004

Lutwak, N. (2018). The psychology of health and illness: The mental health and physiological effects of intimate partner violence on women. *The Journal of Psychology, 152*(6), 373–387. https://doi.org/10.1080/00223980.2018.1447435

Luyt, R. (2012). A framework for mixing methods in quantitative measurement development, validation, and revision. *Journal of Mixed Methods Research, 6*(4), 294–316. https://doi.org/10.1177/1558689811427912

Lövestad, S., Vaez, M., Löve, J., Hensing, G., & Krantz, G. (2021). Intimate partner violence, associations with perceived need for help and health care utilization: A population-based sample of women in Sweden. *Scandinavian Journal of Public Health, 49*(3), 268–276. https://doi.org/10.1177/1403494820930952

Mackenzie, C. S., Erickson, J., Deane, F. P., & Wright, M. (2014). Changes in attitudes toward seeking mental health services: A 40-year cross-temporal meta-analysis. *Clinical Psychology Review, 34*(2), 99–106. https://doi.org/10.1016/j.cpr.2013.12.001

Malan, L., Smuts, C. M., Baumgartner, J., & Ricci, C. (2020). Missing data imputation via the expectation-maximization algorithm can improve principal component analysis aimed at deriving biomarker profiles and dietary patterns. *Nutrition Research, 75*, 67–76. https://doi.org/10.1016/j.nutres.2020.01.001

Marriott, B. R., Lewis, C. C., & Gobin, R. L. (2016). Disclosing traumatic experiences: Correlates, context, and consequences. *Psychological Trauma, 8*(2), 141–148. https://doi.org/10.1037/tra0000058

Martin, C. G., Cromer, L. D., DePrince, A. P., & Freyd, J. J. (2013). The role of cumulative trauma, betrayal, and appraisals in understanding trauma symptomatology. *Psychological Trauma, 5*(2), 110–118. https://doi.org/10.1037/a0025686

Martin, S. L., Birhanu, Z., Omotayo, M. O., Kebede, Y., Pelto, G. H., Stoltzfus, R. J., & Dickin, K. L. (2017). "I can't answer what you're asking me. Let me go, please.": Cognitive interviewing to assess social support measures in Ethiopia and Kenya. *Field Methods, 29*(4), 317–332. https://doi.org/10.1177/1525822X17703393

McCloskey, L. A., Lichter, E., Williams, C., Gerber, M., Wittenberg, E., & Ganz, M. (2006). Assessing intimate partner violence in health care settings leads to women's receipt of interventions and improved health. *Public Health Reports, 121*(4), 435–444. https://doi.org/10.1177/003335490612100412

McDermott, M. S., & Sharma, R. (2017). Evaluating the impact of method bias in health behaviour research: A meta-analytic examination of studies utilising the theories of reasoned action and planned behaviour. *Health Psychology Review, 11*(4), 358–373. https://doi.org/10.1080/17437199.2017.1339568

McNeish, D. (2017). Exploratory factor analysis with small samples and missing data. *Journal of Personality Assessment, 99*(6), 637–652. https://doi.org/10.1080/00223891.2016.1252382

Melgar-Alcantud, P., Campdepadrós-Cullell, R., Fuentes-Pumarola, C., & Mut-Montalvà, E. (2021). 'I think I will need help': A systematic review of who facilitates the recovery from gender-based violence and how they do so. *Health Expectations, 24*(1), 1–7. https://doi.org/10.1111/hex.13157

Mendlinger, S., & Cwikel, J. (2008). Spiraling between qualitative and quantitative data on women's health behaviors: A double helix

model for mixed methods. *Qualitative Health Research, 18*(2), 280–293. https://doi.org/10.1177/1049732307312392

Messick, S. (1988). The once and future issues of validity: Assessing the meaning and consequences of measurement. In H. Wainer & H. I. Braun (Eds.), *Test validity* (pp. 33–48). Lawrence Erlbaum Associates.

Messick, S. (1989). Validity. In R. L. Linn (Ed.) *Educational measurement* (pp. 13–103). Macmillan Publishers.

Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *The American Psychologist, 50*(9), 741–749. https://doi.org/10.1037//0003-066X.50.9.741

Miller, C. J., Adjognon, O. L., Brady, J. E., Dichter, M. E., & Iverson, K. M. (2021). Screening for intimate partner violence in healthcare settings: An implementation-oriented systematic review. *Implementation Research and Practice*. Advance online publication. https://doi.org/10.1177/26334895211039894

Miller, K., Willson, S., Chepp, V., & Padilla, J. L. (Eds.). (2014). *Cognitive interviewing methodology*. Wiley. https://doi.org/10.1002/9781118838860

Ministry of Welfare. (2012). *Male violence against women in intimate relationships in Iceland – Report of the minister of welfare.* https://www.government.is/media/velferdarraduneyti-media/media/rit-og-skyrslur2012/Ofbeldi_gegn_konum_enska_feb_2012.pdf

Morris, M. D., Neilands, T. B., Andrew, E., Maher, L., Page, K. A., & Hahn, J. A. (2017). Development and validation of a novel scale for measuring interpersonal factors underlying injection drug using behaviours among injecting partnerships. *The International*

Journal of Drug Policy, 48, 54–62.
https://doi.org/10.1016/j.drugpo.2017.05.030

Napier, A. D., Ancarno, C., Butler, B., Calabrese, J., Chater, A.,
Chatterjee, H., Guesnet, F., Horne, R., Jacyna, S., Jadhav, S.,
Macdonald, A., Neuendorf, U., Parkhurst, A., Reynolds, R.,
Scambler, G., Shamdasani, S., Smith, S. Z., Stougaard-Nielsen, J.,
Thomson, L., . . . Woolf, K. (2014). Culture and health. *The Lancet,
384*(9954), 1607–1639. https://doi.org/10.1016/S0140-
6736(14)61603-2

Nederhof, A. J. (1985). Methods of coping with social desirability bias:
A review. *European Journal of Social Psychology, 15*(3), 263–280.
https://doi.org/10.1002/ejsp.2420150303

Nilsson-Kajermo, K., Böe, H., Johansson, E., Henriksen, E., McCormack,
B., Gustavsson, J. P., & Wallin, L. (2013). Swedish translation,
adaptation and psychometric evaluation of the Context
assessment index (CAI). *Worldviews on Evidence-Based Nursing,
10*(1), 41–50. https://doi.org/10.1111/j.1741-6787.2012.00252.x

Noar, S. M. (2004). A health educator's guide to theories of health
behavior. *International Quarterly of Community Health Education,
24*(1), 75–92. https://doi.org/10.2190/DALP-3F95-GCT3-M922

Nordic Council of Ministers. (2020). *State of the Nordic Region 2020 –
Wellbeing, health and digitalisation edition*.
https://www.norden.org/en/publication/state-nordic-region-
2020-wellbeing-health-and-digitalisation-edition

O'Doherty, L. J., Taft, A., Hegarty, K., Ramsay, J., Davidson, L. L., &
Feder, G. (2014). Screening women for intimate partner violence
in healthcare settings: Abridged Cochrane systematic review and
meta-analysis. *BMJ: The British Medical Journal, 348*, 1–11.
https://doi.org/10.1136/bmj.g2913

Onwuegbuzie, A. J., Bustamante, R. M., & Nelson, J. A. (2010). Mixed research as a tool for developing quantitative instruments. *Journal of Mixed Methods Research, 4*(1), 56–78. https://doi.org/10.1177/1558689809355805

Onwuegbuzie, A. J., Daniel, L. G., & Collins, K. M. T. (2009). A meta-validation model for assessing the score-validity of student teaching evaluations. *Quality & Quantity, 43*(2), 197–209. https://doi.org/10.1007/s11135-007-9112-4

Onwuegbuzie, A. J., & Johnson, R. B. (2006). The validity issue in mixed research. *Research in the Schools, 13*(1), 48–63.

Onwuegbuzie, A. J., Johnson, R. B., & Collins, K. (2011). Assessing legitimation in mixed research: A new framework. *Quality & Quantity, 45*(6), 1253–1271. https://doi.org/10.1007/s11135-009-9289-9

Organisation for Economic Co-operation and Development. (2022). *OECD labour force statistics 2021.* https://doi.org/10.1787/177e93b9-en

Overstreet, N. M., & Quinn, D. M. (2013). The intimate partner violence stigmatization model and barriers to help seeking. *Basic and Applied Social Psychology, 35*(1), 109–122. https://doi.org/10.1080/01973533.2012.746599

Palmieri, J., & Valentine, J. L. (2021). Using trauma-informed care to address sexual assault and intimate partner violence in primary care. *Journal for Nurse Practitioners, 17*(1), 44–48. https://doi.org/10.1016/j.nurpra.2020.08.028

Pasick, R. J., Stewart, S. L., Bird, J. A., & D'Onofrio, C. N. (2001). Quality of data in multiethnic health surveys. *Public Health Reports, 116*(1), 223–243. https://doi.org/10.1093/phr/116.S1.223

Perez, A., Howell-Smith, M. C., Babchuk, W. A., & Lynch-O'Brien, L. I. (2022). Advancing quality standards in mixed methods research: Extending the legitimation typology. *Journal of Mixed Methods Research*. Advance online publication. https://doi.org/10.1177/15586898221093872

Permanyer, I., & Gomez-Casillas, A. (2020). Is the 'Nordic paradox' an illusion? Measuring intimate partner violence against women in Europe. *International Journal of Public Health, 65*(7), 1169–1179. https://doi.org/10.1007/s00038-020-01457-5

Pescosolido, B. A. (1992). Beyond rational choice: The social dynamics of how people seek help. *The American Journal of Sociology, 97*(4), 1096–1138. https://doi.org/10.1086/229863

Pescosolido, B. A., & Boyer, C. A. (2010). Understanding the context and dynamic social processes of mental health treatment. In T. L. Scheid & T. N. Brown (Eds.), *A handbook for the study of mental health: Social contexts, theories, and systems* (pp. 420–438). Cambridge University Press.

Pill, N., Day, A., & Mildred, H. (2017). Trauma responses to intimate partner violence: A review of current knowledge. *Aggression and Violent Behavior, 34*, 178–184. https://doi.org/10.1016/j.avb.2017.01.014

Platt, M., Barton, J., & Freyd, J. J. (2009). A betrayal trauma perspective on domestic violence. In E. Stark & E. S. Buzawa (Eds.), *Violence against women in families and relationships* (pp. 185–207). Greenwood Press.

Pluye, P., Grad, R. M., Levine, A., & Nicolau, B. (2009). Understanding divergence of quantitative and qualitative data (or results) in mixed methods studies. *International Journal of Multiple Research Approaches, 3*(1), 58–72. https://doi.org/10.5172/mra.455.3.1.58

Rammstedt, B., & Beierlein, C. (2014). Can't we make it any shorter? The limits of personality assessment and ways to overcome them. *Journal of Individual Differences, 35*(4), 212–220. https://doi.org/10.1027/1614-0001/a000141

Regnault, A., Willgoss, T., & Barbic, S. (2018). Towards the use of mixed methods inquiry as best practice in health outcomes research. *Journal of Patient-Reported Outcomes, 2*(1), 1–4. https://doi.org/10.1186/s41687-018-0043-8

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian E-Journal for the Advancement of Mental Health, 4*(3), 218–251. https://doi.org/10.5172/jamh.4.3.218

Rickwood, D., & Thomas, K. (2012). Conceptual measurement framework for help-seeking for mental health problems. *Psychology Research and Behavior Management, 5*, 173–183. https://doi.org/10.2147/PRBM.S38707

Ridolfo, H., & Schoua-Glusberg, A. (2011). Analyzing cognitive interview data using the constant comparative method of analysis to understand cross-cultural patterns in survey data. *Field Methods, 23*(4), 420–438. https://doi.org/10.1177/1525822X11414835

Robinson, S. R., Ravi, K., & Voth-Schrag, R. J. (2021). A systematic review of barriers to formal help seeking for adult survivors of IPV in the United States, 2005-2019. *Trauma, Violence, & Abuse, 22*(5) 1279–1295. https://doi.org/10.1177/1524838020916254

Rodelli, M., Koutra, K., Thorvaldsdottir, K. B., Bilgin, H., Ratsika, N., Testoni, I., & Saint Arnault, D. M. (2022). Conceptual development and content validation of a multicultural instrument to assess the normalization of gender-based violence against women. *Sexuality*

& *Culture, 26*, 26–47. https://doi.org/10.1007/s12119-021-09877-
y

Rolfe, G. (1997). Science, abduction and the fuzzy nurse: An
exploration of expertise. *Journal of Advanced Nursing, 25*(5),
1070–1075. https://doi.org/10.1046/j.1365-
2648.1997.19970251070.x

Saint Arnault, D. M. (2009). Cultural determinants of help seeking: A
model for research and practice. *Research and Theory for Nursing
Practice, 23*(4), 259–278. https://doi.org/10.1891/1541-
6577.23.4.259

Saint Arnault, D. M. (2018). Defining and theorizing about culture: The
evolution of the cultural determinants of help-seeking, revised.
Nursing Research, 67(2), 161–168.
https://doi.org/10.1097/NNR.0000000000000264

Saint Arnault, D. M., Gang, M., & Woo, S. (2017). Construct validity and
reliability of the Beliefs toward mental illness scale for American,
Japanese, and Korean women. *Research and Theory for Nursing
Practice, 31*(4), 349–363. https://doi.org/10.1891/1541-
6577.31.4.349

Saint Arnault, D. M., & O'Halloran, S. (2016). Using mixed methods to
understand the healing trajectory for rural Irish women years
after leaving abuse. *Journal of Research in Nursing, 21*(5-6), 369–
383. https://doi.org/10.1177/1744987116649636

Saint Arnault, D. M., & Sinko, L. (2021). Comparative ethnographic
narrative analysis method: Comparing culture in narratives. *Global
Qualitative Nursing Research, 8*, 1–8.
https://doi.org/10.1177/23333936211020722

Saint Arnault, D. M., & Zonp, Z. (2022). Understanding help-seeking
barriers after gender-based violence: Validation of the Barriers to

help seeking-trauma version (BHS-TR). *Archives of Psychiatric Nursing, 37*, 1–9. https://doi.org/10.1016/j.apnu.2021.12.004

Sankofa, N. L. (2021). Transformativist measurement development methodology: A mixed methods approach to scale construction. *Journal of Mixed Methods Research*. Advance online publication. https://doi.org/10.1177/15586898211033698

Sareen, J., Jagdeo, A., Cox, B. J., Clara, I., ten Have, M., Belik, S., de Graaf, R., & Stein, M. B. (2007). Perceived barriers to mental health service utilization in the United States, Ontario, and the Netherlands. *Psychiatric Services, 58*(3), 357–364. https://doi.org/10.1176/appi.ps.58.3.357

Sayer, A. (1992). *Method in Social Science: A Realist Approach* (2nd ed.). Routledge.

Schreiber, V., Renneberg, B., & Maercker, A. (2009). Seeking psychosocial care after interpersonal violence: An integrative model. *Violence and Victims, 24*(3), 322–336. https://doi.org/10.1891/0886-6708.24.3.322

Schreier, M. (2012). *Qualitative content analysis in practice*. Sage Publications.

Sha, M., & Immerwahr, S. (2018). Survey translation: Why and how should researchers and managers be engaged? *Survey Practice, 11*(2), 1–7. https://doi.org/10.29115/SP-2018-0016

Shaghaghi, A., Bhopal, R. S., & Sheikh, A. (2011). Approaches to recruiting 'hard-to-reach' populations into research: A review of the literature. *Health Promotion Perspectives, 1*(2), 86–94. https://doi.org/10.5681/hpp.2011.009

Sheeran, P., Klein, W. M. P., & Rothman, A. J. (2017). Health behavior change: Moving from observation to intervention. *Annual Review*

of *Psychology, 68*(1), 573–600. https://doi.org/10.1146/annurev-psych-010416-044007

Shepard, L. A. (1993). Evaluating test validity. In L. Darling-Hammon (Ed.), *Review of research in education* (pp. 405–450). American Educational Research Association.

Sigurdardottir, S., & Halldorsdottir, S. (2021). Persistent suffering: The serious consequences of sexual violence against women and girls, their search for inner healing and the significance of the #MeToo movement. *International Journal of Environmental Research and Public Health, 18*(4), 1–14. https://doi.org/10.3390/ijerph18041849

Sinko, L., Burns, C. J., O'Halloran, S., & Saint Arnault, D. M. (2021). Trauma recovery is cultural: Understanding shared and different healing themes in Irish and American survivors of gender-based violence. *Journal of Interpersonal Violence, 36*(13-14), 7765–7790. https://doi.org/10.1177/0886260519829284

Sinko, L., Goldner, L., & Saint Arnault, D. M. (2021). The trauma recovery actions checklist: Applying mixed methods to a holistic gender-based violence recovery actions measure. *Sexes, 2*(29), 363–377. https://doi.org/10.3390/sexes2030029

Sinko, L., James, R., & Hughesdon, K. (2021). Healing after gender-based violence: A qualitative metasynthesis using meta-ethnography. *Trauma, Violence, & Abuse.* Advance online publication. https://doi.org/10.1177/1524838021991305

Sinko, L., & Saint Arnault, D. M. (2020). Finding the strength to heal: Understanding recovery after gender-based violence. *Violence Against Women, 26*(12-13), 1616–1635. https://doi.org/10.1177/1077801219885185

Squires, A., Aiken, L. H., van den Heede, K., Sermeus, W., Bruyneel, L., Lindqvist, R., Schoonhoven, L., Stromseng, I., Busse, R., Brzostek, T., Ensio, A., Moreno-Casbas, M., Rafferty, A. M., Schubert, M., Zikos, D., & Matthews, A. (2013). A systematic survey instrument translation process for multi-country, comparative health workforce studies. *International Journal of Nursing Studies, 50*(2), 264–273. https://doi.org/10.1016/j.ijnurstu.2012.02.015

Steinmetz, H., Knappstein, M., Ajzen, I., Schmidt, P., & Kabst, R. (2016). How effective are behavior change interventions based on the theory of planned behavior? *Zeitschrift Für Psychologie, 224*(3), 216–233. https://doi.org/10.1027/2151-2604/a000255

Streiner, D. L. (2003). Starting at the beginning: An introduction to coefficient alpha and internal consistency. *Journal of Personality Assessment, 80*(1), 99–103. https://doi.org/10.1207/S15327752JPA8001_18

Streiner, D. L., Norman, G. R., & Cairney, J. (2015). *Health measurement scales* (5th ed.). Oxford University Press.

St. Vil, N. M., Carter, T., & Johnson, S. (2021). Betrayal trauma and barriers to forming new intimate relationships among survivors of intimate partner violence. *Journal of Interpersonal Violence, 36*(7-8), 3495–3509. https://doi.org/10.1177/0886260518779596

Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. HHS Publication.

Super, S., Wagemakers, M. A. E., Picavet, H. S. J., Verkooijen, K. T., & Koelen, M. A. (2016). Strengthening sense of coherence: Opportunities for theory building in health promotion. *Health Promotion International, 31*(4), 869–878. https://doi.org/10.1093/heapro/dav071

Svavarsdottir, E. K., Orlygsdottir, B., & Gudmundsdottir, B. (2015). Reaching out to women who are victims of intimate partner violence. *Perspectives in Psychiatric Care, 51*(3), 190–201. https://doi.org/10.1111/ppc.12080

Svavarsdottir, E. K., & Rayens, M. K. (2005). Hardiness in families of young children with asthma. *Journal of Advanced Nursing, 50*(4), 381–390. https://doi.org/10.1111/j.1365-2648.2005.03403.x

Taft, C. T., Murphy, C. M., & Creech, S. K. (2016). *Trauma-informed treatment and prevention of intimate partner violence*. American Psychological Association. https://doi.org/10.1037/14918-000

Taket, A., Wathen, C. N., & Macmillan, H. (2004). Should health professionals screen all women for domestic violence? *PLOS Medicine, 1*(1), 7–10 https://doi.org/10.1371/journal.pmed.0010004

Tanaka-Matsumi, J. (2019). Abnormal psychology and culture. In D. Matsumoto & H. C. Hwang (Eds.), *The handbook of culture and psychology* (pp. 431–467). Oxford University Press. https://doi.org/10.1093/oso/9780190679743.003.0014

Tang, S. S. S., & Freyd, J. J. (2012). Betrayal trauma and gender differences in posttraumatic stress. *Psychological Trauma, 4*(5), 469–478. https://doi.org/10.1037/a0025765

Taras, V., Rowney, J., & Steel, P. (2009). Half a century of measuring culture: Review of approaches, challenges, and limitations based on the analysis of 121 instruments for quantifying culture. *Journal of International Management, 15*(4), 357–373. https://doi.org/10.1016/j.intman.2008.08.005

Tashakkori, A., & Teddlie, C. (2003). The past and future of mixed methods research: From data triangulation to mixed model designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed*

methods in social and behavioral research (pp. 671–701). Sage Publications.

Tashakkori, A., & Teddlie, C. (2006, April). *Validity issues in mixed methods research: Calling for an integrative framework*. [Paper presentation]. Annual meeting of the American Educational Research Association, San Francisco, CA, United States.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education, 2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Teddlie, C., & Tashakkori, A. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In A. Tashakkori and C. Teddlie (Eds.), *Handbook of mixed methods in the social and behavioral research* (pp. 3–50). Sage Publications.

The Economist. (2022). *The Economist's glass-ceiling index: Our annual measure of the role and influence of women in the workforce*. https://www.economist.com/graphic-detail/glass-ceiling-index

Tietgen, F., Kjaran, J. I., Halldórsdóttir, B. E. (2021). Power dynamics and internalized oppression: Immigrant women and intimate partner violence in Iceland. In *The role of universities in addressing societal challenges and fostering democracy: Inclusion, migration, and education for citizenship* (p. 54). The Icelandic Centre for Research and University of Akureyri. https://www.unak.is/static/files/pdf-skjol/2021/abstracts_single.pdf

Tirone, V., Orlowska, D., Lofgreen, A. M., Blais, R. K., Stevens, N. R., Klassen, B., Held, P., & Zalta, A. K. (2021). The association between social support and posttraumatic stress symptoms among survivors of betrayal trauma: A meta-analysis. *European Journal of*

Psychotraumatology, 12(1), 1–19.
https://doi.org/10.1080/20008198.2021.1883925

Tourangeau, R. (1984). Cognitive sciences and survey methods. In T. Jabine, M. Straf, J. Tanur & R. Tourangeau (Eds.), *Cognitive aspects of survey methodology: Building a bridge between disciplines* (pp. 73–100). National Academy Press.

Triandis, H. C. (2000). Dialectics between cultural and cross-cultural psychology. *Asian Journal of Social Psychology, 3*(3), 185–195. https://doi.org/10.1111/1467-839X.00063

United Nations. (2020). *Human development report 2020 – The next frontier: Human development and the Anthropocene*. https://hdr.undp.org/en/2020-report

United Nations Population Fund. (2020). *Against my will: Defying the practices that harm women and girls and undermine equality*. https://www.unfpa.org/publications/state-world-population-2020

UN Women. (2015). *A framework to underpin action to prevent violence against women*. https://www.unwomen.org/en/digital-library/publications/2015/11/prevention-framework

UN Women. (2020). *Gender equality – Women's rights in review 25 years after Beijing.* https://www.unwomen.org/en/digital-library/publications/2020/03/womens-rights-in-review

Valdez, D., Montenegro, M. S., Crawford, B. L., Turner, R. C., Lo, W., & Jozkowski, K. N. (2021). Translation frameworks and questionnaire design approaches as a component of health research and practice: A discussion and taxonomy of popular translation frameworks and questionnaire design approaches. *Social Science & Medicine, 278*, 1–6. https://doi.org/10.1016/j.socscimed.2021.113931

Van de Vijver, F. J. R. (2015). Methodological aspects of cross-cultural research. In M. Gelfand, Y. Hong & C. Y. Chiu (Eds.), *Handbook of advances in culture and psychology* (pp. 101–160). Oxford University Press.

Van de Vijver, F. J. R., & Leung, K. (2021). *Methods and data analysis for cross-cultural research* (2nd ed.). Cambridge University Press. https://doi.org/10.1017/9781107415188

Voith, L. A., Hamler, T., Francis, M. W., Lee, H., & Korsch-Williams, A. (2020). Using a trauma-informed, socially just research framework with marginalized populations: Practices and barriers to implementation. *Social Work Research, 44*(3), 169–181. https://doi.org/10.1093/swr/svaa013

Wathen, C. N., & MacMillan, H. L. (2012). Health care's response to women exposed to partner violence: Moving beyond universal screening. *JAMA: The Journal of the American Medical Association, 308*(7), 712–713. https://doi.org/10.1001/jama.2012.9913

Weaver, B., & Maxwell, H. (2014). Exploratory factor analysis and reliability analysis with missing data: A simple method for SPSS users. *Tutorials in Quantitative Methods for Psychology, 10*(2), 143–152. https://doi.org/10.20982/tqmp.10.2.p143

Wei, Y., McGrath, P. J., Hayden, J., & Kutcher, S. (2015). Mental health literacy measures evaluating knowledge, attitudes and help-seeking: A scoping review. *BMC Psychiatry, 15*(291), 1–20. https://doi.org/10.1186/s12888-015-0681-9

Wemrell, M., Stjernlöf, S., Aenishänslin, J., Lila, M., Gracia, E., & Ivert, A. (2019). Towards understanding the Nordic paradox: A review of qualitative interview studies on intimate partner violence against

women (IPVAW) in Sweden. *Sociology Compass, 13*, 1–23. https://doi.org/10.1111/soc4.12699

Wemrell, M., Stjernlöf, S., Lila, M., Gracia, E., & Ivert, A. (2021). The Nordic paradox. Professionals' discussions about gender equality and intimate partner violence against women in Sweden. *Women & Criminal Justice.* Advance online publication. https://doi.org/10.1080/08974454.2021.1905588

Wexler, L., Rasmus, S., Ullrich, J., Flaherty, A. A., Apok, C., Amarok, B., Black, J., McEachern, D., Murphrey, C., Johnson, R., & Allen, J. (2020). The development of a measure of Alaska native community resilience factors through knowledge co-production. *Progress in Community Health Partnerships, 14*(4), 443–459. https://doi.org/10.1353/cpr.2020.0050

Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in qualitative research. *Qualitative Health Research, 11*(4), 522–537. https://doi.org/10.1177/104973201129119299

Wild, D., Grove, A., Martin, M., Eremenco, S., McElroy, S., Verjee-Lorenz, A., & Erikson, P. (2005). Principles of good practice for the translation and cultural adaptation process for patient-reported outcomes (PRO) measures: Report of the ISPOR task force for translation and cultural adaptation. *Value in Health, 8*(2), 94–104. https://doi.org/10.1111/j.1524-4733.2005.04054.x

Williams, S. J. (1995). Theorising class, health and lifestyles: Can Bourdieu help us? *Sociology of Health & Illness, 17*(5), 577–604. https://doi.org/10.1111/1467-9566.ep10932093

Willis, G. B. (2005). *Cognitive interviewing: A tool for improving questionnaire design*. Sage Publications. https://doi.org/10.4135/9781412983655

Willis, G. B. (2008). Cognitive interviewing. In P. J. Lavrakas (Ed.), *Encyclopedia of survey research methods* (pp. 106–109). Sage Publications. https://doi.org/10.4135/9781412963947.n73

Willis, G. B. (2015). Research synthesis the practice of cross-cultural cognitive interviewing. *Public Opinion Quarterly, 79*(1), 359–395. https://doi.org/10.1093/poq/nfu092

Willis, G. B., & Miller, K. (2011). Cross-cultural cognitive interviewing: Seeking comparability and enhancing understanding. *Field Methods, 23*(4), 331–341. https://doi.org/10.1177/1525822X11416092

Wills, C., Cuevas, C. A., & Sabina, C. (2022). The role of the victim–offender relationship on psychological distress among Latinx women: A betrayal trauma perspective. *Psychological Trauma: Theory, Research, Practice, and Policy, 14*(1), 20–28. https://doi.org/10.1037/tra0000923

Wilson, D., Smith, R., Tolmie, J., & de Haan, I. (2015). Becoming better helpers: Rethinking language to move beyond simplistic responses to women experiencing intimate partner violence. *Policy Quarterly, 11*(1), 25–31. https://doi.org/10.26686/pq.v11i1.4529

Wolf, M. E., Ly, U., Hobart, M. A., & Kernic, M. A. (2003). Barriers to seeking police help for intimate partner violence. *Journal of Family Violence, 18*(2), 121–129. https://doi.org/10.1023/A:1022893231951

World Economic Forum. (2021). *Global gender gap report 2021*. https://www.weforum.org/reports/global-gender-gap-report-2021

World Health Organization. (2005). *WHO Multi-country study on women's health and domestic violence against women:*

Prevalence, health outcomes and women's responses.
https://apps.who.int/iris/handle/10665/43310

World Health Organization. (2012). *Understanding and addressing violence against women: Intimate partner violence*.
https://apps.who.int/iris/handle/10665/77432

World Health Organization. (2013). *Responding to intimate partner violence and sexual violence against women: WHO clinical and policy guidelines.* https://apps.who.int/iris/handle/10665/85240

World Health Organization. (2019). *RESPECT women: Preventing violence against women*.
https://www.who.int/publications/i/item/WHO-RHR-18.19

World Health Organization. (2021a). *Addressing violence against women in health and multisectoral policies: A global status report*.
https://www.who.int/publications/i/item/9789240040458

World Health Organization. (2021b). *Violence against women prevalence estimates, 2018: Global, regional and national prevalence estimates for intimate partner violence against women and global and regional prevalence estimates for non-partner sexual violence against women*.
https://www.who.int/publications/i/item/9789240022256

World Medical Association. (2013). *WMA Declaration of Helsinki – Ethical principles for medical research involving human subjects*.
https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/

Wu, Y., Levis, B., Riehm, K. E., Saadat, N., Levis, A. W., Azar, M., Rice, D. B., Boruff, J., Cuijpers, P., Gilbody, S., Ioannidis, J. P. A., Kloda, L. A., McMillan, D., Patten, S. B., Shrier, I., Ziegelstein, R. C., Akena, D. H., Arroll, B., Ayalon, L., . . . Thombs, B. D. (2020). Equivalency of the diagnostic accuracy of the PHQ-8 and PHQ-9: A systematic

review and individual participant data meta-analysis. *Psychological Medicine, 50*(8), 1368–1380. https://doi.org/10.1017/S0033291719002137

Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology, 9*(2), 79–94. https://doi.org/10.20982/tqmp.09.2.p079

Zeldenryk, L., Gordon, S., Gray, M., Speare, R., Melrose, W., Hossain, M., & Williams, G. (2013). Cognitive testing of the WHOQOL-BREF Bangladesh tool in a northern rural Bangladeshi population with lymphatic filariasis. *Quality of Life Research, 22*(8), 1917–1926. https://doi.org/10.1007/s11136-012-0333-1

Ægisdóttir, S., & Einarsdóttir, S. (2012). Cross-cultural adaptation of the Icelandic Beliefs about psychological services scale (I-BAPS). *International Perspectives in Psychology, 1*(4), 236–251. https://doi.org/10.1037/a0030854

Ægisdóttir, S., & Gerstein, L. H. (2009). Beliefs about psychological services (BAPS): Development and psychometric properties. *Counselling Psychology Quarterly, 22*(2), 197–219. https://doi.org/10.1080/09515070903157347

Ægisdóttir, S., Gerstein, L. H., & Çinarbaş, D. C. (2008). Methodological issues in cross-cultural counseling research. *The Counseling Psychologist, 36*(2), 188–219. https://doi.org/10.1177/0011000007305384

Article I

RESEARCH   **Open Access**

Adaptation of the barriers to help-seeking for trauma (BHS-TR) scale: a cross-cultural cognitive interview study with female intimate partner violence survivors in Iceland

Karen Birna Thorvaldsdottir[1*] , Sigridur Halldorsdottir[1] , Rhonda M. Johnson[2] , Sigrun Sigurdardottir[1] and
Denise Saint Arnault[3]

Abstract

Background: Even though traumatization is linked to substantially reduced health-related quality of life, help-seeking and service utilization among trauma survivors are very low. To date, there has not been available in Iceland a culturally attuned, self-reported measure on help-seeking barriers after trauma. This study aimed to translate and cross-culturally adapt the English version of Barriers to Help-Seeking for Trauma (BHS-TR) scale into the Icelandic language and context.

Methods: The BHS-TR was culturally adapted following well-established and rigorous guidelines, including forward-backward translation, expert committee review, and pretesting through cognitive interviews. Two rounds of interviews with 17 female survivors of intimate partner violence were conducted using a think-aloud technique and verbal probing. Data were analyzed using qualitative content analysis, a combination of deductive and inductive approaches.

Results: Issues with the BHS-TR that were uncovered in the study were classified into four categories related to general design, translation, cultural aspects, and post-trauma context. The trauma-specific issues emerged as a new category identified in this study and included concepts specific to trauma experiences. Therefore, modifications were of great importance—resulting in the scale becoming more trauma-informed. Revisions made to address identified issues improved the scale, and the process led to an Icelandic version, which appears to be semantically and conceptually equivalent to the original version; additionally, the results provided evidence of content validity.

Conclusions: As a cognitive interview study, it adds to the growing cognitive interviewing methodology literature. Furthermore, the results provide essential insights into the self-report response process of trauma survivors, highlighting the significance of making health-related research instruments trauma-informed.

Keywords: Translation, Cross-cultural adaptation, Cognitive interviews, Self-reported measures, Trauma, Help-seeking, Interpersonal violence, Health-related quality of life

* Correspondence: karenbirna@unak.is
[1]School of Health Sciences, University of Akureyri, Akureyri, Iceland
Full list of author information is available at the end of the article

Plain English summary

Trauma (being hurt a lot) can have big effects on people's health and how they feel about life. However, very few people who are hurt by others look for help, even at places that have been set up to help them and others, like health clinics. Understanding how hard it can be for people who have been hurt by others to actually get the help they need can make it easier for us to help them sooner and in better ways. Before, in Iceland, there has been no easy way to study what stops people from looking for help after being hurt. In this study, we changed the English language Barriers to Help-Seeking for Trauma (BHS-TR) scale so it was a better fit for Icelandic people who have had trauma in their lives. We talked to 17 Icelandic women who had lived through violence at home. We wanted to know what they thought of the BHS-TR scale and how to make it more useful in Iceland. In general, they liked the scale but they had several ideas about how to make it better and how to make sure that taking the survey did not make the women feel bad about their lives. We made changes to the scale based on their ideas.

Background

Much of the global population is exposed to traumatic events in their lifetime [1, 2]. Such events are defined as exposure to threatened death, serious injury, or sexual violence [3]. While most individuals exhibit resilience and the capacity to recover afterward [4–6], many survivors face lasting adverse effects, leading to trauma identified as a public health issue [7, 8]. Traumatization is linked to an increased risk of suffering from an array of mental and physical conditions associated with functional impairment and substantially reduced health-related quality of life (HRQoL) [9, 10], even years after exposure [11]. This suffering is particularly evident in cases of complex and interpersonal trauma [7, 12]. A recent review of the WHO world mental health surveys in 24 countries ($n = 68,894$) showed that of the 29 trauma types assessed, interpersonal traumas carried the highest posttraumatic stress disorder (PTSD) risk, and intimate partner violence (IPV) had the highest PTSD burden [5].

Despite these adverse effects of trauma on HRQoL, the estimates of help-seeking among traumatized individuals are very low, especially for formal sources of help, including the healthcare system [13–15]. Thus, a significant proportion of trauma survivors are not receiving the care they need. This finding is consistent with previous research that has shown that survivors are facing a range of barriers to health service utilization, including both system-level structural factors and individual attitudinal factors [16–18]. Further exploration of the barriers that trauma survivors face is essential to better understand the gap between the perceived need for help and service utilization, which can give us the critical information needed to increase help-seeking after traumatization. However, instruments measuring help-seeking barriers have mainly been developed in the specific context of physical or mental illness, and very few are trauma-specific [19–21].

The Barriers to Help-Seeking for Trauma (BHS-TR) scale was developed by Saint Arnault [17] based on the Barriers to Seeking Care scale used in the mental health supplement of the Ontario epidemiology study [22]. The original scale included 25 barriers to mental health service utilization. Besides Canada, these barriers have been examined in large population-based studies in the United States and the Netherlands and found to be relevant, despite differing healthcare systems in these countries [23]. For the BHS-TR, Saint Arnault added items related to help-seeking after traumatization, based on literature review and focus group interviews with gender-based violence (GBV) survivors from the United States and Ireland. The BHS-TR has been used to date in research with women from both primary-care sites and the general community [17, 24]. Moreover, the scale was found to be reliable, valid, and useful in understanding aspects of the barriers GBV trauma survivors experience on their help-seeking journey (Saint Arnault, D. M., & Ozaslan, Z. (under review). Understanding help-seeking barriers after gender-based violence: Validation of the barriers to help-seeking for trauma (BHS-TR) scale. *International Journal of Mental Health Nursing*.). BHS-TR is, to our knowledge, the first trauma-specific instrument that assesses barriers to help-seeking. As has been noted, the scale was developed from existing mental health barriers measure but adapted for survivorship, which can be related yet distinct. The rationale for choosing the BHS-TR was the need for a trauma survivor-centered help-seeking barriers instrument that can be used to identify and develop interventions to mitigate them and help revise services to address these barriers in Iceland.

Investigators are increasingly turning their attention to best practices for instrument translation and cultural adaption [25–27]. It is recognized that if measures are to be used across cultures, the items must not merely be translated well linguistically but also adapted culturally to maintain the content validity at a conceptual level [28]. The most appropriate way to collect data to support content validity is by conducting qualitative research involving communication with participants to capture their perspective on the measure [29]. Within the existing guidelines, there is furthermore a broad agreement on the purpose and necessity of pretesting the translated instrument with the target population [27, 28, 30].

Cognitive interviewing (CI), a psychologically oriented method for empirically studying how respondents mentally process and respond to survey questions [31], has emerged as an essential qualitative method for the pretesting and evaluation of self-report instruments. Its primary value is in providing information to uncover potential issues with questions and offer recommendations for improvements [32, 33]. However, since CI was derived from the cognitive aspects of survey methodology movement [34, 35], the method has been criticized in the context of cross-cultural research for lack of focus on sociocultural factors that can influence the survey response process, consistent with the understanding that cognitive processes do not operate within a black box but are shaped by persons' lived experiences [33, 36].

Cross-cultural cognitive interviewing (CCCI) is a variant of standard cognitive testing that has increasingly been carried out in an effort to detect issues related to the translation of instruments and establish cultural equivalence [37]. This extension of CI, an already interdisciplinary paradigm, has incorporated perspectives from sociology and anthropology [32, 38], with an increased emphasis on how members of different cultural groups interpret specific questions and instruments in the context of their unique viewpoints [33, 37].

Currently, there is no self-reported measure on help-seeking barriers after trauma available in Iceland. This study was undertaken to translate the BHS-TR scale from the English version into the Icelandic language and to adapt it for use in the Icelandic context. Also, we aimed to pretest and qualitatively evaluate the content validity of the Icelandic version through cross-cultural cognitive interviews. This study is part of a larger international research being carried out by the Multicultural Study of Trauma Recovery (MiStory).[1]

Methods
Description of the instrument
The BHS-TR is a 34-item self-report instrument, measuring barriers to seeking help for trauma recovery [17]. Help-seeking is defined as "the experiences, expectations, and interpretations that interact with structural variables, as well as context, to influence behavior aimed at reducing suffering and promoting health ([24] , p. 163)." The scale includes structural barriers (e.g., lack of information, financial problems, and unavailability of care), intra- and interpersonal barriers (e.g., normalization, feeling they must solve it on their own, and shame), and trauma-specific barriers

(e.g., feeling frozen, confused, or fearing the consequences of disclosure). Respondents answer on a Likert scale anchored at 1 ("Did not influence me") to 4 ("Strongly influenced me").
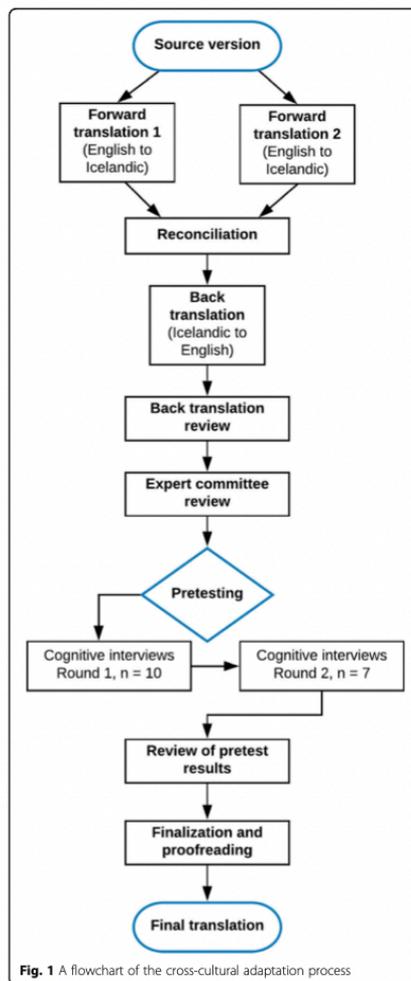

Fig. 1 A flowchart of the cross-cultural adaptation process

---

[1]The MiStory network (https://mistory-traumarecovery.org/) is a research collaborative currently working in 13 countries around the world to use safe and trauma-informed methods that illuminate the interactions among cultural context, the self, gender, and trauma recovery.

Translation and adaptation process

The BHS-TR was translated and culturally adapted following international guidelines and principles of good practice [27, 28] (see Fig. 1). These guidelines have been widely used for translation and adaption of self-reported measures, providing a rigorous process designed to maximize the attainment of semantic and conceptual equivalence between the source and translated instruments. Steps of the process are described in detail in Table 1.

Ethical considerations

Permission from the instrument developer to use, translate, and adapt the BHS-TR was obtained. The National Bioethics Committee in Iceland provided the ethical clearance to conduct the CI in the pretesting phase (VSNb2019060009/03.01), and the study was reported to the Data Protection Authority (19–119). Verbal and written informed consent was obtained before participation, and all participants received a list of local referral resources at the end of the interview. They were also offered post-interview support from a psychologist if difficult emotional reactions emerged during or after participation.

Cognitive interviews

The Icelandic version of the BHS-TR was pretested using cognitive interviews. The theoretical perspective underlying this study was Tourangeau's [34] four-stage cognitive model of survey response: (1) comprehension of the question, (2) retrieval from memory of relevant information, (3) judgment of needed information, and (4) responding to the question. Due to the cultural aspect, the pretesting was furthermore conducted following recommendations for CCCI [37], with a focus as well on sociocultural factors that can influence the response process.

Interview participants

Seventeen women took part in the interviews. The inclusion criteria were: Icelandic women (aged ≥18 years) who self-identified as having experienced IPV. For ethical reasons and the safety of the women, they had to have been out of the abusive relationship for at least a year. Participants were recruited from centers and services for survivors of violence in North and South Iceland, using purposive sampling. The years in the abusive relationship ranged from one to eighteen, and most had been in the relationship over six years. The years

Table 1 Overview of the cross-cultural adaptation process, based on [27, 28]

Steps	Description of how each step was performed
Step 1. Preparation	The instrument developer (last author) permitted the process and agreed to be involved.
Step 2. Forward translations	Two separate forward translations were carried out individually by two native Icelandic speakers who were fluent in English, one a professional translator and the other a health professional; both also experienced researchers in their field. The focus was to avoid literal translation and capture the conceptual meaning of the items.
Step 3. Reconciliation	The first author, a native Icelandic speaker, met with the translators to synthesize the results of the translations. They compared and discussed the differences between the two translations. Ambiguities and discrepancies were examined to create a single forward version.
Step 4. Back translation	Back translation of the reconciled translation was performed by a native English speaker who was fluent in Icelandic. The back translator was an experienced researcher in the field of health sciences but had no prior knowledge of the instrument and had not seen the two forward translations.
Step 5. Back translation review	The first author reviewed the back translation against the source instrument to identify any discrepancies and ensure the conceptual equivalence of the translation. Clarification and recommendations were sought from the instrument developer (last author, a native English speaker and a skilled researcher).
Step 6. Expert committee review	A multidisciplinary committee reviewed all the versions of the instrument (steps 2, 3, and 4) and developed the pre-final version of the translation. The committee consisted of a methodologist and two health professionals (nurse and psychologist) experienced with working with survivors of violence. The committee's role was to make recommendations to achieve semantic, idiomatic, experiential, and conceptual equivalence between the source and target instruments.
Step 7. Pretesting through cognitive interviews	Two rounds of cognitive interviews were conducted with participants drawn from the target population. The goal was to explore comprehensibility, interpretation, and cultural relevance of the pre-final version. The interview data were analyzed using qualitative content analysis.
Step 8. Review of pretest results	The results were reviewed, and desirable modifications identified. The pretesting, being of particular importance for cultural adaptation, is described in more detail in the sections below.
Step 9. Finalization and proofreading	Following agreement on adjustments, the translation was finalized. In this final quality control step, the translation was proofread by one of the forward translators, which checked for any remaining spelling or grammatical errors.
Step 10. Final report	Each step was thoroughly documented during the process, allowing tracking of all the decisions made. This article represents the final step of the process, where a report is written on the development of the Icelandic version of the scale.

out of the abusive relationship at the time of the interviews varied from two to twelve, on average, five years. Most of the women (13) had sought help from informal sources (family and friends) at the time of leaving the abuse, but few (6) had done so at later stages in the help-seeking journey when trying to recover from the trauma. The women had all sought formal help for their traumatic experience, hence the recruitment strategy. Nevertheless, only nine of them had sought help from the healthcare system, even though all had been faced with adverse, emotional, physical, and social health effects of the violence. During recruitment, attempts were made to select a diversity of individuals within the target population, as recommended for CI [32]. Table 2 describes the participants' socio-demographic characteristics.

Procedures

Two iterative rounds of in-person CI were conducted, a total of 17 interviews. The interviews took place between August and October 2019, in a location chosen by participants, either at their homes or in a secure meeting room. The first author conducted all the interviews, which lasted on average for an hour. Think-aloud technique and verbal probing were used in conjunction to elicit participants' interpretive process. The probing was done concurrently, using a combination of scripted and spontaneous probes (see Table 3). All interviews were

Table 2 Overview of the participants' demographics

Characteristics	N = 17
Age	
18–29	4
30–39	7
40–49	4
50+	2
Icelandic language proficiency	
Native speaker	16
Fluent speaker	1
Education completed	
Less than high school	3
Junior college	5
University degree	9
Employment status	
Employed	12
Unemployed	5
Number of children	
None	5
One or two	9
Three or more	3

audio-recorded with participants' permission, and written notes were taken by the interviewer, documenting non-verbal cues. Round one consisted of interviews with 10 participants. Items identified as problematic during the analysis in the first round were revised and then further tested in round two with seven additional participants. In both rounds, all items on the scale were examined, in addition to obtaining feedback on BHS-TR relevance and cultural attunement in the Icelandic help-seeking context.

Data analysis

After each interview, the audio recordings were reviewed and transcribed. Next, detailed summaries were prepared, using the transcripts and written notes from the interviews. These interview summaries were used as the main source for the analysis. The first author was the primary analyst, responsible for preparing the interview summaries, coding, and categorization, with a thorough follow-up on the whole process from the second author.

A qualitative content analysis (QCA) was performed based on the procedures described by Elo and Kyngäs [39], focusing both on manifest and latent content. The main focus was to identify issues that participants had with the scale and classify them into meaningful categories. The analysis utilized a combined deductive and inductive approach, using an unconstrained matrix to code the data (see Fig. 2). The matrix was mainly based on categories frequently reported in the literature; general design issues, translation issues, and cultural issues [40–42], but since it was unconstrained, there was a possibility of creating different categories within its bounds [39]. In addition to the more familiar categories identified using the deductive approach, trauma-specific issues emerged as a unique category in this study, using steps of the inductive approach (grouping, categorization, and abstraction). The sub-categories within each of the four categories were also created following those steps. The analysis process was performed after each round, and afterward, the results were examined together before making final decisions about revisions. All authors were involved in the dialogue and the careful determination of revisions made. An audit trail was maintained for scientific rigor.

Results

Translation and adaptation process

The two forward translations were concordant on most items and considered linguistically equivalent in terms of their meaning. Minor differences were in wording, and for the reconciliation version, preference was given to less complicated and semantically equivalent words. Review of the back translation suggested semantic and conceptual equivalence with the source version as most

Thorvaldsdottir *et al. Journal of Patient-Reported Outcomes*   (2021) 5:22

Page 6 of 13

Table 3 Cognitive probes based on Tourangeau [34] and Willis [37]

Category of probes	Example
Comprehension probe	What do you understand by …?
Interpretation probe	What does the term … mean to you?
Paraphrasing probe	Can you tell me in your own words what this item is asking?
Process probe	How did you arrive at that answer?
Recall probe	How do you remember that you …?
Elaborative probe	Tell me more, why do you say that?
Sensitivity probe	Is it all right to ask about this, or do you think that this item is inappropriate?
Evaluative probe	Do you feel this item is easy or difficult to answer?

items were nearly identical. Translation discrepancy identified in the review was regarding the item "I had distance or transportation problems," which was translated to "I had problems going there" and hence became broader in the translation process than intended. Therefore, the translation of the item was made more specific, using the Icelandic words for "distance" and "transportation."

The expert committee provided remarks on several items, mainly involving minor grammatical changes and
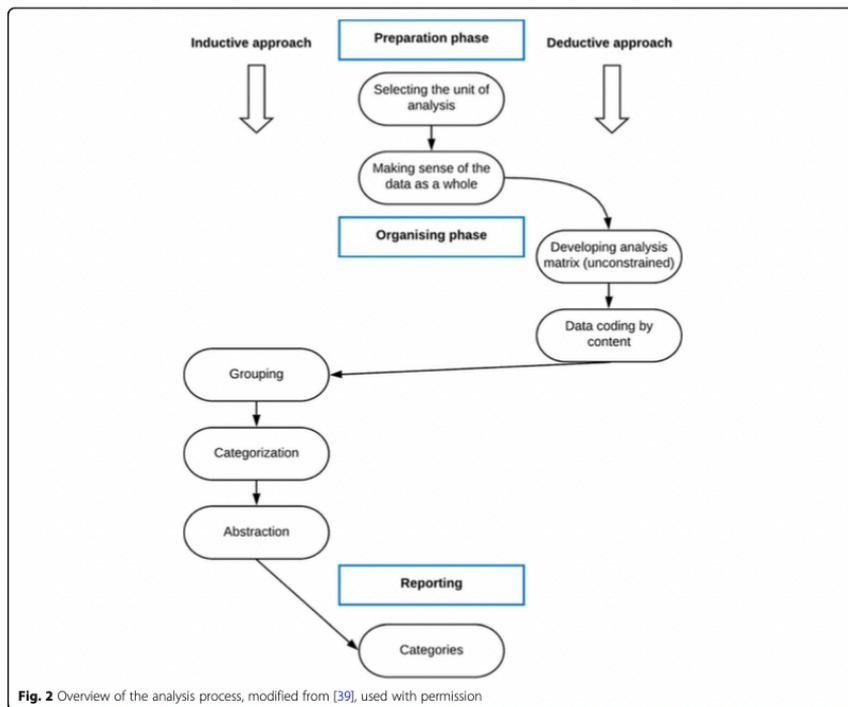

Fig. 2 Overview of the analysis process, modified from [39], used with permission

135

suggestions for different wording, as special attention was given to producing a translation that would be easily understood by the target population. Other challenges reported by the committee involved the cultural relevance of items, for instance, concerning health coverage. Due to different healthcare and insurance systems, the committee recommended modifications. The same was true for items regarding race and ethnicity, which the committee thought might need to be adapted better to the Icelandic context. These items were kept unchanged for further assessment in the pretesting.

Cognitive interviews

The BHS-TR was well-received overall, and the women stated that the items described their experience with barriers to seeking help after trauma for the most part. However, the participants questioned the relevance of a few items, which were the same items of concern by the expert committee. The women found the layout of the scale to be clear, the response options appropriate, and most items understandable, and the CI confirmed that they grasped the intended meaning. Furthermore, the women talked about the importance and value of this measure concerning their own challenges while trying to seek and seeking help. In the interviews, most of them had a hard time or felt uncomfortable with the think-aloud technique, whereas the probes were generally adequate.

Several issues, primarily on item-level, were uncovered in the interviews using the deductive and inductive QCA. The issues were classified into the four following categories: (1) *General design issues:* Problems with the design or layout of the original scale, (2) *Translation issues:* Problems where the wording of a translated item altered the

intent of the source item, (3) *Cultural issues:* Problems where differences in social structures, norms, or values made it challenging to convey items to the Icelandic context, and (4) *Trauma-specific issues:* Problems where participants had trouble responding or were sensitive to the wording of items due to their lived experiences of trauma.

More detailed examples of the identified issues are presented in the following sections, as well as the revisions that were made as a result of both pretesting rounds. Quotations from participants that best represent and support each identified issue were chosen (see Tables 4, 5, 6, and 7). To allow for cross-cultural comparison, we were partially restricted in making some modifications to resolve these issues. Revisions that were made, based on the first pretesting round, reduced the number of issues identified in the later round, nearly eliminating items with problematic translations and enhancing equivalence between the translated and source versions. In the second round, similar insights were repeated, and no new significant problems emerged. Thus, it was decided that no subsequent rounds were required.

General design issues

The general design issues were divided into four subcategories, involving unclear scale instructions, forgetting response options, double-barreled items, and repetition of items (see Table 4). Overall, we detected relatively few general design issues. However, these were the issues that we were most restricted in making modifications. The lack of clarity of the scale instructions, being of particular importance, and also related to the post-trauma context issues (see Table 7) regarding the women's multistep help-seeking journey was addressed

Table 4 Examples of general design issues identified

Issues	Description	Meaning unit	Revisions
Unclear scale instructions	Many (13 of 17) participants thought the scale instructions were unclear regarding the time of being faced with these barriers and how to answer if they had, at some point, sought help after their traumatic experience.	"Like what time are we talking about? And what if I did seek help at some point, should I still answer the scale?"	The specific time frame of asking about the last 12 months was added. Clearly stating that if people felt that they needed help during this specific time period but did not seek it, they are asked to answer the scale, even though they had sought or received help in the past.
Response options are forgotten	Several (6 of 17) participants forgot what the response options stood for while answering the scale.	"Halfway through, I forgot what the answer possibilities stood for, you should maybe have them visible at each item, so people do not have to scroll up and down."	Description of the response options was made to appear more frequently on the scale.
Double-barreled items	Items with the conjunctions "or" and "and" were thought to be confusing and hard to answer by a few participants (3 of 17).	"I do not like these statements with "or" in them, you know asking about two things … it is a little confusing to answer. Also, if I have experienced only the other, how do you know which one I meant?"	None at this point, since fully addressing the issue would require significant modification to the scale.
Repetition	Some participants (5 of 17) thought that the scale included repetitive items.	"I just answered this … I know you are probably going to be looking at if I answered these questions in the same manner, but that is just really annoying."	No need to adjust, as the BHS-TR is a multidimensional measure, and repetition in this context (and for that purpose) is consistent with good study design.

Table 5 Examples of translation issues identified

Issues	Description	Meaning unit	Revisions
Problematic translation	In the item "I thought the problem would probably go away by itself," the phrasal verb "go away" was translated to "disappear" in Icelandic (9 of 17 participants).	"Disappear is not really appropriate for this kind of problem. Sure, I thought things would get better by itself, but never just poof and gone."	The translation was changed to "I thought the problem would probably get better by itself."
Problematic translation	In the item "I was ashamed or embarrassed," the word "embarrassed" was translated as "awkward" in Icelandic, which was unsuitable in this context (12 of 17 participants).	"Awkward? I was racked with shame not blushing … using this word is not okay in my opinion."	Since being ashamed and embarrassed have similar meanings in Icelandic, the adapted item became "I was ashamed."
Problematic translation	In the item "I couldn't get time away from work or family responsibilities," the Icelandic meaning of the word "responsibilities" is more similar to the English word "obligations" (8 of 17 participants).	"Is taking care of my family supposed to sound so negative?"	The word "responsibilities" was cut from the item, changing the translation to "I couldn't get time away from work or my family."
Problematic translation	In the item "I thought getting help would take too much time or was inconvenient," the word "inconvenient" was translated to "impractical," which was missing the aspects of causing trouble or discomfort (6 of 17 participants).	"I would put that this did not influence me because you don't think about if it is going to be practical or not … is this really the best word to use?"	The Icelandic word "troublesome" was used instead.

by adding the specific time frame of asking about the last 12 months.

Translation issues

There was only one sub-category of the translation issues identified, problematic translation, which was when the Icelandic words did not convey intended constructs or meaning (see Table 5). This category had issues that were most easily resolved, and

modifications mainly involved choosing alternative words. Very few problematic translations were identified in the second round of CI.

Cultural issues

The cultural issues were divided into three subcategories, all related to the appropriateness of items in the Icelandic help-seeking context (see Table 6). Firstly, there were few issues regarding connotations, cultural

Table 6 Examples of cultural issues identified

Issues	Description	Meaning unit	Revisions
Connotations and cultural idioms	In the item "I was afraid I couldn't clearly express my needs," the word "needs" was considered by many participants (11 of 17) to be strange in this context. They thought Icelanders would instead use sayings like "how I felt" or "what was wrong."	"What do you mean by my needs? You know, I know what it literally means, but I would never sit down with my doctor or psychologist and say I need this and that."	Despite good suggestions from participants, those changes would have altered the literal meaning of the item. The wording was nevertheless changed from "my needs" to "what I needed."
Different healthcare system	All (17 of 17) participants commented on the item, "My health coverage wouldn't cover the type of treatment I needed." Some thought the item was not appropriate in the Icelandic context, while others thought it was relevant regarding some mental health services.	"This sounds very American, we don't say our or my health insurance, everybody is insured … the system here is so different, and it covers a lot of care. Although not all mental healthcare is government-subsidized, so that affects trauma survivors in Iceland."	The adapted version of the item became "The available health insurance wouldn't cover the type of treatment I needed."
Historically homogeneous nation	Some (8 of 17) participants wondered if the following item, "I felt that my culture, ethnic background or specific situation would not be understood," should be on the Icelandic version of the scale. However, they often stated that if immigrants were to answer the scale, then this item might be relevant.	"Is this appropriate in Iceland? I don't think that culture or ethnic background is a problem for most Icelanders … then again, we are becoming more diverse … still, I feel like there is a lot in your background besides ethnicity that you can be scared of people not understanding, so you don't seek help."	The item was adapted to the Icelandic context by changing it to "I felt that my culture, background or specific situation would not be understood."
Historically homogeneous nation	In the item "I felt that there would be prejudice, racism, or discrimination against me," several (9 of 17) participants focused only on the word "racism" and thought that prejudice or discrimination had to be related to their race.	"This focus on race is not very Icelandic, so yeah, I would answer that this did not affect me because you know of course I thought there would be prejudice, but not about my race or you know racism."	The adapted version of the item became "I felt that there would be prejudice or discrimination against me," which could include racism, among other things.

Table 7 Examples of trauma-specific issues identified

Issues	Description	Meaning unit	Revisions
Post-trauma context	Difficulties deciding how to answer due to the complex nature of the trauma and a multistep help-seeking journey was a common problem (14 of 17 participants).	"Some of these barriers are also really descriptive when you are trying to leave an abusive relationship, so my mind always went there. When I think about seeking help for my PTSD or you know everything after … there can be different barriers, so I would answer differently."	The scale was designed to measure barriers to seeking help for trauma recovery, which was included in the scale instructions. However, this issue made it apparent that it needed to be more clearly defined. It furthermore supported the change of adding the specific time frame of asking about the last 12 months.
Post-trauma context	Some (8 of 17) participants felt that the following item "Professionals from my own cultural or ethnic group were not available" should rather be about the gender of professionals than about their culture or ethnicity. Hence, this problem was also classified as a cultural issue, but the primary meaning was related to the post-IPV context (also relevant to other types of interpersonal trauma).	"I do not relate and actually it doesn't matter to me what their ethnicity is or culture, cultural … uhm … I don't even know what my cultural group is, you know we don't talk like this, anyway … what was really a barrier for me was being forced to have a health professional of the same gender as my perpetrator."	The adapted version of the item became "Suitable professionals were not available," which could include the cultural and ethnic background as well as gender.
Sensitive to wording	The wording "your decisions not to seek help" in the scale instructions was thought to be offensive by many (10 of 17) participants.	"It is not this simple, I did not sit down and made this thought out decision to not get the help that I needed."	The instructions were rephrased using the word "reasons" instead of "decisions."
Victim-blaming wording	Several (7 of 17) participants thought some of the items had victim-blaming wording.	"My problems, my situation, my my my … you are taking all of the responsibility from the perpetrator and putting it all on the survivor like it is my fault."	Revisions involved changing the word "my" to "the" in the problematic sentences that reflect negative aspects (such as problem and situation) while maintaining "my" in those sentences that reflect respondent autonomy (such as reasons, feelings, or actions).
Sensitive to word order	Few (5 of 17) participants were sensitive to the order of words in the following item "I was worried that if others discover my health problems or my situation, I could lose housing, security, or my children."	"I would never put housing and my security before my children … so I would not want to answer this."	The order was changed to "my children, security, or housing."

idioms, or the use of phrases in the speech of Icelanders. Secondly, while going through the scale, the women talked about the difference between healthcare in Iceland versus the United States. These cultural differences were especially regarding items about cost and individual health coverage, which they did not relate to since Iceland has a universal healthcare system that is primarily paid for by taxes and under which all legal residents are covered. Thirdly, some of the women viewed Iceland as being a relatively homogeneous country, and therefore, found items about race and ethnic background to be culturally inappropriate. Revisions mainly involved making adaptations based on the women's input, while still maintaining cross-cultural comparability.

Trauma-specific issues

The trauma-specific issues were divided into four subcategories, where the underlying thread was the unique post-trauma context and how it impacted the participants' viewpoints (see Table 7). The women had difficulty answering some items due to the complex and interpersonal nature of their trauma; some described general difficulties responding to the measure because

the specific barriers to seeking help for trauma recovery reminded them of parallel barriers they had experienced over time while seeking to live through and survive their own traumatic experiences. Another aspect of these issues was the participants' vulnerability, where they were sensitive to the wording of items, the choice of words, and even the order of words. This category of issues became apparent and most associated with participants not wanting to answer, and ultimately skipping items. It also became clear that few items on the scale were triggering negative feelings for some women. Therefore, modifications were of great importance, and these issues were resolved with clarification or rewording items, making the instrument more trauma-informed as a result.

Discussion

This study described the translation and cultural adaption process of the Icelandic version of the BHS-TR, including cognitive interviews with survivors of IPV. To the best of our knowledge, this is the first Icelandic trauma-specific instrument that assesses barriers to help-seeking. The process led to a version that is

semantically and conceptually equivalent to the original English version; additionally, the results provided evidence of content validity.

The first steps of the translation went without significant problems, which might have been facilitated due to English and Icelandic both being Germanic languages. Interestingly, only one problematic translation issue emerged during the back translation step. However, several translation issues were independently identified with both the expert committee and the CI, making us question if we could have forgone the back translation step and potentially adding to the growing body of research indicating the shortcomings of back translation as a quality testing tool [43, 44]. Still, it could be that the efficacy of the back translation was limited by the nature of our study, as back translations can be particularly valuable in cases where multiple target languages are being developed simultaneously, and can therefore be analyzed as a group, and less so when only one target language is being developed.

The pretesting through CI was a valuable step, allowing us to gain insight into participants' perspectives and interpretations of the scale that helped us to identify issues and improve the Icelandic version before field testing. CI has been used successfully in many areas of healthcare research to develop and culturally adapt instruments [45, 46]. The theoretical perspective underlying the interviews in this study was from traditional CI [34] with influences from CCCI [37]. Hence, we not only focused on what is presumably happening in the "black box" of the mind [47] but also how these cognitive processes are tied to the sociocultural context, which was essential to successfully adapt the instrument to the lived reality of Icelandic trauma survivors. During the interviews, the women found it difficult to "think out loud," which is in line with other studies where difficulties with this technique across diverse linguistic and cultural groups have been reported [48–50]. On the other hand, the concurrent probing functioned well and helped the women elicit their interpretive and meaning process.

Results from the interviews showed that the women found the Icelandic version of the BHS-TR in general clear, understandable, and relevant. Moreover, we identified relatively few general design and translation issues, which might have resulted from the rigorous steps in the translation and adaptation process taken before the pretesting.

Iceland, as a high-income Western country, shares numerous cultural characteristics with Canada and the United States, where the scale was developed, including a strong sense of individualism and a great emphasis on independence and self-help [51], which can influence help-seeking and service utilization. Yet, we detected a few cultural relevance issues, mainly involving Iceland

being less ethnically and culturally diverse than those two countries. Another observed distinction was related to different types of welfare states, a critical factor in the formal help-seeking context. A similar issue was reported in a study adapting a U.S. developed healthcare-related measure for use in another Nordic country [46].

The trauma-specific issues category, unlike the others, was not built on common categories identified in previous research. These were nevertheless the issues that most resulted in participants skipping items, which is noteworthy since one of the aims of CI is to ensure high response rates from a sample of the target population in the field testing [45]. This category is a valuable finding for those undertaking studies with trauma survivors or other vulnerable populations and highlights the importance of making research instruments trauma-informed.

Importance was given to the analysis process of the interviews as it has been identified as the most undeveloped area of CI methodology; researchers rarely describe how they moved from data collection to the production of results and revisions [47]. QCA was believed to be the most suitable method since the aim was to identify any issues participants had with the scale, displayed as manifest or latent content, and to classify these issues into smaller content categories. This method has been used effectively in other CI studies [40, 42]. One challenge in using a deductive approach, however, is deciding how to treat meaningful left-over data [52]. The decision to use an unconstrained matrix gave us the flexibility to create the new category following the principles of an inductive approach [39], making the left-over data become an essential contribution. The combination of deductive and inductive approaches within QCA has recently been described as an abductive approach [52]. To enhance the study's trustworthiness, we undertook a joint collaborative analytic process, along with maintaining a transparent audit trail, showing the analytic steps, and linking the revisions to the data as recommended when using QCA [39, 53].

The findings in this study are subject to some limitations—including a relatively small sample size of 17 participants. However, traditionally CI studies include few participants but strive to conduct interviews with a variety of individuals [32, 54]. The target population in this study was Icelandic female IPV survivors, and we believe that our sample contains important characteristics of that population. We did not select participants according to racial categorization. All the women would, nevertheless, be socially classified as "white," and even though that mirrors most Icelandic women, we are aware of this limitation, particularly regarding the women's view on the relevance of items related to ethnic background and race, and the likelihood that minority populations are likely to experience unique barriers to help-seeking and

care which is the primary focus of this scale. With globalization and growing migration, the Icelandic nation is becoming more diverse [55], and it may at some future date be desirable to further culturally review and adapt this Icelandic scale to be of maximum utility to populations not well-represented in our sample.

The data collection was stopped after two rounds of interviews when saturation was reached. According to Willis [54], an instrument could, in one sense, be tested forever and still have issues. The BHS-TR was tested until several major issues had been detected and adequately addressed. This study did not include source-language interviews with English-speaking survivors. An emerging consensus within the CCCI literature is that source-language testing should be done in parallel with the translation assessment, to establish whether the problems identified are truly general, rather than specific to the target version [37, 42]. Presumably, this approach would have provided important data, especially for dealing with general design issues as well as allowing for decentering, which has been defined as the process of modifying the source instrument when necessary along with the translated version [56].

After an instrument has been translated and adapted, additional testing of the psychometric properties is highly recommended [28]. Although the interviews provided evidence of content validity and valuable insight into the women's interpretations of the scale, it does not address the reliability, item response patterns, or construct validity. Further testing of the Icelandic BHS-TR is therefore needed. As mentioned earlier, the pretesting in this study was limited to female IPV survivors seeking formal sources of help to meet healthcare needs. Based on the literature reviewed above, indicating low rates of help-seeking from any source despite a diminished HRQoL, it is crucial to test the scale with trauma survivors not seeking help. Future research should as well include more diverse populations regarding gender, ethnic origin, and the types of trauma experienced.

Conclusions

In this study, we translated and adapted the BHS-TR into the Icelandic language and context. The process followed a series of ten rigorous steps, where the expert committee review and the cognitive interviews were particularly useful steps. The study adds to the growing CI methodology literature, where the emphasis was put on reporting of the analysis. The results provide essential insights into the self-report response process of trauma survivors, highlighting the significance of making health-related research instruments trauma-informed. Revisions made to the scale improved it, and the process resulted in an Icelandic version, which appears to be semantically and conceptually equivalent to the source version, as

well as linguistically valid. Evaluations of the scale's psychometric properties are, however, recommended. The availability of a valid and reliable trauma-informed measure of help-seeking barriers has a value for health research, practice, and policy—by providing information that can guide the development of evidence-based interventions to break down barriers and facilitate help-seeking after trauma.

Author details
[1]School of Health Sciences, University of Akureyri, Akureyri, Iceland. [2]Department of Health Sciences, University of Alaska Anchorage, Anchorage, AK, USA. [3]School of Nursing, University of Michigan, Ann Arbor, MI, USA.

References
1. Benjet, C., Bromet, E., Karam, E. G., Kessler, R. C., McLaughlin, K. A., Ruscio, A., et al. (2016). The epidemiology of traumatic event exposure worldwide:

Results from the world mental health survey consortium. *Psychological Medicine*, *46*(2), 327–343. https://doi.org/10.1017/S0033291715001981.

2. Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National estimates of exposure to traumatic events and PTSD prevalence using DSM-IV and DSM-5 criteria. *Journal of Traumatic Stress*, *26*(5), 537–547. https://doi.org/10.1002/jts.21848.

3. American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders*, (5th ed.). Washington, DC: Author.

4. Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *The American Psychologist*, *59*(1), 20–28. https://doi.org/10.1037/0003-066X.59.1.20.

5. Kessler, R. C., Aguilar-Gaxiola, S., Alonso, J., Benjet, C., Bromet, E. J., Cardoso, G., et al. (2017). Trauma and PTSD in the WHO world mental health surveys. *European Journal of Psychotraumatology*, *8*(Suppl. 5), 1353383. https://doi.org/10.1080/20008198.2017.1353383.

6. Raghavan, S. S., & Sandanapitchai, P. (2019). Cultural predictors of resilience in a multinational sample of trauma survivors. *Frontiers in Psychology*, *10*, 131. https://doi.org/10.3389/fpsyg.2019.00131.

7. Kleber, R. J. (2019). Trauma and public mental health: A focused review. *Frontiers in Psychiatry*, *10*, 451. https://doi.org/10.3389/fpsyt.2019.00451.

8. Magruder, K. M., McLaughlin, K. A., & Borbon, D. L. E. (2017). Trauma is a public health issue. *European Journal of Psychotraumatology*, *8*(1), 1375338. https://doi.org/10.1080/20008198.2017.1375338.

9. Pagotto, L. F., Mendlowicz, M. V., Freire Coutinho, E. S., Figueira, I., Luz, M. P., Araujo, A. X., & Berger, W. (2015). The impact of posttraumatic symptoms and comorbid mental disorders on the health-related quality of life in treatment-seeking PTSD patients. *Comprehensive Psychiatry*, *58*, 68–73. https://doi.org/10.1016/j.comppsych.2015.01.002.

10. Scott, K. M., Koenen, K. C., Aguilar-Gaxiola, S., Alonso, J., Angermeyer, M. C., Benjet, C., et al. (2013). Associations between lifetime traumatic events and subsequent chronic physical conditions: A cross-national, cross-sectional study. *PLoS One*, *8*(11), e80573. https://doi.org/10.1371/journal.pone.0080573.

11. Li, J., Zweig, K. C., Brackbill, R. M., Farfel, M. R., & Cone, J. E. (2018). Comorbidity amplifies the effects of post-9/11 posttraumatic stress disorder trajectories on health-related quality of life. *Quality of Life Research*, *27*(3), 651–660. https://doi.org/10.1007/s11136-017-1764-5.

12. Overstreet, C., Berenz, E. C., Kendler, K. S., Dick, D. M., & Amstadter, A. B. (2017). Predictors and mental health outcomes of potentially traumatic event exposure. *Psychiatry Research*, *247*, 296–304. https://doi.org/10.1016/j.psychres.2016.10.047.

13. European Union Agency for Fundamental Rights. (2014). *Violence against women: An EU-wide survey*. Luxembourg: Publications Office of the European Union.

14. Goldmann, E., & Galea, S. (2014). Mental health consequences of disasters. *Annual Review of Public Health*, *35*, 169–183. https://doi.org/10.1146/annurev-publhealth-032013-182435.

15. Koenen, K. C., Ratanatharathorn, A., Ng, L., McLaughlin, K. A., Bromet, E. J., Stein, D. J., et al. (2017). Posttraumatic stress disorder in the world mental health surveys. *Psychological Medicine*, *47*(13), 2260–2274. https://doi.org/10.1017/S0033291717000708.

16. Kantor, V., Knefel, M., & Lueger-Schuster, B. (2017). Perceived barriers and facilitators of mental health service utilization in adult trauma survivors: A systematic review. *Clinical Psychology Review*, *52*, 52–68. https://doi.org/10.1016/j.cpr.2016.12.001.

17. Saint Arnault, D. M., & O'Halloran, S. (2016). Using mixed methods to understand the healing trajectory for rural Irish women years after leaving abuse. *Journal of Research in Nursing*, *21*(5–6), 369–383. https://doi.org/10.1177/1744987116649636.

18. Schreiber, V., Maercker, A., & Renneberg, B. (2010). Social influences on mental health help-seeking after interpersonal traumatization: A qualitative analysis. *BMC Public Health*, *10*, 634. https://doi.org/10.1186/1471-2458-10-634.

19. Clement, S., Brohan, E., Jeffery, D., Henderson, C., Hatch, S. L., & Thornicroft, G. (2012). Development and psychometric properties the barriers to access to care evaluation scale (BACE) related to people with mental ill health. *BMC Psychiatry*, *12*(36), 1–11. https://doi.org/10.1186/1471-244X-12-36.

20. Divin, N., Harper, P., Curran, E., Corry, D., & Leavey, G. (2018). Help-seeking measures and their use in adolescents: A systematic review. *Adolescent Research Review*, *3*(1), 113–122. https://doi.org/10.1007/s40894-017-0078-8.

21. Fischer, E., & Turner, J. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*, *35*(1), 79–90. https://doi.org/10.1037/h0029636.

22. Boyle, M. H., Offord, D. R., Campbell, D., Catlin, G., Goering, P., Lin, E., & Racine, Y. A. (1996). Mental health supplement to the Ontario health survey: Methodology. *Canadian Journal of Psychiatry / Revue Canadienne de Psychiatrie*, *41*(9), 549–558. https://doi.org/10.1177/070674379604100903.

23. Sareen, J., Jagdeo, A., Cox, B. J., Clara, I., ten Have, M., Belik, S., et al. (2007). Perceived barriers to mental health service utilization in the United States, Ontario, and the Netherlands. *Psychiatric Services*, *58*(3), 357–364. https://doi.org/10.1176/appi.ps.58.3.357.

24. Saint Arnault, D. M. (2018). Defining and theorizing about culture: The evolution of the cultural determinants of help seeking–revised. *Nursing Research*, *67*(2), 161–168. https://doi.org/10.1097/NNR.0000000000000264.

25. Ljungberg, A. K., Fossum, B., Fürst, C. J., & Hagelin, C. L. (2015). Translation and cultural adaptation of research instruments – Guidelines and challenges: An example in FAMCARE-2 for use in Sweden. *Informatics for Health & Social Care*, *40*(1), 67–78. https://doi.org/10.3109/17538157.2013.872111.

26. Squires, A., Aiken, L. H., van den Heede, K., Sermeus, W., Bruyneel, L., Lindqvist, R., et al. (2013). A systematic survey instrument translation process for multi-country, comparative health workforce studies. *International Journal of Nursing Studies*, *50*(2), 264–273. https://doi.org/10.1016/j.ijnurstu.2012.02.015.

27. Wild, D., Grove, A., Martin, M., Eremenco, S., McElroy, S., Verjee-Lorenz, A., & Erikson, P. (2005). Principles of good practice for the translation and cultural adaptation process for patient-reported outcomes (PRO) measures: Report of the ISPOR task force for translation and cultural adaptation. *Value in Health*, *8*(2), 94–104. https://doi.org/10.1111/j.1524-4733.2005.04054.x.

28. Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*, *25*(24), 3186–3191. https://doi.org/10.1097/00007632-200012150-00014.

29. Brod, M., Tesler, L. E., & Christensen, T. L. (2009). Qualitative research and content validity: Developing best practices based on science and experience. *Quality of Life Research*, *18*(9), 1263–1278. https://doi.org/10.1007/s11136-009-9540-9.

30. World Health Organization. (2019). Process of translation and adaptation of instruments. https://www.who.int/substance_abuse/research_tools/translation/en/. Accessed 10 Apr 2020.

31. Willis, G. B. (2009). Cognitive interviewing. In P. J. Lavrakas (Ed.), *Encyclopedia of survey research methods*, (pp. 106–109). Thousand Oaks: SAGE.

32. Miller, K., Willson, S., Chepp, V., & Padilla, J. L. (2014). *Cognitive interviewing methodology*. Hoboken: Wiley.

33. Willis, G. B., & Miller, K. (2011). Cross-cultural cognitive interviewing: Seeking comparability and enhancing understanding. *Field Methods*, *23*(4), 331–341. https://doi.org/10.1177/1525822X11416092.

34. Tourangeau, R. (1984). Cognitive sciences and survey methods. In T. Jabine, M. Straf, J. Tanur, & R. Tourangeau (Eds.), *Cognitive aspects of survey methodology: Building a bridge between disciplines*, (pp. 73–100). Washington, DC: National Academy Press.

35. Willis, G. B. (2005). *Cognitive interviewing: A tool for improving questionnaire design*. Thousand Oaks: Sage Publications.

36. Ridolfo, H., & Schoua-Glusberg, A. (2011). Analyzing cognitive interview data using the constant comparative method of analysis to understand cross-cultural patterns in survey data. *Field Methods*, *23*(4), 420–438. https://doi.org/10.1177/1525822X11414835.

37. Willis, G. B. (2015). The practice of cross-cultural cognitive interviewing. *Public Opinion Quarterly*, *79*(S1), 359–395. https://doi.org/10.1093/poq/nfu092.

38. Gerber, E. R. (1999). The view from anthropology: Ethnography and the cognitive interview. In M. Sirken, D. Herrmann, S. Schechter, N. Schwarz, J. Tanur, & R. Tourangeau (Eds.), *Cognition and survey research*, (pp. 217–234). New York: Wiley.

39. Elo, S, & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x.

40. Crawford, J., Ahmad, F., Bierman, A., & Beaton, D. (2017). Cognitive testing of the colon cancer screening behaviours survey with south Asian immigrants in Canada. *Journal of Patient-Reported Outcomes*, *1*(7), 1–15. https://doi.org/10.1186/s41687-017-0007-4.

41. Fitzgerald, R, Widdop, S., Gray, M., & Collins, D. (2011). Identifying sources of error in cross-national questionnaires: Application of an error source

typology to cognitive interview data. *Journal of Official Statistics, 27*(4), 569–599.

42. Levin, K., Willis, G. B., Forsyth, B. H., Norberg, A., Kudela, M. S., Stark, D., & Thompson, F. E. (2009). Using cognitive interviews to evaluate the Spanish-language translation of the dietary questionnaire. *Survey Research Methods, 3*(1), 13–25. https://doi.org/10.18148/srm/2009.v3i1.88.

43. Behr, D. (2017). Assessing the use of back translation: The shortcomings of back translation as a quality testing method. *International Journal of Social Research Methodology, 20*(6), 573–584. https://doi.org/10.1080/13645579.2016.1252188.

44. Epstein, J., Osborne, R. H., Elsworth, G. R., Beaton, D. E., & Guillemin, F. (2015). Cross-cultural adaptation of the health education impact questionnaire: Experimental study showed expert committee, not back-translation, added value. *Journal of Clinical Epidemiology, 68*(4), 360–369. https://doi.org/10.1016/j.jclinepi.2013.07.013.

45. Drennan, J. (2003). Cognitive interviewing: Verbal data in the design and pretesting of questionnaires. *Journal of Advanced Nursing, 42*(1), 57–63. https://doi.org/10.1046/j.1365-2648.2003.02579.x.

46. Husebø, A. M. L., Morken, I. M., Eriksen, K. S., & Nordfonn, O. K. (2018). The patient experience with treatment and self-management (PETS) questionnaire: Translation and cultural adaption of the Norwegian version. *BMC Medical Research Methodology, 18*(147), 1–12. https://doi.org/10.1186/s12874-018-0612-9.

47. Boeije, H., & Willis, G. (2013). The cognitive interviewing reporting framework (CIRF) – Towards the harmonization of cognitive testing reports. *Methodology European Journal of Research Methods for the Behavioral and Social Sciences, 9*(3), 87–95. https://doi.org/10.1027/1614-2241/a000075.

48. Martin, S. L., Birhanu, Z., Omotayo, M. O., Kebede, Y., Pelto, G. H., Stoltzfus, R. J., & Dickin, K. L. (2017). "I can't answer what you're asking me. Let me go, please.": Cognitive interviewing to assess social support measures in Ethiopia and Kenya. *Field Methods, 29*(4), 317–332. https://doi.org/10.1177/1525822X17703393.

49. Pasick, R. J., Stewart, S. L., Bird, J. A., & D'Onofrio, C. N. (2001). Quality of data in multiethnic health surveys. *Public Health Reports, 116*(1), 223–243. https://doi.org/10.1093/phr/116.S1.223.

50. Zeldenryk, L., Gordon, S., Gray, M., Speare, R., Melrose, W., Hossain, M., & Williams, G. (2013). Cognitive testing of the WHOQOL-BREF Bangladesh tool in a northern rural Bangladeshi population with lymphatic filariasis. *Quality of Life Research, 22*(8), 1917–1926. https://doi.org/10.1007/s11136-012-0333-1.

51. Olafsson, S. (2003). Contemporary Icelanders – Scandinavian or American? *Scandinavian Review, 91*(1), 6–14.

52. Graneheim, U. H., Lindgren, B., & Lundman, B. (2017). Methodological challenges in qualitative content analysis: A discussion paper. *Nurse Education Today, 56*, 29–34. https://doi.org/10.1016/j.nedt.2017.06.002.

53. Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Päätalo, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE Open, 4*(1), 1–10. https://doi.org/10.1177/2158244014522633.

54. Willis, G. B. (1999). *Cognitive interviewing: A "how-to" guide*. North Carolina: Research Triangle Institute.

55. Loftsdottir, K. (2014). Within a 'white' affective space: Racialization in Iceland and development discourses. *Social Identities, 20*(6), 452–470. https://doi.org/10.1080/13504630.2015.1004996.

56. Brislin, R. (1976). Comparative research methodology: Cross-cultural studies. *International Journal of Psychology, 11*(3), 215–229. https://doi.org/10.1080/00207597608247359.

Publisher's Note

Article II

Article

Understanding and Measuring Help-Seeking Barriers among Intimate Partner Violence Survivors: Mixed-Methods Validation Study of the Icelandic Barriers to Help-Seeking for Trauma (BHS-TR) Scale

Karen Birna Thorvaldsdottir [1,2,*], Sigridur Halldorsdottir [1] and Denise M. Saint Arnault [2]

[1] School of Health Sciences, University of Akureyri, 600 Akureyri, Iceland; sigridur@unak.is
[2] Department of Health Behavior and Biological Sciences, University of Michigan, Ann Arbor, MI 48109, USA; starnaul@umich.edu
[*] Correspondence: karenbirna@unak.is

Abstract: Intimate partner violence (IPV) against women is a global human rights violation of vast proportions and a severe public health problem. Despite high rates of adverse outcomes related to IPV, help-seeking and service utilization among survivors is low. This exploratory sequential mixed-methods study using a combined etic–emic approach describes the validation of the Icelandic Barriers to Help-Seeking for Trauma (BHS-TR) scale. The qualitative phase involved developing new items based on the experiences of 17 Icelandic IPV survivors, identifying barriers including beliefs that help-seeking is a sign of weakness, and the desire to safeguard oneself from re-traumatization. The quantitative phase examined the psychometrics of the BHS-TR in a sample of 137 IPV survivors in Iceland. Results supported an eight-factor structure (Financial Concerns; Unavailable/Not Help-ful; External Constraints; Inconvenience; Weakness/Vulnerability; Problem Management Beliefs; Frozen/Confused; and Shame), which when grouped comprised two indices of Structural and Inter-nal Barriers. The scale's internal consistency was high ($\alpha = 0.87$), and the results provided evidence of convergent, discriminant, and known-group validity. This study adds to the growing literature supporting the advantages of applying mixed methods for instrument development and validation, and its results highlight the significance of giving rise to the voices of survivors. The BHS-TR is the first trauma-specific and survivor-centered measure of help-seeking barriers available in Iceland. It can be used to provide valuable information that may guide the development of evidence-based interventions to break down barriers and help survivors find ways to trauma recovery.

Keywords: interpersonal trauma; intimate partner violence; help-seeking; barriers; mental health; trauma recovery; survivor-centered; cross-cultural adaptation; validation; mixed-methods research

1. Introduction

1.1. Intimate Partner Violence against Women

Violence against women is a global human rights violation of vast proportions and a severe public health problem [1,2]. A landmark multi-country study led by the World Health Organization (WHO) showed that women are more at risk of experiencing violence in intimate relationships than anywhere else [3]. While all genders may experience intimate partner violence (IPV), most survivors self-identify as women. IPV is deeply rooted in gender inequality and harmful cultural norms [2,3]. To date, it remains the most widespread form of violence against women, making it the most common form of gender-based violence (GBV) globally [2,4]. Estimates from WHO indicate that the lifetime prevalence of IPV ranges from 16% to 37%, depending on the region [4].

IPV is generally a traumatic experience, and the high prevalence of acute and chronic health problems are well documented, including physical injuries, somatic symptoms, post-traumatic stress disorder (PTSD), depression, and suicide ideation [5–8]. Despite the

144

high rates of adverse health outcomes, studies have shown that help-seeking among IPV survivors is low. Many survivors never disclose the violence to anyone, and those who do most often choose support from friends and family and are substantially less likely to seek help from formal sources, such as healthcare and social services, even despite their perceived need for such support [3,9–11]. These findings may reflect the limited availability or accessibility of services for abused women in some countries. However, low rates of formal help-seeking are also common in countries that are relatively well supplied with resources for survivors [3,12,13], the Nordic Region included [14–16].

1.2. Barriers to Help-Seeking

The majority of the IPV help-seeking literature to date focuses on leaving an abusive relationship. While these studies are critical, it is essential to move beyond the often first steps of the help-seeking journey, to an increased focus on the trauma recovery trajectory [17–19]. The existing research has shed light on several levels of help-seeking barriers among IPV survivors, including sociocultural, structural, interpersonal, and individual levels [20–23]. Furthermore, studies have indicated that survivors with depression, PTSD, and low sense of coherence face even more significant barriers as symptom burden and seeing the world as unpredictable and meaningless can make it more challenging to take action [24–26]. The burden of mental illness stigma, e.g., concerns for negative stereotyping, status loss, and discrimination, is also a significant deterrent to help-seeking and service utilization [27,28].

1.3. Existing Measures

In a recent scoping review [29] on mental health related-measures, 35 help-seeking measures were identified, of which only 10 were validated. Most of the measures focused on attitudes towards help-seeking or intentions to seek help. The Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH) [30] was the most widely used measure, and few assessed actual help-seeking behaviors. In another review, help-seeking measures were classified into similar attitudes and intentions categories but added a specific barriers category that included five measures [31]. A strength of barrier-based measures is that they are more tied to behavior than attitudinal measures [32]. Nonetheless, most of the existing measures solely focus on barriers to formal sources of help, primarily mental health treatment, and very few are trauma-specific.

1.4. The Barriers to Help-Seeking for Trauma Scale

The Barriers to Help-Seeking for Trauma (BHS-TR) scale was developed from an existing mental health barriers measure, the Barriers to Seeking Care scale [33], and adapted for use with GBV survivors. The BHS-TR included the 25 items from the original measure plus an additional nine trauma-specific and survivor-centered items (34-item version). The early work on the scale indicated that the barriers could be grouped into structural and internal dimensions [26], which was later confirmed in a psychometric study among American GBV survivors [34]. Moreover, a seven-factor structure was revealed, creating a 24-item version of the English BHS-TR, which was found to be reliable and valid.

The BHS-TR was translated and cross-culturally adapted into the Icelandic language and context [35], creating the first Icelandic measure on help-seeking barriers after trauma. In order to capture all possible nuances, the full 34-item version was used in the effort to develop the Icelandic BHS-TR. The scale was pretested with Icelandic IPV survivors, which provided preliminary evidence of relevance and content validity. However, most survivors in that study also mentioned barriers that they thought were missing from the scale. This finding demonstrated the need to further evaluate and adapt the Icelandic BHS-TR to better capture the reality and experiences of survivors seeking help in Iceland.

Int. J. Environ. Res. Public Health **2022**, *19*, 104

3 of 21

1.5. Study Aims

The aims of this mixed-methods validation study were to: (1) develop new barrier items for the Icelandic BHS-TR scale based on the experiences of IPV survivors in Iceland and pretest those items through cognitive interviewing, (2) evaluate the construct validity of the Icelandic version of the scale by examining its factor structure, dimensionality, convergent validity, discriminant validity, and known-group validity, and (3) evaluate the reliability by examining the internal consistency of the scale.

2. Materials and Methods

2.1. Study Design

This study was conducted following well-established guidelines and best practices for adapting and validating instruments [36,37]. A combined etic (universal) and emic (culture-specific) strategy using mixed methods was employed as recommended to enhance the construct validity of instruments for use outside their culture of origin [38,39]. We used a mixed-method exploratory sequential design [40], conducted in two phases with equal emphasis given to both phases. In this design, the Qualitative (Qual) phase occurs first, both the data collection and analysis, followed by the Quantitative (Quan) phase. This type of integration at the methods level is called building. It occurs when the findings from one data collection procedure inform the data collection approach of the subsequent procedure [40,41]. We implemented four legitimation strategies to ensure the highest design quality: sample integration, inside-outside, weakness minimization, and multiple validities [42].

The Qual phase of this study included three rounds of iterative cognitive interviews (CI) with IPV survivors in Iceland where we explored the phenomenon of interest (i.e., help-seeking barriers) qualitatively, pretested and adapted the existing items, and developed new (emic) items based on the survivors' experiences. Using this data, we utilized building to adapt the BHS-TR scale with the additional emic items and then used psychometric testing in the Quan phase to evaluate the whole instrument with an Icelandic sample of IPV survivors.

2.2. Sampling and Data Collection

We used a sequential mixed-methods sampling design with parallel samples [43] for the Qual and Quan phases of the study. The inclusion criteria for both phases were to self-identify as a woman, be 18 or older, live in Iceland, speak Icelandic, and have experienced IPV. In addition, for ethical reasons and the women's safety, they had to have been out of the abusive relationship for at least a year. Following its aim, a stricter criterion for the participants' Icelandic language proficiency was applied in the Qual phase; still, to answer the survey, the participants needed to be able to read and understand Icelandic.

This study is part of ongoing international research on help-seeking and trauma recovery carried out by the Multicultural Study of Trauma Recovery (MiStory). The MiStory network (https://mistory-traumarecovery.org/, accessed on 21 November 2021) is a research collaborative currently working in 15 countries around the world to better understand and use safe and trauma-informed methods that illuminate the interactions among cultural context, the self, gender, and recovery.

2.2.1. Qualitative Phase

Three rounds of in-person CI with 17 Icelandic IPV survivors were conducted. The interview procedures were guided by standard CI recommendations [44] and cross-cultural cognitive interviewing [45]. Participants were recruited from centers and service providers for survivors of violence in North and South Iceland. Purposive sampling attempts were made to select diverse individuals within the target population. The years in the abusive relationship ranged from 1 to 18, and most of the women had been in the relationship for over 6 years. The years out of the relationship at the time of the interviews varied from 2 to 12, on average, 5 years. For further information on participants' characteristics, see Table 1.

The first two rounds consisted of 17 interviews between August and October 2019 and were part of the cross-cultural adaptation and initial testing of the BHT-TR [35]. Based on these interviews, we developed new items for the Icelandic version of the scale and pretested these items in the third round between December 2019 and January 2020. The final round, which was part of member checking and pretesting the new items, involved a second interview with eight of the 17 women who participated in the earlier rounds. The eight women were chosen purposively based on their help-seeking history and experiences with barriers. The Qual data collection continued until data saturation was achieved. All 25 interviews took place in a location chosen by participants and were conducted by the first author. A think-aloud technique and concurrent verbal probing were used to elicit the women's interpretive process, and the interviews were all audio-recorded with permission.

Table 1. Overview of the participants' demographics characteristics.

Characteristics	Qual Phase (n = 17)	Quan Phase (n = 137)
Age		
18–29	4 (23.5%)	24 (17.5%)
30–39	7 (41.2%)	34 (24.8%)
40–49	4 (23.5%)	38 (27.7%)
50–59	1 (5.9%)	18 (13.1%)
60+	1 (5.9%)	6 (4.4%)
Not stated	–	17 (12.4%)
Racial and ethnic background		
Caucasian	17 (100%)	–
Iceland-born	16 (94.1%)	–
Foreign-born	1 (5.9%)	–
Level of education		
High school or less	3 (17.6%)	11 (8.0%)
Technical or junior college degree	5 (29.4%)	29 (21.2%)
University degree	9 (52.9%)	82 (59.9%)
Not stated	–	15 (10.9%)
Employment status (not mutually exclusive)		
Working	12 (70.6%)	88 (64.2%)
Unemployed or looking for work	2 (11.8%)	7 (5.1%)
Student	5 (29.4%)	26 (19.0%)
Homemaker	1 (5.9%)	3 (2.2%)
Unable to work due to sickness/disability	3 (17.6%)	20 (14.6%)
Other	–	24 (17.5%)
Number of children		
None	5 (29.4%)	24 (17.5%)
One or two	9 (52.9%)	59 (43.1%)
Three or more	3 (17.6%)	46 (33.6%)
Not stated	–	8 (5.8%)
Current medical diagnosis (mental and/or physical)		
No	6 (35.3%)	44 (32.1%)
Yes	11 (64.7%)	93 (67.9%)
History of receiving mental healthcare		
No	8 (47.1%)	24 (17.5%)
Yes	9 (52.9%)	112 (81.8%)
Not stated	–	1 (0.7%)

2.2.2. Quantitative Phase

The Quan phase was advertised using social media posts and flyers posted on various sites, such as centers and services for violence survivors in Iceland, located all over the country. Participants accessed an online survey by following a link hosted on the Icelandic Directorate of Equality's website. The survey was built using Qualtrics, a secure online platform, and included the measure under study, demographic questions and several other instruments measuring mental and physical health symptoms, help-seeking history, and

trauma-recovery related outcomes. A total of 168 women in Iceland who self-identified as IPV survivors answered the survey anonymously collected between February and October 2020. However, the data presented here include only the 137 participants who completed the entire BHS-TR scale (see Table 1).

2.3. Ethical Considerations

Permission was obtained from the National Bioethics Committee in Iceland (Qual phase: VSNb2019060009/03.01; Quan phase: VSNb2019090016/03.01), and the study was reported to the Data Protection Authority (Qual phase: 19–119; Quan phase: 19–166). All participants received detailed information about the study and gave their voluntary informed consent before participation. Written consent was obtained from the interview participants, while the survey participants provided their consent by answering the survey. At the end of the interview or the survey, all participants received a list of local referral resources. They were also offered support from a psychologist if difficult emotional reactions emerged during or after participation.

2.4. Measures

2.4.1. The Barriers to Help-Seeking for Trauma (BHS-TR) Scale

The BHS-TR asks about barriers to seeking help for trauma recovery in the past year. The instrument's directions are: "Think about your experiences and feelings that are a result of gender-based violence. In the last 12 months, how much of the feelings or attitudes listed below influenced your decisions not to seek help?" Respondents answer on a 4-point Likert scale anchored at 1 ("Did not influence me") to 4 ("Strongly influenced me"), with a higher total score indicating more help-seeking barriers [26]. The English BHS-TR consists of seven subscales that can be grouped along two indices. The "Structural Index" includes subscales that represent perceived structural barriers, including the "Unavailable/Not Helpful", "Financial Concerns", "Discrimination" and "External Constraints" subscales. The "Internal Index" includes subscales that represent perceived internal barriers and is comprised of the "Shame", "Frozen/Confused" and "Problem Management Beliefs" subscales. The entire scale was psychometrically sound in a sample of American GBV survivors [34]. The initial CI testing of the Icelandic BHS-TR provided evidence of content validity [35], but further psychometric testing was needed which was a primary aim of this study.

2.4.2. Patient Health Questionnaire

The eight-item version of the Patient Health Questionnaire (PHQ-8) [46] is a valid diagnostic tool that measures depressive symptoms in the general population. It consists of eight of the nine criteria on which the DSM-IV diagnosis of depression is based, omitting the last item on PHQ-9 about suicidal or self-injurious thoughts, making it suitable for more general survey use. Respondents are asked to assess the frequency of symptoms in the past two weeks on a 4-point response scale from 0 ("Not at all") to 3 ("Nearly every day"), resulting in a total score range from 0 to 24. A clinical cut-off score of ≥ 10 has been recommended to indicate probable depression [46,47]. The Icelandic version of the measure (or the PHQ-9) has been shown to have sound psychometric properties [48]. Cronbach's alpha in our sample was 0.87.

2.4.3. Post-Traumatic Stress Disorder (PTSD) Checklist for DSM-5

The PTSD Checklist for DSM-5 (PCL-5) [49] is a widely used and validated measure that assesses the presence and severity of PTSD symptoms. The measure consists of 20 items that correspond with the DSM-5 criteria, and it can be used to screen for probable PTSD. Respondents are asked to rate how bothered they have been by the symptoms in the past month on a 5-point response scale from 0 ("Not at all") to 4 ("Extremely"), resulting in a total score range from 0 to 80. A clinical cut-off score of ≥ 31 has been recommended to indicate probable PTSD [49–51]. Validation studies on the Icelandic version of the PCL-5

have not been published, but the measure is used in research and clinical work in Iceland. It has been shown to have good internal consistency [52]. Cronbach's alpha in our sample was 0.96.

2.4.4. Beliefs toward Mental Illness Scale

Beliefs Toward Mental Illness Scale (BTMI) [53] is a mental illness stigma measure that consists of 21 items assessing negative stereotypical views of psychological disorders, including subscales for dangerousness, social dysfunction, incurability, and embarrassment. The scale was designed to measure differences in such views and to predict treatment-seeking behavior among different cultural groups. Participants rate their level of agreement with the belief statements on a 6-point Likert scale ranging from 0 ("Completely disagree") to 5 ("Completely agree"). Higher scores reflect more stigma towards mental illness. The BTMI has been demonstrated to be reliable and valid across cultures [53–55], but validation studies on the Icelandic version have not been published. Cronbach's alpha for the full scale in our sample was 0.89, with the alpha values for the subscales ranging from 0.71 to 0.81.

2.4.5. Orientation to Life Questionnaire

The shortened version of the Orientation to Life Questionnaire (SOC-13) [56] is a widely used measure that assesses sense of coherence, a concept at the heart of the salutogenic model of health and argued to be an important determinant of successful coping with stressful life situations [57–59]. SOC-13 consists of 13 items about how people view their life, measuring the three main components of sense of coherence: comprehensibility, manageability, and meaningfulness. Participants rate their level of agreement or disagreement on a 7-point semantic differential scale, with two anchoring responses adjusted to each item. The total score range is from 13 to 91, and a higher score indicates a stronger sense of coherence. The measure has been found to be reliable and valid in multiple studies conducted in numerous countries [60,61], but validation studies on the Icelandic version of the SOC-13 have not been published. The original full 29-item version in Icelandic has been shown to have good internal consistency reliability [62], and Cronbach's alpha for SOC-13 in our sample was 0.85.

2.5. Data Analysis

2.5.1. Qualitative Phase

Qualitative content analysis (QCA) was chosen to analyze the Qual data as it represents a systematic way to examine both manifest and latent content with the aim of describing a phenomenon and its meaning [63,64].

Item Generation

The first 17 interviews had already been transcribed verbatim in former steps of the cross-cultural adaptation process [35]. The domain for the item generation was any barriers to help-seeking after trauma that were not already included in the scale. We used the same framework that guided the development of the BHS-TR, where help-seeking is defined as "the experiences, expectations, and interpretations that interact with structural variables, as well as context, to influence behavior aimed at reducing suffering and promoting health [65] (p. 163)".

The unit of analysis was the parts of the interviews where the women spoke about help-seeking barriers they thought were missing from the instrument. The data were analyzed using inductive QCA as described by Elo and Kyngäs [63], including making sense of the data to gain a comprehensive understanding of the content, open coding, creating categories, and abstraction. The steps of the process are described in detail in Table 2. After forming and defining the categories, a new item was developed based on each of the sub-categories. Icelandic and English versions of the items were developed simultaneously; however, only the Icelandic ones were tested in this study.

Int. J. Environ. Res. Public Health **2022**, *19*, 104

7 of 21

Table 2. Overview of the content analysis process, based on Elo and Kyngäs [63].

QCA Inductive Approach	Description of How Each Step Was Performed
Preparation phase	
Selecting the unit of analysis	In accordance with the aim of the study, it was decided to analyze the parts of the interviews where the women spoke about help-seeking barriers they thought were missing from the scale.
Making sense of the data and obtaining a whole	First, the transcribed material was read through several times without coding to become immersed in the data.
Organizing phase	
Open coding	The transcribed material was read through again, and this time paragraphs and phrases (meaning units) directly related to the phenomenon under study were highlighted, and headings written down in the margins. Next, the headings were collected onto coding sheets and categories freely generated.
Grouping and categorization	The initial categories were compared and grouped based on similarities and differences into broader higher-order categories.
Abstraction	Each category was defined and named according to its content. Sub-categories with similar meanings were then grouped to form categories, which were all classified under the main category. The analysis process was continued until new categories could no longer be formed.
Reporting phase	
Report on the process	Each step was thoroughly documented during the process, allowing tracking of all the decisions made. This article represents the final step, where the analysis and findings are reported.

Pretesting the New Items

The second interview data were analyzed using deductive QCA as described by Elo and Kyngäs [63]. After each interview, the audio recordings were reviewed, transcribed, and detailed summaries were prepared. These interview summaries were used as the primary source for the analysis, and the data were coded using an unconstrained categorization matrix based on four categories identified in our previous work [35], focusing on the general design, language and wording, cultural relevance, and trauma sensitivity of the items.

In both strands of the Qual analysis, the first author was the primary analyst, responsible for performing each step, with a thorough follow-up and dialogue on the whole process from the other authors. All authors were involved in the careful determination of finalizing the new items, and an audit trail was maintained for scientific rigor.

2.5.2. Quantitative Phase

We began by examining the survey data to ascertain that the variables' distribution and relationships did not violate the statistical assumptions of the analyses. There were no missing data for the BHS-TR scale as our criteria preclude it, and missing data did not exceed 5% on any of the other measures. All statistical analyses were performed using the SPSS Statistics software package (Version 27.0; IBM Corp., Armonk, NY, USA, 2020), and the significance level was set at $p \leq 0.05$.

Factor Structure and Dimensionality

For item reduction purposes and to explore the underlying factor structure of the 41-item (34 etic and 7 emic) version of the BHS-TR, we conducted a principal component analysis (PCA) following best practices in exploratory factor analysis (EFA) [66–68]. Although PCA is not technically a factor analysis method, it is a psychometrically sound and widely used technique for data extraction [66]. To be consistent with the terminology used for the source version of the BHS-TR, we use the term factor instead of component. To determine if the data were suitable for PCA, the correlation matrix was inspected for any variables that had either many items with low ($r < 0.30$) or high ($r > 0.90$) correlations. In addition, Bartlett's Test of Sphericity was performed. Furthermore, the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy was calculated to test whether the sample size was adequate (cut-off > 0.60).

PCA was performed using oblique direct oblimin rotation to allow for the expected correlations between factors and what is recommended when measuring constructs related to human behavior [67]. We retained factors based on three criteria: (1) examination of the scree plot [69], (2) the eigenvalues were greater than 1.0 [70], and (3) the extracted factor solution was deemed interpretable and theoretically sensible [71]. Items were included in a factor if: (1) loading value > 0.35, (2) no cross-loading, and (3) communality value > 0.40 [67,68]. To further explore the measure's structure, we used multidimensional scaling (MDS) to test if the retained factors would group into the two indices of Structural and Internal Barriers.

Convergent and Discriminant Validity

To assess the convergent and discriminant validity of the scale, we examined the associations between help-seeking barriers (using the BHS-TR subscales and indices) and mental illness stigma beliefs (measured with the BTMI and its subscales) on the one hand and sense of coherence (measured with the SOC-13) on the other. For the convergent validity, we hypothesized that barriers to help-seeking, especially the internal barriers, would be related to stigma beliefs and expected there to be moderate to high positive correlations. For the discriminant validity, we hypothesized that barriers to help-seeking would not be highly related to a sense of coherence and expected there to be no or weak negative correlations. These relationships have been indicated in the relevant literature (e.g., [27,57,59,65]) and shown in a prior evaluation of the BHS-TR [34]. We used Cohen's [72] suggestions for correlation coefficients cut-off values of >0.10 = weak; >0.30 = moderate; >0.50 = strong.

Known-Groups Validity

We used independent sample *t*-tests to examine whether the BHS-TR could differentiate between groups known to differ on help-seeking barriers. We created "probable depression" and "probable PTSD" subgroups by using the PHQ-8 clinical cut-off score of ≥ 10 and the PCL-5 clinical cut-off score of ≥ 31. Based on the relevant literature (e.g., [24–26]) and results from a prior study on the BHS-TR [34], it was expected that survivors with depression or PTSD would on average score higher on the scale than survivors without depression or PTSD.

Reliability

The internal consistency of the BHS-TR, its subscales, and indices was assessed using Cronbach's alpha coefficient. As recommended [73,74], values above 0.70 but not higher than 0.90 were preferred.

3. Results

3.1. Qualitative Phase

Figure 1 shows the conceptual diagram of the help-seeking barriers identified from the interviews. These barriers were all internal barriers and were conceptually divided into two categories. The first category was "Reveals Weakness", composed of four sub-categories, and the second category was "Safeguard Yourself", composed of three sub-categories. The proposed new items developed based on each sub-category are presented in Tables 3 and 4. Quotations from the women that best represent and support each identified barrier were chosen.
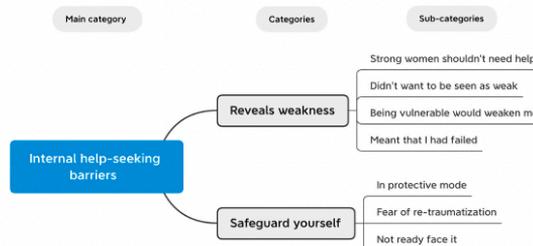

Figure 1. Conceptual diagram of the newly identified help-seeking barriers.

3.1.1. Reveals Weakness

A common thread across all the interviews was beliefs related to viewing help-seeking as a sign of weakness and how it had hindered the women in their help-seeking journey. The Reveals Weakness category (see Table 3) included sub-categories reflecting aspects of this possible factor of help-seeking barriers: (1) strong women should not need help, (2) did not want to be seen as weak, (3) being vulnerable would weaken me, and (4) meant that I had failed.

3.1.2. Safeguard Yourself

The coping of wanting to protect yourself but getting stuck there was commonly mentioned in the interviews as a barrier to help-seeking. The Safeguard Yourself category (see Table 4) included sub-categories reflecting aspects of this possible factor of help-seeking barriers: (1) in protective mode, (2) fear of re-traumatization, and (3) not ready to face it.

3.1.3. Pretesting the New Items

The new items were well-received by the women, who confirmed that the items accurately described their experiences. No issues regarding the general design, relevance, or lack of trauma sensitivity were identified. A few women mentioned minor changes to the wording of some items for clarity, which we changed according to their suggestions before finalizing the items for further evaluation in the Quan phase.

Table 3. Reveals weakness category.

Barriers Reveals Weakness	Meaning Units	Proposed New Items
Strong women shouldn't need help	"It was so strong within me the need to be tough and keep going, needing help felt like a sign of weakness" "I wanted to feel strong, show some strength, we are supposed to be so hardy and resilient . . . you know Vikings or whatever, and I guess that some part of me believed that strong women shouldn't need help"	I thought that strong people should not need help
Didn't want to be seen as weak	"I didn't want to be looked at as weak and then to have people treat me differently . . . you know, feel sorry for me" "I was scared of being seen as a weakling"	I was scared of being seen as weak
Being vulnerable would weaken me	"It was like I would somehow become less . . . I don't like being vulnerable, and vulnerability is to me at least a big part of seeking help" "I felt like, if I would open up . . . you know about my feelings or whatever that it would weaken me"	I felt like opening up to my feelings would weaken me
Meant that I had failed	"It was like a defeat or something, like such a personal failure, and that's why it took me such a long time to seek help, it wasn't until I had nothing left" "To seek help would mean that I had ultimately lost, for him and what he did to be the reason I was so fucked up . . . and like still . . . I couldn't bear it"	Getting help would mean that I had failed or had been defeated

3.2. Quantitative Phase

3.2.1. Participants' Characteristics, Health Status, and Help-Seeking

A total of 137 Icelandic women with a history of IPV participated in the Quan phase (see Table 1). Their ages ranged from 19 to 76 years (M = 40.7, SD = 11.7). Most of the women had junior college or university degrees (81.1%), were employed or students (83.2%), and were mothers (76.7%). The majority self-reported a current mental or physical diagnosis (67.9%). Using the clinical cut-off scores, 41.6% of the participants had probable depression, and 45.3% had probable PTSD. Most of the women (81.8%) had received mental healthcare at some point in their life. When asked about needing help in the last 12 months because of their trauma, 75.9% reported a perceived need for help in general, and 70.1% reported specifically needing mental health treatment. However, almost half of the participants (45.3%) said that they did not seek the professional help they believed they needed in the last 12 months.

Table 4. Safeguard Yourself category.

Barriers Safeguard Yourself	Meaning Units	Proposed New Items
In protective mode	"I wanted to protect myself, and I was in this mode that I just could not deal with it and needed to let myself be there . . . but you shouldn't stay there for too long, you can get stuck" "I didn't want to take the chance of regretting it. You know if I would seek help, and I wouldn't be believed, or it wouldn't be taken seriously, I was dealing with enough"	I did not seek help in an effort to protect or safeguard myself
Fear of re-traumatization	"I had made my world trigger-free, so yeah, I was really isolated but it was easier that way, and I just didn't see the point . . . to go there, talking about it would only hurt me even more" "I was afraid that it would be too difficult for me because then I had to think about it, talk about it, recall these painful memories, and there was no way that I could do that"	I was afraid that seeking help would be too emotionally difficult or hurt me even more
Not ready to face it	"The desire to be whole was so strong, and if I had to get help, that would mean that I wasn't whole anymore . . . of course, deep down, I knew I was broken, but I wasn't ready to admit it" "Denial was a huge barrier for me, because you know, staying in denial doesn't hurt as much . . . if you seek help, you need to face your experience"	Seeking help would require acknowledging things I did not want to face

3.2.2. Construct Validity

Factor Structure

In the initial runs of PCA, following the procedure and criteria described above, we eliminated 15 items that had loading values below 0.35, cross-loadings, or communality values below 0.40. The items that were dropped from the scale are listed in Table 5. Of these items, nine were from the original mental healthcare utilization scale, three were from the trauma-specific additions, and three were from the emic additions we created for this study. After eliminating the problematic items, mainly due to cross-loadings, the final PCA for the remaining 26 items showed that all those items met our criteria. Examination of the correlation matrix from the final run indicated a patterned relationship amongst the variables, and no multicollinearity issues were identified. Bartlett's test of sphericity ($\chi^2(325) = 1705.503$, $p < 0.001$) further indicated the patterned relationships and that the correlations between items were sufficient for PCA as well as the use of an oblique rotation. Moreover, the KMO value was 0.79, supporting the sampling adequacy for the analysis.

Eight factors had eigenvalues greater than 1.0. but the scree plot was somewhat ambiguous, showing inflections that would justify retaining from six to eight factors. Since a seven or eight-factor solution was deemed theoretically sensible and was consistent with the factor structure of the English BHS-TR scale, but still allowing for an additional emic factor, we retained eight factors. These factors combined explained 72.14% of the total variance, and the factor loadings after rotation (pattern matrix) are shown in Table 6. The items that clustered together suggest that factor 1 represents "Weakness/Vulnerability" barriers, factor 2 represents "Financial Concerns" barriers, factor 3 represents "Unavailable/Not Helpful" barriers, factor 4 represents "External Constraints" barriers, factor 5 represents "Problem Management Beliefs" barriers, factor 6 represents "Frozen/Confused" barriers, factor 7 represents "Inconvenience" barriers, and factor 8 represents "Shame" barriers. The

following analyses further assessed this initial eight-factor solution of the Icelandic BHS-TR, and the factors were labeled and evaluated as potential subscales.

Table 5. Items removed from the Barriers to Help-Seeking for Trauma (BHS-TR) scale in the Quan phase.

Dropped Items
From the original mental healthcare scale
3. I was unsure about where to go for help or how to access help
4. I thought help probably would not do any good
9. I could not get time away from work or my family
12. I was concerned that I would not be able to get help soon enough
13. I was scared about being put into a hospital against my will
20. I felt that my culture, background, or specific situation would not be understood
21. Suitable professionals were not available to me
22. The kind of help I needed was not available
23. I felt that there would be prejudice or discrimination against me
From the trauma-specific additions
31. I was afraid I would explain what I needed, and no one would help me anyway
32. I felt that I could not trust people to help me
33. I felt no one could understand or help me
From the cognitive interviews (emic) additions
36. I was afraid that seeking help would be too emotionally difficult or hurt me even more
37. I did not seek help in an effort to protect or safeguard myself
38. I felt like opening up to my feelings would weaken me

Table 6. The eight-factor solution of the Icelandic BHS-TR scale.

Factors Items (Communalities)	1	2	3	4	5	6	7	8
Weakness/Vulnerability (Cumulative % of Variance: 26.47; Eigenvalue: 6.88)								
40. I thought that strong people should not need help (0.84)	0.93							
39. Getting help would mean that I had failed or had been defeated (0.81)	0.83							
35. I was scared of being seen as weak (0.79)	0.72				0.22			
41. Seeking help would require acknowledging things I did not want to face (0.68)	0.69					0.34		
24. I thought my situation was too personal or wanted to keep it private (0.50)	0.40		0.27					0.27
Financial Concerns (Cumulative % of Variance: 37.96; Eigenvalue: 2.99)								
2. I was concerned that the help I needed would be too expensive (0.80)		0.87						
19. The available health insurance would not cover the type of treatment I needed (0.78)		0.85					0.28	
18. I did not have adequate financial resources (0.81)		0.82						
Unavailable/Not Helpful (Cumulative % of Variance: 45.98; Eigenvalue: 2.07)								
15. I was not satisfied with the available services (0.75)			0.87					

Table 6. *Cont.*

Factors Items (Communalities)	1	2	3	4	5	6	7	8
16. I felt that the help available would not provide the type of treatment or help that was best for the problem (0.72)			**0.85**					
17. I had sought help before, but it did not help (0.60)			**0.61**	0.32		−0.24		
External Constraints (Cumulative % of Variance: 53.06; Eigenvalue: 1.84)								
14. I was worried that if others discovered my health problems or situation, I could lose my children, security, or housing (0.74)				**0.86**				
34. Others were preventing me from getting the help I needed (0.71)				**0.78**				
25. I was afraid of the consequences for myself, my children, or my family (0.71)				**0.72**				0.32
Problem Management Beliefs (Cumulative % of Variance: 58.38; Eigenvalue: 1.38)								
1. I thought the problem would probably get better by itself (0.59)					**0.77**			
11. I thought the situation was normal or was not severe (0.69)	0.21				**0.62**	−0.34		
10. I wanted to or thought I should solve the problems on my own (0.64)					**0.58**			0.31
Frozen/Confused (Cumulative % of Variance: 63.54; Eigenvalue: 1.34)								
29. I could not seem to clarify my feelings or know what I needed (0.83)						**−0.91**		
30. I was afraid I could not clearly express what I needed (0.67)					0.22	**−0.61**		
26. I was confused or unable to plan out all the details or steps (0.69)				0.24	−0.20	**−0.56**		0.31
27. I felt paralyzed or frozen and unable to get started (0.70)		0.26		0.30		**−0.43**		0.25
Inconvenience (Cumulative % of Variance: 68.08; Eigenvalue: 1.18)								
5. I had distance or transportation problems (0.78)							**−0.83**	
8. I thought getting help would take too much time or was inconvenient (0.64)	0.27				0.22		**−0.60**	
Shame (Cumulative % of Variance: 72.14; Eigenvalue: 1.06)								
6. I was concerned about what others might think (0.80)								**0.86**
7. I was ashamed (0.72)								**0.79**
28. I believed that people would judge me (0.75)								**0.75**

Notes: Rotation method: oblimin with Kaiser normalization; all loadings below 0.2 were suppressed for readability.

Structural and Internal Barriers Indices

The results from the MDS showed that Financial Concerns, Unavailable/Not Helpful, External Constraints, and Inconvenience were a dimension of barriers that, when grouped, comprised the "Structural Barriers Index". Weakness/Vulnerability, Problem Management Beliefs, Frozen/Confused and Shame barriers were a separate dimension, and when

grouped, comprised the "Internal Barriers Index" (see Figure 2). We computed these two indices to use along with specific barrier subscales sum scores for further validation analyses.
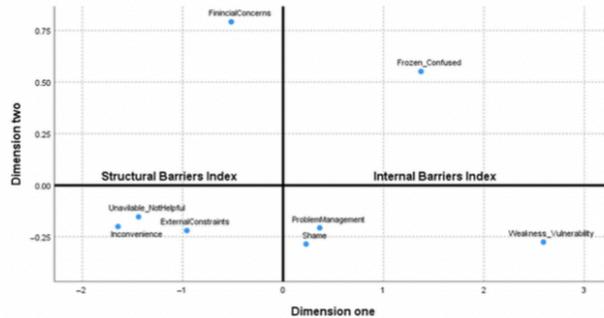

Figure 2. The structural and internal barriers indices of BHS-TR.

Convergent and Discriminant Validity

There were no significant correlations between the scores on the BTMI scale and the scores on the Structural or Internal Barriers indices. However, there were weak and moderate significant positive correlations between the scores on the Embarrassment BTMI subscale and the scores for the BHS-TR subscales of Problem Management Beliefs ($r = 0.22$, $p = 0.02$), Shame ($r = 0.38$, $p = 0.00$), and Weakness/Vulnerability ($r = 0.41$, $p = 0.00$).

There was no significant correlation between the scores on the SOC-13 scale and the scores on the Structural Barriers Index. However, there was a weak significant negative correlation with the scores on the Internal Barriers Index ($r = -0.21$, $p = 0.02$). The SOC-13 scores were unrelated to most of the BHS-TR subscales. Still, there were weak significant negative correlations for SOC-13 and the Unavailable/Not Helpful ($r = -0.17$, $p = 0.04$), Weakness/Vulnerability ($r = -0.18$, $p = 0.04$), and Frozen/Confused ($r = -0.22$, $p = 0.01$) subscales.

Known-Groups Validity

The total mean score of the BHS-TR scale and mean scores of the Structural and Internal Barriers indices were all significantly higher for the probable depression and probable PTSD groups (see Table 7). In addition, most of the subscales' mean scores were significantly higher for the probable depression and probable PTSD groups. However, there were no significant differences in the mean scores for the groups for the Financial Concerns, Weakness/Vulnerability, and Problem Management Beliefs barriers. Furthermore, the mean score for the Unavailable/Not Helpful subscale was significantly higher only for the depression group, and the mean score for the Shame subscale was significantly higher only for the PTSD group.

Table 7. Known-groups validity results.

BHS-TR	Depression			PTSD		
Indices and Subscales	No (*n* = 80)	Probable (*n* = 57)	*p*	No (*n* = 75)	Probable (*n* = 62)	*p*
Structural Barriers	20.4 (5.4)	23.7 (7.7)	0.00	20.5 (5.5)	23.3 (7.5)	0.01
Financial Concerns	7.0 (3.2)	7.3 (3.4)	–	6.9 (3.3)	7.4 (3.2)	–
Unavailable/Not Helpful	4.4 (2.0)	5.5 (2.7)	0.01	4.6 (2.2)	5.1 (2.6)	–
External Constraints	5.2 (2.5)	6.7 (3.2)	0.00	5.2 (2.6)	6.6 (3.1)	0.00
Inconvenience	3.8 (1.8)	4.4 (1.9)	0.05	3.7 (1.7)	4.5 (2.0)	0.02
Internal Barriers	39.9 (10.5)	43.8 (9.9)	0.03	39.8 (10.9)	43.6 (9.5)	0.04
Weakness/Vulnerability	12.6 (4.8)	13.9 (4.7)	–	12.6 (4.9)	13.7 (4.7)	–
Problem Management Beliefs	8.7 (2.5)	9.0 (2.4)	–	8.6 (2.7)	9.1 (2.1)	–
Frozen/Confused	10.5 (3.4)	12.3 (3.0)	0.00	10.7 (3.6)	12.0 (3.2)	0.03
Shame	8.0 (2.9)	8.6 (3.0)	–	7.8 (3.0)	8.8 (2.8)	0.05
Total	60.3 (13.2)	67.5 (15.0)	0.00	60.3 (13.7)	66.9 (14.3)	0.00

Notes: Independent sample *t*-tests; mean score (standard deviation); significance level at $p \leq 0.05$; Patient Health Questionnaire-8 cut-off score of ≥ 10; Post-Traumatic Stress Disorder (PTSD) Checklist for DSM-5 cut-off score of ≥ 31.

3.2.3. Reliability

The 26-item scale showed good internal consistency with Cronbach's alpha of 0.87, and the values for the Structural and Internal Barriers indices were 0.75 and 0.88, respectively. Moreover, all except two of the subscales had Cronbach's alpha exceeding 0.70. By examining the Cronbach's alpha if an item was deleted, all 26 items appeared worthy of retention. Therefore, no items were dropped based on the reliability analysis, and the items in the subscales with alpha values below 0.70 were retained for continuing research and further evaluation. Descriptive results and alpha values for the full scale are presented in Table 8.

Table 8. Descriptive results and alpha values for the BHS-TR scale (*n* = 137).

Indices and Subscales	Min.	Max.	M	SD	α
Structural Barriers	11	44	21.8	6.6	0.75
Financial Concerns	3	12	7.1	3.3	0.82
Unavailable/Not Helpful	3	12	4.8	2.4	0.71
External Constraints	3	12	5.8	2.9	0.77
Inconvenience	2	8	4.0	1.8	0.52
Internal Barriers	15	60	41.5	10.4	0.88
Weakness/Vulnerability	5	20	13.1	4.8	0.86
Problem Management Beliefs	3	12	8.8	2.5	0.62
Frozen/Confused	4	16	11.2	3.3	0.79
Shame	3	12	8.3	2.9	0.83
Total	26	104	63.3	14.3	0.87

Notes: M = mean; SD = standard deviation; α = Cronbach's alpha.

4. Discussion

This study described the development and psychometric evaluation of the Icelandic version of the BHS-TR, the first trauma-specific and survivor-centered measure on help-seeking barriers available in Iceland. The mixed-methods approach provided a rigorous process, capitalizing on the strengths of both Qual and Quan methods while minimizing the weaknesses [40,42]. The use of mixed methods in instrument development and validation studies has been increasing. It can promote more rigor in the process, optimizing the development of psychometrically sound and culturally sensitive instruments [75–77]. The combined etic–emic strategy, allowing for the development and adding of the new items, was also valuable to enhance the Icelandic BHS-TR's construct validity and cultural

sensitivity. This approach has been successfully used in other studies adapting measures developed in other countries to the Icelandic context [78,79].

It is noteworthy that while the new items are labeled as emic (culture-specific) because they were developed based on Icelandic survivors' experiences, we recognize that these help-seeking barriers are most likely not specific to Iceland. Fearing vulnerability and not wanting to appear weak to others is a significant challenge for trauma recovery amongst GBV survivors in other countries [23,80]. Moreover, barriers similar to our safeguard barriers were identified in a recent systematic review on mental health service use among trauma survivors, where concerns about re-experiencing the traumatic events and avoiding reminders were prominent [81]. Nonetheless, it remains an empirical question whether any of the new items have value for use in other cultures. Our research group is currently testing these items as possible additions for the English BHS-TR in American samples.

The examination of the Icelandic BHS-TR structure was exploratory following the emic approach, as 'imposed etics' or, in this case, a measure's structure, may obscure culture-specific results [38,82]. Our study revealed eight underlying factors (possible subscales) of the BHS-TR. This process reduced the number of items to 26, and 20 of those are shared with the 24-item English version of the scale [34]. Six of the eight factors (Financial Concerns, Unavailable/Not Helpful, External Constraints, Problem Management Beliefs, Frozen/Confused, and Shame) were generally identical to the seven-factor model of the English BHS-TR. Moreover, further supporting the construct validity of the measure, our results also showed two indices of Structural and Internal Barriers.

Interestingly, the Reveals Weakness category became an emic factor but not the Safeguard Yourself category. However, besides the three weakness items, this new Weakness/Vulnerability factor included one safeguard item ("Seeking help would require acknowledging things I did not want to face"), and one privacy item ("I thought my situation was too personal or wanted to keep it private") that belonged to the Shame subscale on the English BHS-TR. Surprisingly, the weakness item that got dropped in the Quan phase was a vulnerability barrier ("I felt like opening up to my feelings would weaken me"), which was central in the Qual phase's survivors' narratives. Other items that were surprisingly dropped were the trauma-specific additions about the notion that other people would not understand or could not be trusted to help (see Table 5), despite the fact that perceived rejection and mistrust of people or systems are commonly cited barriers in previous studies [20,26,83]. Most of these items were dropped due to cross-loadings on different factors. While we know this concept is critical based on our Qual work, we may need to revise the wording of the items to capture the concept more fully. Additional study is underway to critically evaluate these items.

Another result from the Quan phase raising concerns was that the entire Discrimination factor from the English BHS-TR, including items about culture, background, and prejudice, was dropped. The relevance of these items had been questioned in the CI pretesting [35], and it is possible that this subscale performed poorly in our study because of the ethnic and socio-economic homogeneity of our Icelandic sample. Future studies can examine this by carrying out sampling of people with more diverse backgrounds and immigrant status.

Finally, the structural items about distance or transportation problems and seeking help taking too much time hung together as a separate factor, which is not consistent with the English BHS-TR structure. We chose to include this possible Inconvenience subscale for the Icelandic BHS-TR and continue the research on this concept, as these barriers might be important in the Icelandic help-seeking context.

The full 26-item BHS-TR, the two indices, and most subscales showed good reliability as measured with Cronbach's alpha coefficient. The two subscales (Problem Management Beliefs and Inconvenience) with alpha values below the recommended 0.70 are short subscales with only three and two items, respectively. Cronbach's alpha is sensitive to the number of items. It is expected to find relatively low values with short scales, and some researchers claim that the coefficient is inappropriate and even meaningless for two-item

scales [84,85]. Still, these results further indicated the need to continue working with the subscales, especially the inconvenience one, as stable factors usually need to include at least three items [67,68].

　　Our results demonstrate support for the Icelandic BHS-TR convergent and discriminant validity by showing the hypothesized relationships between help-seeking barriers and mental illness stigma beliefs on the one hand and sense of coherence on the other. Nonetheless, the correlations between the barriers and stigma beliefs were only weak to moderate. In addition, the results provided evidence of known-group validity, as the BHS-TR could differentiate between groups of IPV survivors based on the severity of depression and PTSD symptoms.

　　Several limitations of this study should be noted, including relatively small, self-selected samples of IPV survivors in both phases. As with most other studies among hidden populations [86], probability sampling was impossible. Using an online survey for the Quan phase also limited our ability to reach individuals without access to a computer or with limited technological literacy. While a larger sample, especially for examining the BHS-TR structure, would have been preferred, testing the sampling adequacy showed that our sample size was sufficient. Furthermore, previous studies have revealed that EFA and PCA can be applied to sample sizes far below what traditional recommendations suggest and still yield reliable results [87,88].

　　Another limitation is that for the Quan sample, we did not have information on how long the women had been in the abusive relationship, the time out of it, their race, or foreign origin. Both the time in and out of the abusive relationship varied for the women in the Qual sample, but they were predominantly Caucasian and born in Iceland. Since the participants needed to read and understand Icelandic to take the survey, those characteristics might also be the case for the Quan sample, which could explain why the Discrimination subscale did not remain a factor in our study. This is noteworthy because women of foreign origin are increasingly making Iceland their home and it is well-established that immigrants may be particularly at risk for violence in intimate relationships and might have even more difficulties seeking help than their Icelandic-born counterparts [16,89]. Although participants in both of our samples had experienced many barriers, most of these women had at some point sought help and care. Considering the literature reviewed above, demonstrating that many survivors never seek help, even despite the perceived need, the scale must capture the barriers experienced by an increasingly diverse group of survivors.

　　Future work with and about the BHS-TR would be greatly enhanced in studies with more extensive and more diverse samples regarding, e.g., gender, foreign origin, types of GBV experienced, disabilities, and help-seeking history. While the exploratory nature of this study yielded important findings, future research should include the use of confirmatory factor analysis and test-retest reliability assessment. Finally, while the strengths of the etic–emic strategy have been pointed out, using this approach can limit the equivalence between language versions of a measure, thus making cross-cultural comparisons challenging. One recommendation to address this issue is to use only shared (etic) items for comparison [38]. As has been noted, we are currently testing the newly developed BHS-TR items for use outside of Iceland.

5. Conclusions

　　Taken together, the results of this study indicate that the Icelandic BHS-TR is reliable, valid, and helpful in understanding aspects of the help-seeking barriers that IPV survivors in Iceland face. The 26-item version with eight subscales and two indices shows promise but deserves continuing attention for improvement and maximum utility to populations not well-represented in our samples.

　　The availability of this psychometrically sound and survivor-centered measure on help-seeking barriers has value by providing information that can guide the development of evidence-based interventions targeted toward breaking down barriers and increasing help-seeking among survivors. Understanding these barriers can also guide trauma-informed

practice that integrates a better understanding of trauma responses and sociocultural influencing factors into serveries where survivors might seek help in their journey to trauma recovery.

References

1. Devries, K.M.; Mak, J.Y.T.; García-Moreno, C.; Petzold, M.; Child, J.C.; Falder, G.; Lim, S.; Bacchus, L.J.; Engell, R.E.; Rosenfeld, L.; et al. The Global Prevalence of Intimate Partner Violence against Women. *Science* **2013**, *340*, 1527–1528. [CrossRef] [PubMed]
2. UN Women. *Gender Equality—Women's Rights in Review 25 Years after Beijing*; UN Women: New York, NY, USA, 2020; ISBN 978-92-1-127072-3.
3. World Health Organization. *WHO Multi-Country Study on Women's Health and Domestic Violence against Women: Initial Results on Prevalence, Health Outcomes and Women's Responses*; WHO: Geneva, Switzerland, 2005; ISBN 92-4-159358-X.
4. World Health Organization. *Violence against Women Prevalence Estimates, 2018: Global, Regional and National Prevalence Estimates for Intimate Partner Violence against Women and Global and Regional Prevalence Estimates for Non-Partner Sexual Violence against Women*; WHO: Geneva, Switzerland, 2021; ISBN 978-92-4-002225-6.
5. Dutton, M.A.; Green, B.L.; Kaltman, S.I.; Roesch, D.M.; Zeffiro, T.A.; Krause, E.D. Intimate Partner Violence, PTSD, and Adverse Health Outcomes. *J. Interpers. Violence* **2006**, *21*, 955–968. [CrossRef] [PubMed]
6. García-Moreno, C.; Pallitto, C.; Devries, K.; Stöckl, H.; Watts, C.; Abrahams, N. *Global and Regional Estimates of Violence against Women: Prevalence and Health Effects of Intimate Partner Violence and Non-Partner Sexual Violence*; WHO: Geneva, Switzerland, 2013; ISBN 978-92-4-156462-5.
7. Hisasue, T.; Kruse, M.; Raitanen, J.; Paavilainen, E.; Rissanen, P. Quality of Life, Psychological Distress and Violence among Women in Close Relationships: A Population-Based Study in Finland. *BMC Women's Health* **2020**, *20*, 85. [CrossRef] [PubMed]
8. Sigurdardottir, S.; Halldorsdottir, S. Persistent Suffering: The Serious Consequences of Sexual Violence against Women and Girls, their Search for Inner Healing and the Significance of the #MeToo Movement. *Int. J. Environ. Res. Public Health* **2021**, *18*, 1849. [CrossRef]
9. Cho, H.; Shamrova, D.; Han, J.; Levchenko, P. Patterns of Intimate Partner Violence Victimization and Survivors' Help-Seeking. *J. Interpers. Violence* **2020**, *35*, 4558–4582. [CrossRef]
10. Goodson, A.; Hayes, B.E. Help-Seeking Behaviors of Intimate Partner Violence Victims: A Cross-National Analysis in Developing Nations. *J. Interpers. Violence* **2021**, *36*, 4705–4727. [CrossRef]
11. Lövestad, S.; Vaez, M.; Löve, J.; Hensing, G.; Krantz, G. Intimate Partner Violence, Associations with Perceived Need for Help and Health Care Utilization: A Population-Based Sample of Women in Sweden. *Scand. J. Public Health* **2021**, *49*, 268–276. [CrossRef]
12. Barrett, B.J.; Peirone, A.; Cheung, C.H. Help Seeking Experiences of Survivors of Intimate Partner Violence in Canada: The Role of Gender, Violence Severity, and Social Belonging. *J. Fam. Violence* **2020**, *35*, 15–28. [CrossRef]

13. Fanslow, J.L.; Robinson, E.M. Help-Seeking Behaviors and Reasons for Help Seeking Reported by a Representative Sample of Women Victims of Intimate Partner Violence in New Zealand. *J. Interpers. Violence* **2010**, *25*, 929–951. [CrossRef]
14. Andersson, T.; Heimer, G.; Lucas, S. *Violence and Health in Sweden: A National Prevalence Study on Exposure to Violence among Women and Men and Its Association to Health*; The National Centre for Knowledge on Men's Violence against Women: Uppsala, Sweden, 2014; ISSN 1654-7195.
15. European Union Agency for Fundamental Rights. *Violence against Women: An EU-Wide Survey—Main Results*; Publications Office of the European Union: Luxembourg, 2014; ISBN 978-92-9239-999-3.
16. Ministry of Welfare. *Male Violence against Women in Intimate Relationships in Iceland*; Ministry of Welfare: Reykjavík, Iceland, 2012; ISBN 978-9979-799-48-1.
17. Heywood, I.; Sammut, D.; Bradbury-Jones, C. A Qualitative Exploration of 'Thrivership' among Women Who have Experienced Domestic Violence and Abuse: Development of a New Model. *BMC Women's Health* **2019**, *19*, 106. [CrossRef]
18. Lelaurain, S.; Graziani, P.; Lo Monaco, G. Intimate Partner Violence and Help-Seeking A Systematic Review and Social Psychological Tracks for Future Research. *Eur. Psychol.* **2017**, *22*, 263–281. [CrossRef]
19. Sinko, L.; Goldner, L.; Saint Arnault, D.M. The Trauma Recovery Actions Checklist: Applying Mixed Methods to a Holistic Gender-Based Violence Recovery Actions Measure. *Sexes* **2021**, *2*, 363–377. [CrossRef]
20. Heron, R.L.; Eisma, M.C. Barriers and Facilitators of Disclosing Domestic Violence to the Healthcare Service: A Systematic Review of Qualitative Research. *Health Soc. Care Community* **2021**, *29*, 612–630. [CrossRef]
21. Overstreet, N.M.; Quinn, D.M. The Intimate Partner Violence Stigmatization Model and Barriers to Help Seeking. *Basic Appl. Soc. Psych.* **2013**, *35*, 109–122. [CrossRef]
22. Robinson, S.R.; Ravi, K.; Voth Schrag, R.J. A Systematic Review of Barriers to Formal Help Seeking for Adult Survivors of IPV in the United States, 2005–2019. *Trauma Violence Abus.* **2020**, *22*, 1279–1295. [CrossRef]
23. Sinko, L.; Burns, C.J.; O'Halloran, S.; Saint Arnault, D.M. Trauma Recovery is Cultural: Understanding Shared and Different Healing Themes in Irish and American Survivors of Gender-Based Violence. *J. Interpers. Violence* **2021**, *36*, 7765–7790. [CrossRef]
24. Fleming, C.E.; Resick, P.A. Help-Seeking Behavior in Survivors of Intimate Partner Violence: Toward an Integrated Behavioral Model of Individual Factors. *Violence Vict.* **2017**, *32*, 195–209. [CrossRef]
25. Hien, D.; Ruglass, L. Interpersonal Partner Violence and Women in the United States: An Overview of Prevalence Rates, Psychiatric Correlates and Consequences and Barriers to Help Seeking. *Int. J. Law Psychiatry* **2009**, *32*, 48–55. [CrossRef]
26. Saint Arnault, D.M.; O'Halloran, S. Using Mixed Methods to Understand the Healing Trajectory for Rural Irish Women Years after Leaving Abuse. *J. Res. Nurs.* **2016**, *21*, 369–383. [CrossRef]
27. Clement, S.; Schauman, O.; Graham, T.; Maggioni, F.; Evans-Lacko, S.; Bezborodovs, N.; Morgan, C.; Rüsch, N.; Brown, J.S.L.; Thornicroft, G. What is the Impact of Mental Health-Related Stigma on Help-Seeking? A Systematic Review of Quantitative and Qualitative Studies. *Psychol. Med.* **2015**, *45*, 11–27. [CrossRef]
28. Dockery, L.; Jeffery, D.; Schauman, O.; Williams, P.; Farrelly, S.; Bonnington, O.; Gabbidon, J.; Lassman, F.; Szmukler, G.; Thornicroft, G.; et al. Stigma- and Non-Stigma-Related Treatment Barriers to Mental Healthcare Reported by Service Users and Caregivers. *Psychiatry Res.* **2015**, *228*, 612–619. [CrossRef]
29. Wei, Y.; McGrath, P.J.; Hayden, J.; Kutcher, S. Mental Health Literacy Measures Evaluating Knowledge, Attitudes and Help-Seeking: A Scoping Review. *BMC Psychiatry* **2015**, *15*, 291. [CrossRef] [PubMed]
30. Fischer, E.; Turner, J. Orientations to Seeking Professional Help: Development and Research Utility of an Attitude Scale. *J. Consult. Clin. Psychol.* **1970**, *35*, 79–90. [CrossRef] [PubMed]
31. Divin, N.; Harper, P.; Curran, E.; Corry, D.; Leavey, G. Help-Seeking Measures and their use in Adolescents: A Systematic Review. *Adolesc. Res. Rev.* **2018**, *3*, 113–122. [CrossRef]
32. Clement, S.; Brohan, E.; Jeffery, D.; Henderson, C.; Hatch, S.L.; Thornicroft, G. Development and Psychometric Properties the Barriers to Access to Care Evaluation Scale (BACE) Related to People with Mental Ill Health. *BMC Psychiatry* **2012**, *12*, 36. [CrossRef]
33. Boyle, M.H.; Offord, D.R.; Campbell, D.; Catlin, G.; Goering, P.; Lin, E.; Racine, Y.A. Mental Health Supplement to the Ontario Health Survey: Methodology. *Can. J. Psychiat.* **1996**, *41*, 549–558. [CrossRef] [PubMed]
34. Saint Arnault, D.M.; Özaslan, Z.Z. Understanding help-seeking barriers after Gender-Based Violence: Validation of the Barriers to Help Seeking-Trauma version (BHS-TR). *Arch. Psychiatr. Nurs.* **2021**, *in press*. [CrossRef]
35. Thorvaldsdottir, K.B.; Halldorsdottir, S.; Johnson, R.M.; Sigurdardottir, S.; Saint Arnault, D.M. Adaptation of the Barriers to Help-Seeking for Trauma (BHS-TR) Scale: A Cross-Cultural Cognitive Interview Study with Female Intimate Partner Violence Survivors in Iceland. *J. Patient-Rep. Outcomes* **2021**, *5*, 22. [CrossRef]
36. Beaton, D.E.; Bombardier, C.; Guillemin, F.; Ferraz, M.B. Guidelines for the Process of Cross-Cultural Adaptation of Self-Report Measures. *Spine* **2000**, *25*, 3186–3191. [CrossRef]
37. Boateng, G.O.; Neilands, T.B.; Frongillo, E.A.; Melgar-Quiñonez, H.R.; Young, S.L. Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer. *Front. Public Health* **2018**, *6*, 1–18. [CrossRef]
38. Ægisdóttir, S.; Gerstein, L.H.; Çinarbaş, D.C. Methodological Issues in Cross-Cultural Counseling Research. *Couns. Psychol.* **2008**, *36*, 188–219. [CrossRef]
39. Brislin, R.W. Cross-Cultural Research in Psychology. *Annu. Rev. Psychol.* **1983**, *34*, 363–400. [CrossRef]

40. Creswell, J.W.; Plano Clark, V.L. *Designing and Conducting Mixed Methods Research*, 3rd ed.; Sage Publications: Los Angeles, CA, USA, 2018; ISBN 9781483344379.
41. Fetters, M.D.; Curry, L.A.; Creswell, J.W. Achieving Integration in Mixed Methods Designs-Principles and Practices. *Health Serv. Res.* **2013**, *48*, 2134–2156. [CrossRef]
42. Onwuegbuzie, A.J.; Johnson, R.B. The Validity Issue in Mixed Research. *Res. Sch.* **2006**, *13*, 48–63.
43. Collins, K.M.T.; Onwuegbuzie, A.J.; Jiao, Q.G. A Mixed Methods Investigation of Mixed Methods Sampling Designs in Social and Health Science Research. *J. Mix. Methods Res.* **2007**, *1*, 267–294. [CrossRef]
44. Tourangeau, R. Cognitive Sciences and Survey Methods. In *Cognitive Aspects of Survey Methodology: Building a Bridge between Disciplines*; Jabine, T., Straf, M., Tanur, J., Tourangeau, R., Eds.; National Academy Press: Washington, DC, USA, 1984; pp. 73–100.
45. Willis, G.B. Research Synthesis the Practice of Cross-Cultural Cognitive Interviewing. *Public Opin. Q.* **2015**, *79*, 359–395. [CrossRef]
46. Kroenke, K.; Strine, T.W.; Spitzer, R.L.; Williams, J.B.W.; Berry, J.T.; Mokdad, A.H. The PHQ-8 as a Measure of Current Depression in the General Population. *J. Affect. Disord.* **2009**, *114*, 163–173. [CrossRef] [PubMed]
47. Wu, Y.; Levis, B.; Riehm, K.E.; Saadat, N.; Levis, A.W.; Azar, M.; Rice, D.B.; Boruff, J.; Cuijpers, P.; Gilbody, S.; et al. Equivalency of the Diagnostic Accuracy of the PHQ-8 and PHQ-9: A Systematic Review and Individual Participant Data Meta-Analysis. *Psychol. Med.* **2020**, *50*, 2816. [CrossRef]
48. Björnsson, A.S.; Jónsdóttir, K.; Sigurðardóttir, S.; Wessman, I.; Sigurjónsdóttir, Ó.; Þórisdóttir, A.S.; Harðarson, J.P.; Arnkelsson, G. Psychometric Properties of the Icelandic Translations of the Sheehan Disability Scale, Quality of Life Scale and the Patient Health Questionnaire. *J. Icel. Psychol. Assoc.* **2018**, *23*, 91–100. (In Icelandic)
49. Blevins, C.A.; Weathers, F.W.; Davis, M.T.; Witte, T.K.; Domino, J.L. The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): Development and Initial Psychometric Evaluation. *J. Trauma. Stress* **2015**, *28*, 489–498. [CrossRef]
50. Bovin, M.J.; Marx, B.P.; Weathers, F.W.; Gallagher, M.W.; Rodriguez, P.; Schnurr, P.P.; Keane, T.M. Psychometric Properties of the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (PCL-5) in Veterans. *Psychol. Assess.* **2016**, *28*, 1379–1391. [CrossRef] [PubMed]
51. Wortmann, J.H.; Jordan, A.H.; Weathers, F.W.; Resick, P.A.; Dondanville, K.A.; Hall-Clark, B.; Foa, E.B.; Young-McCaughan, S.; Yarvis, J.S.; Hembree, E.A.; et al. Psychometric Analysis of the PTSD Checklist-5 (PCL-5) among Treatment-Seeking Military Service Members. *Psychol. Assess.* **2016**, *28*, 1392–1403. [CrossRef] [PubMed]
52. Ásgeirsdóttir, J. Does Psychological Resilience Moderate the Relationship between Chronological Age, Threat Appraisal, Number of Traumatic Events and Trauma Type and Posttraumatic Stress Symptoms? Master's Thesis, University of Iceland, Reykjavík, Iceland, 2019.
53. Hirai, M.; Clum, G. Development, Reliability, and Validity of the Beliefs Toward Mental Illness Scale. *J. Psychopathol. Behav. Assess.* **2000**, *22*, 221–236. [CrossRef]
54. Hirai, M.; Vernon, L.L.; Clum, G.A. Factor Structure and Administration Measurement Invariance of the Beliefs toward Mental Illness Scale in Latino College Samples: Paper–Pencil versus Internet Administrations. *Assessment* **2018**, *25*, 759–768. [CrossRef] [PubMed]
55. Saint Arnault, D.M.; Gang, M.; Woo, S. Construct Validity and Reliability of the Beliefs toward Mental Illness Scale for American, Japanese, and Korean Women. *Res. Theory Nurs. Pract.* **2017**, *31*, 349–363. [CrossRef] [PubMed]
56. Antonovsky, A. The Structure and Properties of the Sense of Coherence Scale. *Soc. Sci. Med.* **1993**, *36*, 725–733. [CrossRef]
57. Antonovsky, A. *Unraveling the Mystery of Health: How People Manage Stress and Stay Well*; Jossey-Bass: San Francisco, CA, USA, 1987; ISBN 978-1555420284.
58. Eriksson, M.; Lindström, B. Antonovsky's Sense of Coherence Scale and the Relation with Health: A Systematic Review. *J. Epidemiol. Community Health* **2006**, *60*, 376–381. [CrossRef]
59. Super, S.; Wagemakers, M.A.E.; Picavet, H.S.J.; Verkooijen, K.T.; Koelen, M.A. Strengthening Sense of Coherence: Opportunities for Theory Building in Health Promotion. *Health Promot. Int.* **2016**, *31*, 869–878. [CrossRef]
60. Eriksson, M.; Lindström, B. Validity of Antonovsky's Sense of Coherence Scale: A Systematic Review. *J. Epidemiol. Community Health* **2005**, *59*, 460–466. [CrossRef]
61. Holmefur, M.; Sundberg, K.; Wettergren, L.; Langius-Eklöf, A. Measurement Properties of the 13-Item Sense of Coherence Scale using Rasch Analysis. *Qual. Life Res.* **2015**, *24*, 1455–1463. [CrossRef]
62. Svavarsdottir, E.K.; Rayens, M.K. Hardiness in Families of Young Children with Asthma. *J. Adv. Nurs.* **2005**, *50*, 381–390. [CrossRef]
63. Elo, S.; Kyngäs, H. The Qualitative Content Analysis Process. *J. Adv. Nurs.* **2008**, *62*, 107–115. [CrossRef]
64. Schreier, M. *Qualitative Content Analysis in Practice*; Sage Publications: Los Angeles, CA, USA, 2012; ISBN 978-1-84920-592-4.
65. Saint Arnault, D.M. Defining and Theorizing about Culture the Evolution of the Cultural Determinants of Help-Seeking, Revised. *Nurs. Res.* **2018**, *67*, 161–168. [CrossRef] [PubMed]
66. Field, A. *Discovering Statistics using IBM SPSS Statistics*, 5th ed.; Sage Publications: Los Angeles, CA, USA, 2018; ISBN 9781526445780.
67. Costello, A.B.; Osborne, J. Best Practices in Exploratory Factor Analysis: Four Recommendations for getting the most from Your Analysis. *Pract. Assess. Res. Eval.* **2005**, *10*, 1–9.
68. Yong, A.G.; Pearce, S. A Beginner's Guide to Factor Analysis: Focusing on Exploratory Factor Analysis. *Tutor. Quant. Methods Psychol.* **2013**, *9*, 79–94. [CrossRef]

69. Cattell, R.B. The Scree Test for the Number of Factors. *Multivar. Behav. Res.* **1966**, *1*, 245–276. [CrossRef]
70. Kaiser, H.F. An Index of Factorial Simplicity. *Psychometrika* **1974**, *39*, 31–36. [CrossRef]
71. Fabrigar, L.R.; Wegener, D.T.; MacCallum, R.C.; Strahan, E.J. Evaluating the use of Exploratory Factor Analysis in Psychological Research. *Psychol. Methods* **1999**, *4*, 272–299. [CrossRef]
72. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed.; Lawrence Erlbaum Associates: Mahwah, NJ, USA, 1988; ISBN 978-0805802832.
73. Streiner, D.L. Starting at the Beginning: An Introduction to Coefficient Alpha and Internal Consistency. *J. Pers. Assess.* **2003**, *80*, 99–103. [CrossRef]
74. Tavakol, M.; Dennick, R. Making Sense of Cronbach's Alpha. *Int. J. Med. Educ.* **2011**, *2*, 53–55. [CrossRef]
75. Daigneault, P.; Jacob, S. Unexpected but Most Welcome: Mixed Methods for the Validation and Revision of the Participatory Evaluation Measurement Instrument. *J. Mix. Methods Res.* **2014**, *8*, 6–24. [CrossRef]
76. Onwuegbuzie, A.J.; Bustamante, R.M.; Nelson, J.A. Mixed Research as a Tool for Developing Quantitative Instruments. *J. Mix. Methods Res.* **2010**, *4*, 56–78. [CrossRef]
77. Sankofa, N.L. Transformativist Measurement Development Methodology: A Mixed Methods Approach to Scale Construction. *J. Mix. Methods Res.* **2021**, 1–21. [CrossRef]
78. Ægisdóttir, S.; Einarsdóttir, S. Cross-Cultural Adaptation of the Icelandic Beliefs about Psychological Services Scale (I-BAPS). *Int. Perspect. Psychol. Res. Pract. Consult.* **2012**, *1*, 236–251. [CrossRef]
79. Einarsdottir, S.; Vilhjalmsdottir, G.; Smaradottir, S.B.; Kjartansdottir, G.B. A Culture-Sensitive Approach in the Development of the Career Adapt-Abilities Scale in Iceland: Theoretical and Operational Considerations. *J. Vocat. Behav.* **2015**, *89*, 172–181. [CrossRef]
80. Melgar Alcantud, P.; Campdepadrós-Cullell, R.; Fuentes-Pumarola, C.; Mut-Montalvà, E. 'I Think I Will Need Help': A Systematic Review of Who Facilitates the Recovery from Gender-based Violence and How They Do So. *Health Expect.* **2021**, *24*, 1–7. [CrossRef] [PubMed]
81. Kantor, V.; Knefel, M.; Lueger-Schuster, B. Perceived Barriers and Facilitators of Mental Health Service Utilization in Adult Trauma Survivors: A Systematic Review. *Clin. Psychol. Rev.* **2017**, *52*, 52–68. [CrossRef] [PubMed]
82. Berry, J.W. Imposed Etics-Emics-Derived Etics: The Operationalization of a Compelling Idea. *Int. J. Psychol.* **1989**, *24*, 721–735. [CrossRef]
83. Fugate, M.; Landis, L.; Riordan, K.; Naureckas, S.; Engel, B. Barriers to Domestic Violence Help Seeking—Implications for Intervention. *Violence Against Women* **2005**, *11*, 290–310. [CrossRef]
84. Eisinga, R.N.; Grotenhuis, M.; Pelzer, B. The Reliability of a Two-Item Scale: Pearson, Cronbach or Spearman-Brown? *Int. J. Public Health* **2013**, *58*, 637–642. [CrossRef] [PubMed]
85. Rammstedt, B.; Beierlein, C. Can't we make it any Shorter? The Limits of Personality Assessment and Ways to Overcome Them. *J. Individ. Differ.* **2014**, *35*, 212–220. [CrossRef]
86. Ellard-Gray, A.; Jeffrey, N.K.; Choubak, M.; Crann, S.E. Finding the Hidden Participant: Solutions for Recruiting Hidden, Hard-to-Reach, and Vulnerable Populations. *Int. J. Qual. Methods* **2015**, *14*, 38–48. [CrossRef]
87. de Winter, J.C.F.; Dodou, D.; Wieringa, P.A. Exploratory Factor Analysis with Small Sample Sizes. *Multivar. Behav. Res.* **2009**, *44*, 147–181. [CrossRef] [PubMed]
88. McNeish, D. Exploratory Factor Analysis with Small Samples and Missing Data. *J. Pers. Assess.* **2017**, *99*, 637–652. [CrossRef]
89. Tietgen, F.; Kjaran, J.I.; Halldórsdóttir, B.E. Power Dynamics and Internalized Oppression: Immigrant Women and Intimate Partner Violence in Iceland. In *The Role of Universities in Addressing Societal Challenges and Fostering Democracy: Inclusion, Migration, and Education for Citizenship—Book of Abstracts*; University of Akureyri, Iceland, 26 March 2021; Session 5B: Gender Aspects of Migration to Iceland, Paper 4; The Icelandic Centre for Research: Reykjavík, Iceland, 2021.

Article III

Article

Using Mixed Methods Integration to Evaluate the Structure of Help-Seeking Barriers Scale: A Survivor-Centered Approach

Karen Birna Thorvaldsdottir [1,2,*], Sigridur Halldorsdottir [1] and Denise M. Saint Arnault [2]

1   School of Health Sciences, University of Akureyri, 600 Akureyri, Iceland; sigridur@unak.is
2   Department of Health Behavior and Biological Sciences, University of Michigan, Ann Arbor, MI 48109, USA; starnaul@umich.edu
*   Correspondence: karenbirna@unak.is

Abstract: Despite the high prevalence of adverse health and trauma-related outcomes associated with intimate partner violence (IPV), help-seeking and service utilization among survivors is low. This study is part of a larger mixed-methods and survivor-centered validation study on the Icelandic Barriers to Help-Seeking for Trauma (BHS-TR) scale, a new barriers measure focused on trauma recovery. A mixed-methods legitimation strategy of integration was employed to evaluate the BHS-TR structure in samples of IPV survivors. The merging of qualitative ($n = 17$) and quantitative ($n = 137$) data through a joint display analysis revealed mainly complementarity findings, strengthening the scale's overall trustworthiness and validity evidence. Divergent findings involved items about mistrust, perceived rejection, stigmatization, fearing vulnerability, and safeguarding efforts that were significant help-seeking barriers in the survivors' narratives, whereas factor analysis indicated their removal. These BHS-TR items were critically evaluated in an iterative spiraling process that supported the barriers' influence, illuminated core issues, and guided potential refinements. This work contributes to the growing field of mixed methods instrument validation placing equal status on qualitative and quantitative methods and emphasizing integration to provide more complete insights. Moreover, the study's findings highlight the added value of further exploring divergence between two sets of data and the importance of giving attention to the voices of the target population throughout the validation process.

Keywords: interpersonal trauma; gender-based violence; help-seeking barriers; mental health; trauma recovery; survivor-centered; cross-cultural adaptation; construct validation; mixed methods; integration

1. Introduction

1.1. Gender-Based Violence

Gender-based violence (GBV) is a public health crisis of pandemic proportions and one of the most prevalent human rights violations worldwide [1,2]. GBV refers to harmful acts directed against an individual because of their biological sex or gender identity. It is deeply rooted in gender inequality and cultural norms that uphold male domination and female subordination [2,3]. While people of all genders may experience GBV, women-identifying individuals are disproportionately impacted by it, and the most common form of GBV is intimate partner violence (IPV) against women [2–4]. IPV has been defined as any current or former intimate partner behavior that causes physical, sexual, or psychological harm, including physical aggression, sexual coercion, emotional abuse, and controlling actions [4]. Global estimates from the World Health Organization indicate that almost one-third (27%) of women have been subjected to violence by their intimate partners [1].

1.2. Violence against Women in the Nordic Countries

The Nordic countries are often considered the most gender-equal countries in the world [5,6], and according to the Global Gender Gap Index, Iceland had in 2021 closed

89.2% of its overall gender gap, holding the top spot for 12 years in a row [7]. While critical domains are used to measure gender equality (e.g., health and survival, educational access and attainment, economic participation, political power, and time allocation), these indices do not take GBV into account [5–7]. Previous research has reported a high prevalence of violence against women in the Nordic countries [8–10]. One of the most extensive studies in this regard (*n* = 42,000 women) was conducted by the European Union (EU) Agency for Fundamental Rights, which found lifetime prevalence rates of IPV in the Nordic countries to be among the highest of the 28 EU Member States. With an EU average of 22%, ranging between 13% and 32%, the rates were 28% in Sweden, 30% in Finland, and 32% in Denmark [11]. In Iceland (a non-EU member), a national survey estimated the lifetime prevalence of IPV against women at 22.4% [12].

1.3. Help-Seeking for Trauma Recovery

Numerous studies have documented the severe impact of IPV, a form of interpersonal trauma, on survivors' health and well-being, showing increased risk of depression, post-traumatic stress disorder (PTSD), anxiety, somatic symptoms, substance abuse, and suicidal ideation [13–16]. This suffering is associated with functional impairment, low sense of coherence (SOC), and substantially reduced quality of life [17–19], even years after leaving the abusive relationship [20,21].

Despite these adverse outcomes related to IPV, previous research has shown that help-seeking among survivors is low in most countries. Some never seek help, and those who do mainly choose informal sources of help, usually from their family or friends and are less likely to seek formal help, such as from shelters, healthcare services, or the police [22–25]. It should be noted that a significant body of literature suggests that women with a history of IPV use healthcare services more than non-abused women, especially primary care and emergency departments [26–28]. Still, these women rarely disclose the violence and often do not receive the support and appropriate care they need [29–31].

The IPV help-seeking literature is primarily focused on escaping the violence and attending to the immediate harm caused. While these often first steps are critical, there is a need for an increased focus on survivors' pathways for trauma recovery [32–34]. Help-seeking after IPV is a complex journey involving a series of meaning-making judgments and socially engaged and culturally informed actions [35–37], and the road to recovery is often challenging [38,39].

Findings of low help-seeking rates are consistent with other studies reporting that IPV survivors are faced with a wide range of barriers on sociocultural, structural, interpersonal, and individual levels, e.g., normalization of violence, access challenges, fearing conse-quences of disclosure, and self-blame [30,40–42]. Moreover, studies have indicated that survivors with depression, PTSD, and low SOC face even more significant barriers to help-seeking, such as symptom burden, fearing mental illness stigmatization, and a weak sense of manageability and meaning, making it more challenging to take action [21,36,43,44].

1.4. Use of Mixed Methods for Instrument Validation

In a widely used definition based on a review of definitions, mixed methods research is defined as a "type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration [45] (p. 123)". In the mixed methods research field, meta-inferences refer to inferences stemming from both qualitative (Qual) and quantitative (Quan) findings integrated into a coherent whole [46,47].

One of the earliest examples of using multiple research methods for validation dates to the 1950s, with Campbell and Fiske's [48] framework giving rise to methodological trian-gulation and arguing that the convergence of findings derived from more than one method would strengthen the evidence of validity. However, as innovative and valuable their framework has been, it is first and foremost Quan. To date, in the instrument development

literature, construct validation is often conceived as mainly a Quan endeavor [45,49–52]. When Qual data are used, it is usually only granted a supplementary role to Quan data, and often the methods are utilized in isolation rather than fully integrated [50,52,53]. Still, there is a growing literature on mixed methods validation. A few frameworks have been developed that place equal value on Quan and Qual methods, focusing on validity and trustworthiness, and emphasizing the integration or "mixing" of findings from both databases to inform validation evidence for a measure [49,51,52,54].

The "fit" of data integration refers to the coherence of Quan and Qual findings [55]. Such assessment is likely to lead to four possible outcomes: Confirmation is when the findings are consistent with each other, supporting drawing the same conclusion from each. Complementarity is when the findings tell different but nonconflicting stories (reflecting different sides of the same coin). Expansion is when the findings diverge to a certain degree but, when combined, can expand insights. Discordance is when the findings are inconsistent, contradictory, or disagree with each other [55,56].

The term legitimation [46] has been recommended to refer to validity and quality in mixed methods studies, as it considers both Quan and Qual research paradigms [47,57]. A legitimation typology was developed to guide researchers to ensure design quality and interpretive rigor to yield high-quality meta-inferences. The typology includes several legitimation types and is grounded on the notion that legitimation is not only an outcome but a process occurring throughout all stages of the research [46,47,57,58]. Recently a new type of legitimation was proposed to be added to the typology, "Divergent Findings Legitimation" [59], stemming from the challenge researchers face when Quan and Qual findings diverge [55,59–61]. Failure to follow up on divergence can threaten legitimation, and this new type is about the extent to which researchers explore and learn from such findings [59].

1.5. Validation of the Barriers to Help-Seeking for Trauma Scale

The Barriers to Help-Seeking for Trauma (BHS-TR) scale was developed from an existing mental health barriers measure [62] focusing on service use for mental disorders. Based on an international literature review about barriers to seeking help after trauma and findings from focus groups and individual interviews with American and Irish GBV survivors, the original scale was adapted for GBV survivorship [21,63]. The scale added new items about normalization, shame, mistrust, perceived rejection, fearing the consequences, and feeling frozen, making the measure more trauma-specific and survivor-centered. The BHS-TR consists of seven barrier subscales that can be grouped into two structural and internal barriers indices. The scale was psychometrically sound in a sample of American GBV survivors [63].

The BHS-TR was translated and cross-culturally adapted into the Icelandic language and context [64] and initially validated in a mixed-methods study among IPV survivors in Iceland [65], creating the first Icelandic trauma-specific measure that assesses help-seeking barriers. An essential part of this work was qualitatively evaluating the scale through cognitive interviewing, resulting in the development of new barrier items based on the survivors' lived experiences. Using these findings, we utilized building to adapt the BHS-TR scale and then carried out a psychometric evaluation of the whole instrument with the additional items. Both Qual and Quan phases provided evidence that the Icelandic BHS-TR is relevant, reliable, and valid [64,65]. Nevertheless, there was a noticeable mismatch between the Qual and Quan findings regarding several items on the scale. Primarily, items that were significant barriers to help-seeking in the survivors' narratives were problematic in the exploratory factor analysis technique, mainly due to cross-loadings with different factors. According to the factor analysis procedure, these cross-loaded items would be dropped and hereafter referred to as the dropped items [65]. This mismatch between the participants' narratives and the factor analysis results points to a legitimation issue, demonstrating the need for further systematic assessment of the coherence of barriers to help-seeking Qual and Quan findings.

Int. J. Environ. Res. Public Health **2022**, *19*, 4297

4 of 21

1.6. The Current Study

This study is part of a larger mixed-methods and survivor-centered validation study on the Icelandic BHS-TR scale. The more extensive study followed well-established international guidelines and best practices for cross-culturally adapting and validating measures [66–68]. An exploratory sequential mixed methods design [69] was used, conducted in two phases (Qual → Quan) with equal emphasis given to both phases. The primary aim of this present study was to use a mixed-methods legitimation strategy of integration to evaluate the BHS-TR structure by merging the Qual and Quan findings and examining meta-inferences on divergence.

Specifically, this study:

1. Integrated the Qual and Quan data to discover convergent (confirmation or complementarity) and divergent (expansion or discordance) validation evidence for the BHS-TR.
2. Critically evaluated divergent items by examining the following:
    a. influence of the barriers on the survivors' help-seeking,
    b. factor cross-loadings for the most strongly endorsed items,
    c. mean score differences for survivors' subsamples (depression, PTSD, and SOC).
3. Made recommendations about the benefits of this integration to BHS-TR refinements.

2. Materials and Methods

2.1. Study Design, Integration, and Legitimation

This study used a mixed methods spiraling design [49,56,70] that employed integration strategies at the design, methods, interpretation, and reporting levels [55] through merging and joint display. We implemented nine types of legitimation strategies to ensure design quality and interpretive rigor to generate high-quality meta-inferences: sample integration, inside–outside (emic–etic), weakness minimization, sequential, commensurability approximation, multiple validities, integration, pragmatic, and divergent findings legitimation [57–59].

2.2. Data Collection

A sequential parallel sampling design [71] was used for the Qual and Quan phases. The inclusion criteria for both phases were to self-identify as a woman, be 18 years old or older, live in Iceland, speak Icelandic, and have experienced IPV. Since what constitutes IPV can vary from person to person, we let participants self-identify as survivors based on the definition and examples of types of IPV provided in the introductory material, including physical, sexual, emotional, financial, and cyber violence. Additionally, for ethical reasons and the participants' security, they had to have been out of the abusive relationship for at least a year.

2.2.1. Qualitative Phase

The Qual data were comprised of in-person cognitive interviews [72,73] with 17 Icelandic IPV survivors; a total of 25 interviews was conducted between August 2019 and January 2020. Participants were recruited using purposive sampling from survivors' centers and services in North and South Iceland. During recruitment, attempts were made to select a diversity of IPV survivors. A detailed description of the procedures has been previously reported [64].

2.2.2. Quantitative Phase

The Quan data were gathered using an anonymous online survey advertised through social media posts and flyers distributed at various services for violence survivors in Iceland, located all over the country. Participants accessed the survey by following a link hosted on the Icelandic Directorate of Equality's website, and a voluntary response sampling was applied. Qualtrics, a secure online software package, was used to build the

survey, including the BHS-TR scale, demographics, help-seeking history, mental health, and trauma-recovery related outcome measures (detailed below). The data were collected between February and October 2020, and our sample included 137 IPV survivors in Iceland. A detailed description of the procedures has been previously reported [65].

2.3. Participants

The Qual sample included 17 women IPV survivors in Iceland, ages 18 to 64 years (M = 37.4, SD = 12.2). Most of the women were employed (70.6%), with about half having received a university degree (52.9%), and most had children (70.6%). Most of our sample self-reported a current mental or physical diagnosis (64.7%), and all had been faced with physical, emotional, and social health effects because of their traumatic experiences. The women in the Qual sample had all sought help because of the violence, especially when leaving the abusive relationship, hence the recruitment strategy. However, when asked explicitly about seeking help for trauma recovery, only a few (35.3%) said they had done so, and about half of them had received mental healthcare at some point in their life (52.9%).

The Quan sample included 137 women IPV survivors in Iceland, ages 19 to 76 years (M = 40.7, SD = 11.7). Most of the women were employed (64.2%), with over half having received a university degree (59.9%), and most had children (76.7%). Most of our Quan sample self-reported a current mental or physical diagnosis (67.9%), and most had received mental healthcare at some point in their life (81.8%). When asked about needing help for trauma recovery in the last 12 months, 75.9% said that they had needed help in general, of which 26.3% listed as needing it most of the time or very necessary. Furthermore, 70.1% said they had especially required mental health treatment, of which 29.2% listed as needing it most of the time or very necessary. Nonetheless, almost half of the women (45.3%) reported not seeking the professional help they needed in the last 12 months. Further information on the characteristics of both Qual and Quan samples can be found in Table 1.

2.4. Measures

2.4.1. Barriers to Help-Seeking for Trauma Scale

Help-seeking barriers were measured with the BHS-TR scale, which asks about barriers to seeking help for trauma recovery in the last 12 months. Respondents answer on a 4-point Likert scale (1 = "Did not influence me", 2 = "Influenced me a little", 3 = "Influenced me somewhat", 4 = "Strongly influenced me"), with a higher total score indicating more barriers [63]. The current Icelandic version of the scale has 26 items divided into two indices (Structural and Internal Barriers), each of which has four subscales (see Supplementary Table S1). Initially, the scale included 41 items, and a list of the 15 dropped items can be found in Supplementary Table S2. The 26-item BHS-TR was found to have sound psychometric properties in our previous work [65]. There were no missing data for the BHS-TR, and the Cronbach's α in this study was 0.87.

2.4.2. Patient Health Questionnaire-8

Depression was assessed with the Patient Health Questionnaire-8 (PHQ-8) [74]. It is a widely used and valid measure consisting of eight items based on the DSM-IV diagnostic criteria for depression. PHQ-8 is identical to the PHQ-9 without the suicidal thoughts item, making it more suitable for general survey use. Respondents are asked to assess the frequency of symptoms in the past two weeks on a 4-point response scale from 0 ("Not at all") to 3 ("Nearly every day"), with a total score range from 0 to 24. A clinical cut-off score of ≥10 has been recommended to indicate probable current depression [74,75]. There were no missing data for the PHQ-8, and the Cronbach's α in this study was 0.87.

2.4.3. Post-Traumatic Stress Disorder Checklist for DSM-5

Post-traumatic stress disorder was assessed with the PTSD Checklist for DSM-5 (PCL-5) [76]. It is a widely used and validated measure consisting of 20 items corresponding to the DSM-5 symptom criteria for PTSD. Respondents are asked to rate how

bothered they have been by the symptoms in the past month on a 5-point response scale from 0 ("Not at all") to 4 ("Extremely"), with a total score range from 0 to 80. A clinical cut-off score of ≥ 31 has been recommended to indicate probable current PTSD [76,77]. There were no missing data for the PCL-5, and the Cronbach's α in this study was 0.96.

Table 1. Characteristics of participants in both phases.

Characteristics	Qual Phase (*n* = 17)	Quan Phase (*n* = 137)
Age		
18–29	4 (23.5%)	24 (17.5%)
30–39	7 (41.2%)	34 (24.8%)
40–49	4 (23.5%)	38 (27.7%)
50–59	1 (5.9%)	18 (13.1%)
60+	1 (5.9%)	6 (4.4%)
Not stated	-	17 (12.4%)
Racial and ethnic background		
Caucasian	17 (100%)	-
Iceland-born	16 (94.1%)	-
Foreign-born	1 (5.9%)	-
Level of education		
High school or less	3 (17.6%)	11 (8.0%)
Technical or junior college degree	5 (29.4%)	29 (21.2%)
University degree	9 (52.9%)	82 (59.9%)
Not stated	-	15 (10.9%)
Employment status (not mutually exclusive)		
Working	12 (70.6%)	88 (64.2%)
Unemployed or looking for work	2 (11.8%)	7 (5.1%)
Student	5 (29.4%)	26 (19.0%)
Homemaker	1 (5.9%)	3 (2.2%)
Unable to work due to sickness/disability	3 (17.6%)	20 (14.6%)
Other	-	24 (17.5%)
Number of children		
None	5 (29.4%)	24 (17.5%)
One or two	9 (52.9%)	59 (43.1%)
Three or more	3 (17.6%)	46 (33.6%)
Not stated	-	8 (5.8%)
Years in the abusive relationship		
1–5	4 (23.5%)	-
6–10	9 (52.9%)	-
11–15	2 (11.8%)	-
15+	2 (11.8%)	-
Years out of the abusive relationship		
1–5	10 (58.8%)	-
6–10	6 (35.3%)	-
11–15	1 (5.9%)	-
Current medical diagnosis (mental and/or physical)		
No	6 (35.3%)	44 (32.1%)
Yes	11 (64.7%)	93 (67.9%)
History of receiving mental healthcare		
No	8 (47.1%)	24 (17.5%)
Yes	9 (52.9%)	112 (81.8%)
Not stated	-	1 (0.7%)

Int. J. Environ. Res. Public Health **2022**, *19*, 4297

7 of 21

2.4.4. Sense of Coherence Scale-13

SOC was measured with the shortened version of the Sense of Coherence Scale (SOC-13), also known as the Orientation to Life Questionnaire [78]. It comprises 13 items about how people view their lives, measuring SOC's three main dimensions: comprehensibility, manageability, and meaningfulness. Respondents rate their level of agreement or disagreement on a 7-point semantic differential scale that has two anchoring responses tailored to each item. The total score range is from 13 to 91, with a higher score indicating a stronger SOC. It has been proposed that a low SOC corresponds to scores of 13–57, medium SOC corresponds to scores of 58–74, and a high SOC corresponds to scores of 75–91 [79]. The measure has been shown to be reliable and valid in multiple studies conducted across many cultures [80]. Five participants had missing values on the SOC-13, and the Cronbach's α in this study was 0.85.

2.5. Ethical Considerations

The National Bioethics Committee in Iceland approved all procedures and materials (Qual phase: VSNb2019060009/03.01; Quan phase: VSNb2019090016/03.01), and the study was reported to the Icelandic Data Protection Authority (Qual phase: 19–119; Quan phase: 19–166). After receiving detailed information about the study, all participants voluntarily gave informed consent to participate. Written consent was obtained from the interview participants, while the survey participants provided their consent by answering the survey. All participants received a list of local referral resources with the introduction and after participation. Moreover, they were all offered support from a psychologist if difficult emotional reactions had emerged.

2.6. Data Analysis

The data analysis for this study occurred in two stages, each with several steps employed in an iterative spiraling process [49,56,70]. First, we integrated the Qual and Quan findings to assess the coherence of the scale structure. Based on those findings, the next stage focused on divergent findings at the dropped item level.

2.6.1. Mixed Methods Analysis

Coherence of the findings was determined by merging [55] Qual and Quan findings using joint display analysis [81,82]. As noted, there are four possible outcomes of comparing data and drawing conclusions about the fit: Confirmation, Complementarity, Expansion, and Discordance [55,56]. Only the expansion and discordant items were explored in the second analytic stage.

2.6.2. Examination of Expansion and Discordant Findings

The examination of the expansion or discordant dropped items was guided by reconciliation and additional validation strategies [59,60], where we re-analyzed existing data with a new perspective and evaluated these items. This analysis was driven by a critical examination of Quan data based on Qual findings. All statistical analyses were performed using the SPSS Statistics software package (Version 27.0; IBM Corp., Armonk, NY, USA, 2020), and significance was assessed at the $p \leq 0.05$ level.

Level of Influence. We determined that higher mean scores were a metric indicating a stronger level of influence of items on survivors' help-seeking. We, therefore, rank-ordered all the BHS-TR items by mean scores and examined the frequency of survivors who endorsed those items at 3 ("Influenced me somewhat") or 4 ("Strongly influenced me"). Only items that met the threshold of a mean score above 2.00 were included. The strongly endorsed and dropped items were retained for further evaluation in the subsequent step.

Cross-Loadings. Dropped items that cross-loaded at or above 0.35 were compared with retained items to evaluate whether the dropped items were conceptually distinct. Cross-loaded items that were conceptually covered by a retained item were not included in further analysis. Conceptually distinct items were evaluated in the subsequent step.

Known-Groups Validity. We evaluated whether influential and conceptually distinct dropped items could differentiate between groups of survivors using independent sample *t*-tests. We created "probable depression", "probable PTSD", and "low SOC" subsamples by using the PHQ-8 clinical cut-off score of ≥10, the PCL-5 clinical cut-off score of ≥31, and the SOC-13 scores of 13–57. Based on the relevant literature (e.g., [21,36,43,44]) and results from prior studies on the BHS-TR [63,65], it was expected that survivors with depression, PTSD, and low SOC would, on average, score higher on the barrier items than survivors without depression or PTSD and with high SOC.

3. Results

3.1. Merging of Qualitative and Quantitative Findings

The joint displays linking the Qual and Quan findings are shown in Table 2 (Structural Barriers) and Table 3 (Internal Barriers), revealing evidence of complementarity, expansion, and discordance. To illuminate the lived experiences of the barriers, we chose exemplar quotations from the survivors, reported in the Qual column. The items referred to (using their original numbers) in the Quan column can be found in Supplementary Tables S1 and S2.

Table 2. Joint display of the coherence of findings for structural barriers to help seeking.

Conceptual Structure	Qualitative Phase	Quantitative Phase	Coherence of Findings
Structural Barriers	In the interviews, participants (14 of 17) generally made a specific distinction between structural and internal barriers to seeking help. When discussing structural barriers, the women mainly mentioned system-level barriers referring to healthcare and social services. Findings provided evidence of relevance, face validity, and content validity. *"There are so many walls to climb over in our system, and when you are so shattered and exhausted, you just can't."*	The "Structural Barriers Index" included Financial Concerns, Unavailable/Not Helpful, External Constraints, and Inconvenience factors. The index had good internal consistency ($\alpha = 0.75$), and the results provided evidence of convergent, discriminant, and known-groups validity.	Complementarity: Not included in subsequent analysis.
Financial Concerns	A majority (12 of 17) of the participants agreed that the items about financial concerns were significant barriers, especially related to seeking professional psychological help, as the Icelandic Health Insurance covers not all mental healthcare. Findings provided evidence of relevance, face validity, and content validity. *"Let's be clear, getting professional help to work through your trauma is hardly part of our great welfare system, and I couldn't even pay the bills, let alone go to a psychologist."*	The "Financial Concerns" factor comprised items #2, 19, and 18. All items had high factor loadings, and the internal consistency was good ($\alpha = 0.82$). Results provided evidence of convergent, discriminant, and known-groups validity.	Complementarity: Not included in subsequent analysis.
Unavailable/Not Helpful	While these items did not represent the main barriers hindering the women from seeking help, more than half (11 of 17) said that the healthcare they needed had not been available to them. Findings provided evidence of relevance, face validity, and content validity. *"I didn't tick in the right boxes when I finally had the courage to go to the hospital. Like sure honey, we will stitch up your head . . . but you won't get mental healthcare there."*	The "Unavailable/Not Helpful" factor comprised items #15, 16, and 17. All items had high factor loadings, and the internal consistency was good ($\alpha = 0.71$). Furthermore, results provided evidence of convergent, discriminant, and known-groups validity.	Complementarity: Not included in subsequent analysis.

Table 2. *Cont.*

Conceptual Structure	Qualitative Phase	Quantitative Phase	Coherence of Findings
External Constraints	Many (11 of 17) participants were afraid of the consequences of seeking help, and the other external constraints impacted them as well. Findings provided evidence of relevance, face validity, and content validity. *"You can lose so much . . . friends and family members who sided with him, and I knew he would use it against me in the custody battle . . . unfit mentally ill mother."*	The "External Constraints" factor comprised items #14, 34, and 25. All items had high factor loadings, and the internal consistency was good (α = 0.77). Furthermore, results provided evidence of convergent, discriminant, and known-groups validity.	Complementarity: Not included in subsequent analysis.
Inconvenience	The inconveniences barriers were not the foremost reasons stopping participants from seeking help. However, a majority (10 of 17) thought these barriers were part of the picture. The most mentioned was the time factor. Findings provided evidence of relevance, face validity, and content validity. *"There was no time . . . being a single mom working a full-time job doesn't give you a lot of space."*	The "Inconvenience" factor was comprised of items #5 and 8. The items had high factor loadings, but the internal consistency was poor (α = 0.52). Evidence of convergent, discriminant, and known-groups validity was provided. One inconvenience item (#9) about not getting time away from work or family needed to be dropped as it did not load significantly onto this or any other factor.	Expansion: Item #9 was included in the subsequent analysis.
Discrimination	The participants interpreted the prejudice and discrimination items as relating to race and ethnic background, which did not apply to them but recognized these items would be important for the survivor immigrants to Iceland. Yet, many (13 of 17) said they were worried about and experienced prejudice and discrimination for being an IPV survivor. These experiences centered around stereotyping and victim-blaming. *"Take the risk of revealing myself as a victim . . . no. When people know your story, it's like you become nothing else, the weak abused women stamp is burnt to your forehead."*	All the discrimination items (#20, 21, and 23) were identified as problematic due to cross-loadings onto different factors and needed thus to be dropped.	Expansion: Items #20, 21, and 23 were included in subsequent analysis.

Notes: Qualitative findings were generated using deductive and inductive qualitative content analysis; quantitative results were generated using principal component analysis, multidimensional scaling, Cronbach's alpha coefficient (α), Pearson's correlation coefficient, and independent sample *t*-tests.

Table 3. Joint display of the coherence of findings for internal barriers to help seeking.

Conceptual Structure	Qualitative Phase	Quantitative Phase	Coherence of Findings
Internal Barriers	Most participants (14 of 17) distinguished between structural and internal barriers to seeking help. They understood that internal barriers arose from internalized beliefs or values and personally held fears. Findings provided evidence of relevance, face validity, and content validity. *"When these beliefs and attitudes are everywhere in the society, your family, you grew up around this mentality, of course, you start to believe it yourself."*	The "Internal Barriers Index" included the Weakness/Vulnerability, Problem Management Beliefs, Frozen/Confused, and Shame factors. The index had good internal consistency (α = 0.88), and the results provided evidence of convergent, discriminant, and known-groups validity.	Complementarity: Not included in subsequent analysis.

Table 3. *Cont.*

Conceptual Structure	Qualitative Phase	Quantitative Phase	Coherence of Findings
Reveals Weakness	All of the participants (17 of 17) said that help-seeking and being vulnerable felt like a sign of weakness. These beliefs were significant deterrents to seeking help but were identified as missing from the scale. Four new items reflecting aspects of this category were developed, and findings provided evidence of relevance, face validity, and content validity. *"It was so strong within me the need to be tough and keep going, needing help felt like a sign of weakness."*	The "Weakness/Vulnerability" factor was comprised of items #40, 39, 35, 41, and 24. Of these items, three were new revealing weakness items, one new safeguard item, and one shame item. All had high factor loadings, and the internal consistency was good ($\alpha = 0.86$). Furthermore, results provided evidence of convergent, discriminant, and known-groups validity. One weakness item about the vulnerability of opening up to your feelings (#38) needed to be dropped as it significantly loaded onto another factor as well.	Expansion: Item #38 was included in the subsequent analysis.
Problem Management Beliefs	Most (14 of 17) participants said the problem management beliefs items accurately described their coping. Findings provided evidence of relevance, face validity, and content validity. *"Definitely didn't think it was serious enough to seek professional help and like with others . . . you are supposed to be able to, and I just really wanted to deal with it myself."*	The "Problem Management Beliefs" factor comprised items #1, 11, and 10. All items had high factor loadings, and the internal consistency was fair ($\alpha = 0.62$). Furthermore, results provided evidence of convergent, discriminant, and known-groups validity.	Complementarity: Not included in subsequent analysis.
Frozen/ Confused	All participants had experienced being frozen and confused, and many (13 of 17) strongly agreed that this hindered seeking help. Findings provided evidence of relevance, face validity, and content validity. *"I couldn't think straight and felt like I couldn't move, you know this emotional numbness is so hindering."*	The "Frozen/Confused" factor comprised items #29, 30, 26, and 27. All items had high factor loadings, and the internal consistency was good ($\alpha = 0.79$). Furthermore, results provided evidence of convergent, discriminant, and known-groups validity.	Complementarity: Not included in subsequent analysis.
Shame	All participants endorsed shame, and most (15 of 17) talked about many layers of shame as a primary barrier. Findings provided evidence of relevance, face validity, and content validity. *"I was racked with shame. For being so stupid of getting myself into this. For allowing him to break me. For staying. For whom I had become."*	The "Shame" factor comprised items #6, 7, and 28. All items had high factor loadings, and the internal consistency was good ($\alpha = 0.83$). Furthermore, results provided evidence of convergent, discriminant, and known-groups validity.	Complementarity: Not included in subsequent analysis.
Mistrust/ Rejection	Mistrust and perceived rejection of people or systems were prominent barriers in the participants' narratives (14 of 17) when discussing these items and often connected to their former attempts to seek help. Findings provided evidence of relevance, face validity, and content validity. *"I didn't trust anyone, always scared of being betrayed, and like the lack of understanding I got from my family, it took me so many steps back, years until I tried to seek help again."*	The mistrust and rejection items (#31, 32, and 33) were identified as problematic due to cross-loadings onto different factors.	Discordance: Items #31, 32, and 33 were included in the subsequent analysis.

Table 3. *Cont.*

Conceptual Structure	Qualitative Phase	Quantitative Phase	Coherence of Findings
Safeguard Yourself	Most (15 of 17) participants described the desire and efforts to protect themselves from further pain. These help-seeking barriers had strongly influenced them but were identified as missing from the scale. Three new items reflecting aspects of this category were developed, and findings provided evidence of relevance, face validity, and content validity. *"I wanted to protect myself, and I was in this mode that I just could not deal with it and needed to let myself be there, but [. . .] you can get stuck."*	The safeguard items together did not make a new factor. Two of the items (#36 and 37) needed to be dropped as they cross-loaded. Item #41 belonged to the "Weakness/Vulnerability" factor.	Discordance: Items #36 and 37 were included in the subsequent analysis.

Notes: Qualitative findings were generated using deductive and inductive qualitative content analysis; quantitative results were generated using principal component analysis, multidimensional scaling, Cronbach's alpha coefficient (α), Pearson's correlation coefficient, and independent sample *t*-tests.

3.1.1. Complementarity Evidence

Most of the Qual and Quan findings were congruent, reinforced one another, were deemed complementary, and strengthened the overall validation evidence of the BHS-TR. This complementarity applied to the BHS-TR Structural and Internal Barriers indices, as well as for the following specific factors of barriers: Financial Concerns, Unavailable/Not Helpful, External Constraints, Problem Management Beliefs, Frozen/Confused, and Shame. Therefore, these items were not evaluated in any subsequent analyses.

3.1.2. Expansion Evidence

Two factors (Inconvenience and Discrimination) and one category (Reveals Weakness) were found to need expansion. First, the Inconvenience factor revealed in the Quan phase was missing a key inconvenience item identified in the Qual phase. That factor comprised of only two items, likely affecting the poor internal consistency, and needs to be expanded. Secondly, when combined, the Qual and Quan findings for the Discrimination factor indicates the need for further development and evaluation of these items in a more diverse sample. Moreover, the expansion should involve additional items specifically on the prejudice and stigmatization of GBV survivors. Thirdly, the Reveals Weakness category expanded into the Weakness/Vulnerability factor but was missing a vulnerability barrier that had been central in the survivors' narratives. This new BHS-TR factor deserves continuing attention and better understanding of why the one dropped weakness item did not work on the factor.

3.1.3. Discordance Evidence

One factor (Mistrust/Rejection) and one category (Safeguard Yourself) were revealed to be discordant. First, despite the Qual evidence of relevance, face validity, and content validity, the Quan phase showed that all the items on the Mistrust/Rejection factor should be dropped. The concept of mistrust for BHS-TR requires additional examination. Secondly, despite the support for three new items from the Qual phase in the Safeguard Yourself category, two of them were dropped in the Quan phase. The concept of safeguarding yourself requires additional examination.

3.1.4. Integration Implications from Joint Display

Taken together, ten items that were dropped in the factor analysis belong to an expansion or discordant factor or category and need further analysis. Expansion is required for one inconvenience item (#9), all the discrimination items (#20, 21, and 23), and one weak-

ness item (#38). Discordance was identified for all the mistrust items (#31, 32, and 33) and two safeguard items (#36 and 37). These items were focused on in the second analysis stage.

3.2. Examination of Expansion and Discordant Findings

3.2.1. Level of Influence

The BHS-TR items above 2.00 were ranked by mean score (see Table 4). Of the ten expansion and discordance dropped items from the coherence joint displays, seven were above the 2.00 threshold and are indicated in bold. Of these items, one was in the top 10, and five were in the top 20. For most of these items, more than 50% of survivors reported the barrier as somewhat or strongly influencing them in not seeking help (range 35.8% to 62.8%).

Integration Implications from Influence Analysis. The inconvenience item and two of the discrimination items did not reach the mean influence 2.00 threshold and were therefore omitted from further analysis in this study. Two expansion items (Weakness #38 and Discrimination #23) and five discordance items (Mistrust #31, 32, and 33 and Safeguard #36 and 37) had mean influences over 2.00 and were included in subsequent analyses.

3.2.2. Cross-Loadings

Table 5 shows cross-loadings onto BHS-TR factors for the seven influential dropped items. The specific inferences drawn from this analysis are also listed in the table. None of the items were conceptually similar to retained BHS-TR items.

Integration Implications from Cross-Loading Analysis. This analysis revealed issues with the wording of the safeguarding yourself items. We discovered that the concepts of feeling mistrustful and frozen/confused overlap. Similarly, there was a significant overlap between the feeling of revealing weakness and shame. The analysis further supported that the expansion of the discrimination factor needs a GBV specific items. These conceptual overlaps and cultural nuances need additional data gathering and analysis to understand. Because these items were all identified as conceptually distinct, all seven were kept for the final analysis step in this study.

3.2.3. Known-Groups Validity

We used *t*-tests to compare the mean scores for the influential and conceptually distinct items for subgroups of probable depression, probable PTDS, and low SOC survivors (see Table 6). The mean scores for the mistrust and safeguard items were all significantly higher for the probable depression, probable PTSD, and low SOC groups. However, there were no significant differences in the mean scores for the weakness item, as all the survivors' groups scored high on average. The mean score for the discrimination item was significantly higher for the depression group only.

Integration Implications from Known-Groups Analysis. Five out of the seven remaining items were statistically significant for the distress sub-groups and the low SOC subgroup. While the mistrust and safeguard yourself items need refinements, this analysis provided further validity evidence for these two concepts of barriers. The indications of ceiling effects for the weakness item might be related to its shame concept overlap, demonstrating the need for further evaluation. The performance of the discrimination item supports making it more specific about prejudice or discrimination related to GBV, which might enhance its ability to distinguish between different groups.

Table 4. Ranking of the items after influence (*n* = 137).

Item Number	BHS-TR Item (Index: Subscale)	M	SD	*n* (%) *
7	I was ashamed (Internal: Shame)	3.21	1.00	106 (77.4%)
29	I could not seem to clarify my feelings or know what I needed (Internal: Frozen/Confused)	3.15	0.90	110 (80.3%)

Int. J. Environ. Res. Public Health **2022**, *19*, 4297

13 of 21

Table 4. *Cont.*

Item Number	BHS-TR Item (Index: Subscale)	M	SD	*n* (%) *
10	I wanted to or thought I should solve the problems on my own (Internal: Problem Management Beliefs)	3.09	1.03	104 (75.9%)
1	I thought the problem would probably get better by itself (Internal: Problem Management Beliefs)	2.99	1.03	104 (75.9%)
41	Seeking help would require acknowledging things I did not want to face (Internal: Weakness/Vulnerability)	2.84	1.23	87 (63.5%)
26	I was confused or unable to plan out all the details or steps (Internal: Frozen/Confused)	2.82	1.10	89 (65.0%)
11	I thought the situation was normal or was not severe (Internal: Problem Management Beliefs)	2.79	1.13	93 (67.8%)
38	**I felt like opening up to my feelings would weaken me** (Dropped)	2.78	1.11	86 (62.8%)
30	I was afraid I could not clearly express what I needed (Internal: Frozen/Confused)	2.75	1.12	84 (61.3%)
39	Getting help would mean that I had failed or had been defeated (Internal: Weakness/Vulnerability)	2.74	1.16	83 (60.6%)
27	I felt paralyzed or frozen and unable to get started (Internal: Frozen/Confused)	2.66	1.24	79 (57.7%)
2	I was concerned that the help I needed would be too expensive (Structural: Financial Concerns)	2.65	1.12	79 (57.7%)
28	I believed that people would judge me (Internal: Shame)	2.61	1.17	70 (51.1%)
40	I thought that strong people should not need help (Internal: Weakness/Vulnerability)	2.60	1.21	78 (56.9%)
24	I thought the situation was too personal or wanted to keep it private (Internal: Weakness/Vulnerability)	2.58	1.19	79 (57.7%)
33	**I felt no one could understand or help me** (Dropped)	2.58	1.13	76 (55.5%)
6	I was concerned about what others might think (Internal: Shame)	2.54	1.20	75 (54.7%)
32	**I felt that I could not trust people to help me** (Dropped)	2.46	1.04	73 (53.8%)
36	**I was afraid that seeking help would be too emotionally difficult or hurt me even more** (Dropped)	2.42	1.15	72 (52.6%)
37	**I did not seek help in an effort to protect or safeguard myself** (Dropped)	2.40	1.08	70 (51.1%)
35	I was scared of being seen as weak (Internal: Weakness/Vulnerability)	2.39	1.13	64 (46.7%)
25	I was afraid of the consequences for myself, my children, or my family (Structural: External Constraints)	2.37	1.25	64 (46.7%)
18	I did not have adequate financial resources (Structural: Financial Concerns)	2.36	1.22	66 (48.2%)
8	I thought getting help would take too much time or was inconvenient (Structural: Inconvenience)	2.32	1.13	60 (43.8%)
31	**I was afraid I would explain what I needed, and no one would help me anyway** (Dropped)	2.23	1.13	57 (41.6%)
19	The available health insurance would not cover the type of treatment I needed (Structural: Financial Concerns)	2.13	1.25	53 (38.7%)
23	**I felt that there would be prejudice or discrimination against me** (Dropped)	2.07	1.15	49 (35.8%)

Notes: The influential dropped items are indicated in bold; M = mean; SD = standard deviation; * frequency and percent endorsed as somewhat or strongly influenced me.

Table 5. Cross-loadings of the dropped items.

Dropped Items	BHS-TR Factors (Loadings)	Inferences
Mistrust/Rejection		
I felt no one could understand or help me (#33)	Frozen/Confused (−0.41) Unavailable/Not Helpful (0.37)	The mistrust items were cross-loaded with Frozen/Confused (internal) items and structural items, either Unavailable/Not Helpful or External Constraints. Despite this cross-loading with being frozen, the fear of rejection is the cause of the freezing. Moreover, while it may be related to the structural barriers, they do not capture the concept of mistrust and perceived rejection. We believe that the wording of these items does not adequately capture the social component of the "mistrust" concept. The concept includes betrayal, rejection, stigma, problems with past encounters, the general feeling of being misunderstood by society and people in the service sector. This factor requires more analysis and evaluation.
I was afraid I would explain what I needed, and no one would help me anyway (#31)	Frozen/Confused (0.40) External Constraints (0.36)	
I felt that I could not trust people to help me (#32)	Unavailable/Not Helpful (0.43) Frozen/Confused (0.39)	
Safeguard Yourself		
I did not seek help in an effort to protect or safeguard myself (#37)	Inconvenience (0.53) Weakness/Vulnerability (0.52)	Both safeguarding items were cross-loaded onto the Weakness/Vulnerability (internal) and Inconvenience (structural) factors. We believe that neither of these factors captures the safeguarding efforts that the items were intended to measure. These loadings indicate a problem with the wording of the items, and revisions are needed. The former item might need to be more specific about safeguarding from what. The common thread underlying the development of the initial category was safeguarding from being more hurt, which had many aspects. One frequently mentioned was protecting from not being believed, which may be desirable to make into a specific item. *"You know if I would seek help, and I wouldn't be believed, or it wouldn't be taken seriously, I was dealing with enough."* On the other hand, the second item might be too packed and possibly double-barreled. It was developed based on the commonly mentioned fear of re-traumatization by seeking help, still using the women's words. *"I had made my world trigger-free, so yeah, I was really isolated, but [. . .] to go there, talking about it would only hurt me even more."* A potential change is to take out the 'too emotionally difficult' part. Further examination is needed to inform revisions of both items.
I was afraid that seeking help would be too emotionally difficult or hurt me even more (#36)	Weakness/Vulnerability (0.56) Inconvenience (0.50)	
Reveals Weakness		
I felt like opening up to my feelings would weaken me (#38)	Weakness/Vulnerability (0.44) Shame (0.43)	The weakness item loaded onto two internal factors at about the same strength. While the Weakness/Vulnerability and Shame factors are related, we believe they are conceptually distinct. In the interviews', showing weakness was considered shameful. The narratives behind the development of this specific item were indeed related to being ashamed if they opened up and how that made them feel "less-than." *"It was like I would somehow become less . . . I don't like being vulnerable [. . .] a big part of seeking help."* For now, this item should stay as it stands but deserves further evaluation.
Discrimination		
I felt that there would be prejudice or discrimination against me (#23)	Shame (0.59) Discrimination (0.46)	The discrimination (structural) item loaded more strongly on the Shame (internal) factor in our sample, which supports the necessity for expanding the Discrimination factor. This item as it stands needs to be clarified to reference race, ethnicity, religion, or language, and new GBV specific prejudice/stigma item(s) need to be developed.

Table 6. Known-groups validity results on the item level.

BHS-TR	Depression			PTSD			SOC		
Dropped Items	No (*n* = 80)	Probable (*n* = 57)	*p*	No (*n* = 75)	Probable (*n* = 62)	*p*	M/High (*n* = 51)	Low (*n* = 81)	*p*
Mistrust/Rejection									
I felt no one could understand or help me (#33)	2.35 (1.15)	2.88 (1.03)	0.01	2.36 (1.11)	2.82 (1.10)	0.02	2.29 (1.12)	2.75 (1.12)	0.02
I was afraid I would explain what I needed, and no one would help me anyway (#31)	2.00 (1.13)	2.54 (1.05)	0.00	2.04 (1.12)	2.45 (1.09)	0.03	2.00 (1.09)	2.39 (1.11)	0.05
I felt that I could not trust people to help me (#32)	2.21 (1.14)	2.80 (1.03)	0.00	2.20 (1.12)	2.75 (1.08)	0.00	2.08 (1.10)	2.70 (1.10)	0.00
Safeguard Yourself									
I did not seek help in an effort to protect or safeguard myself (#37)	2.14 (1.00)	2.68 (1.10)	0.00	2.03 (0.97)	2.76 (1.07)	0.00	2.02 (1.02)	2.58 (1.08)	0.00
I was afraid that seeking help would be too emotionally difficult or hurt me even more (#36)	2.26 (1.16)	2.65 (1.11)	0.05	2.16 (1.13)	2.74 (1.10)	0.00	2.16 (1.19)	2.60 (1.11)	0.03
Reveals Weakness									
I felt like opening up to my feelings would weaken me (#38)	2.71 (1.08)	2.91 (1.14)	-	2.66 (1.11)	2.95 (1.09)	-	2.62 (1.07)	2.95 (1.11)	-
Discrimination									
I felt that there would be prejudice or discrimination against me (#23)	1.86 (1.09)	2.36 (1.18)	0.01	1.92 (1.17)	2.25 (1.12)	-	1.96 (1.13)	2.14 (1.19)	-

Notes: Independent sample *t*-tests; mean score (standard deviation); significance level at *p* ≤ 0.05; Patient Health Questionnaire-8 cut-off score of ≥10 for probable depression; Post-Traumatic Stress Disorder (PTSD) Checklist for DSM-5 cut-off score of ≥31 for probable PTSD; Sense of Coherence (SOC) Scale-13 scores of 13–57 for low SOC and scores of 58–91 for medium (M) to high SOC.

4. Discussion

This mixed-methods study presents the integration process of evaluating the structure of BHS-TR, the first trauma-specific measure on help-seeking barriers for GBV survivors in Iceland. Our study is part of a larger mixed-methods validation study [64,65] that places equal value on the Qual and Quan phases, focusing on credibility/trustworthiness and reliability/validity. Traditionally, if mixed methods are used, instrument development and validation designs place more emphasis on the Quan phase [49,69]. The merging of the Qual and Quan findings provided more complete insights into the construct validation evidence than could be gained by either alone. A majority of our Qual and Quan findings were complementarity, telling different but congruent stories, strengthening the overall legitimation evidence of the BHS-TR.

The added value of the integration also involved identifying our expansion and discordant findings. Few mixed methods studies examine details of divergence [59,60], and in the past, conflicting evidence between Qual and Quan data have often led researchers to overlook or dismiss Qual findings [83]. It is essential to acknowledge and respect the value of divergence as a possible generative of unanticipated insights [84]. Our survivor-centered approach applying an iterative spiraling process helped illuminate the core issues and inform potential refinements. At the end of this spiraling analysis, we identified seven dropped BHS-TR items that deserved further attention, representing barriers that had strongly influenced the survivors from seeking help yet not covered by the scale. These items belonged to four critical factors/categories of barriers (Mistrust/Rejection, Safeguard Yourself, Reveals Weakness, and Discrimination) that still require work to accurately capture what they are supposed to be measuring and become BHS-TR subscales.

The findings showed that the mistrust items were conceptually overlapping with items related to feeling frozen and confused, indicating the need to rewrite these critical items about the notion that people would not understand them or could not be trusted to

help them. These barriers are often impacted by past encounters and are therefore central to the survivors' help-seeking experience [21,30,41]. Harmful responses (e.g., disbelieving, pathologizing, or blaming survivors) from the helpers and helping services are likely to prevent additional help-seeking [35,41,85,86]. Further, the need to expand the discrimination factor to capture the stigma and prejudice associated with GBV were discovered in this study, consistent with previous studies demonstrating that fear of stigmatization is a major barrier among survivors [30,32]. For example, the IPV Stigmatization Model [40] describes how three components of stigma, cultural, internalized, and anticipated, hinder help-seeking behaviors.

The perception of harmful responses from helpers was also related to our findings on the safeguarding items, highlighting the importance of trauma-informed responses and services. Wanting to protect oneself from further pain, facing one's experience, and being re-traumatized were significant deterrents to help-seeking for the participants in this study. A recent systematic review among trauma survivors shows similar results [85]. However, we detected potential issues involving the items being either written too broadly or too specific. Additional analysis will reveal if the reworded items load, along with the third safeguard item currently belonging to the Weakness/Vulnerability subscale, onto a new Safeguarding Efforts subscale.

The weakness item was the most hindering barrier of the dropped items and was in the top 10 influence rank order for all BHS-TR items. We did not detect a significant problem with the wording. Yet, this item loaded onto the Weakness/Vulnerability and Shame factors, which are related but still conceptually distinct, at about the same strength. What might be causing this is how the item is more related to feeling weak by opening up while the other items focus on being seen as weak by others. Interestingly, this item performed worst in the final validity testing step, as it could not differentiate between any of the groups. On average, all the survivors scored high regardless of distress symptoms or their SOC. That might be related to how intertwined beliefs about staying strong and not revealing weakness are to Icelandic culture. As with many other individualistic countries, value is placed on independence and self-reliance [87–89]. Additionally, a new study examining cultural effects on trauma recovery processes of GBV survivors showed that fearing vulnerability and being perceived as weak were the most significant barriers among the American participants [90].

While the findings of this study are essential, they need to be considered alongside some limitations, such as the relatively small Qual and Quan samples selected using non-probability sampling methods. Probability sampling was unfeasible, as is true for many other studies among hidden and vulnerable populations [91,92]. Moreover, with the Qual data collection occurring before the Quan one, using identical or nested samples [71] was not possible, which can be a legitimation threat to the meta-inferences generated [57]. Still, legitimation strategies were applied to minimize these threats. Our samples were drawn from the same underlying population and comparable to most demographics collected. We had less information on the Quan sample, which is a limitation, and a noticeable difference between the samples was concerning age and prevalence of receiving mental healthcare. In addition, the Qual data collection was conducted before the COVID-19 pandemic, while the Quan data collection occurred in the first months of the pandemic in Iceland. The study's cross-sectional design furthermore did not allow for longitudinal analysis of the relationships between the survivors' distress symptoms, SOC, help-seeking barriers, and trauma recovery actions.

Moreover, we used a largely Quan approach to examine the divergent findings because we were trying to understand the issues revealed in the smaller Qual dataset in the larger Quan sample, allowing us to potentially generalize our findings. While balanced Quan and Qual sample sizes would be desirable, mixed methods research often has smaller Qual samples. What the mixing methods does, however, as demonstrated in this study, is use the findings from each to validate or legitimate the findings from the other. Our previous work had provided strong Qual evidence for the significance of these barriers [21,64,65],

and therefore we decided to focus on the Quan data in this stage. The level of influence step was performed to gain information on the significance of the barriers from a Quan lens. As noted, these Quan data are cross-sectional, providing a point-in-time estimate, and additional Qual data can give us a story of a journey for deeper understanding. Research examining the help-seeking journey of Icelandic survivors is underway. Furthermore, it needs to be acknowledged that "mainstream" responses do not account for individual experiences, and the voices of those who have significantly different experiences of life to most of the population may be lost.

Finally, the work presented here illustrates that the factor analysis of requiring items to load only onto one factor in order to be considered "valid" may sometimes be troubling, promoting an overly reductionist approach that can oversimplify the complexities of social phenomena. A person's view of the world might not align with the way instruments are developed, and we believe that the use of mixed methods, especially the legitimation strategy of integration illustrated here, can help move the field toward the critical examination of including participants' voices in our instrument development and validation.

Future work on the construct validation of the Icelandic BHS-TR should further examine and develop the critical expansion and discordant items identified in this study. Additional interviewing with survivors to gain in-depth insights into the conceptual overlaps and cultural nuances of these barriers are needed to inform BHS-TR refinements further. In addition, assessing floor-and-ceiling effects for all items, examining the BHS-TR structure using confirmatory factor analysis, and evaluating response consistency via test–retest reliability measurement using large and representative samples is required. Finally, future studies with and about the BHS-TR would be greatly enhanced by utilizing recruitment procedures targeting diverse groups of survivors, including gender identity, ethnic background, socioeconomic status, forms of GBV, and help-seeking attempts or experiences. We hope the BHS-TR can serve as a valuable tool in future help-seeking research among survivors of IPV and other types of GBV. Along with creating the Icelandic BHS-TR, our research group, the Multicultural Study of Trauma Recovery network (https://mistory-traumarecovery.org/, accessed on 22 March 2022), is currently working on adapting the BHS-TR to various cultures and contexts.

5. Conclusions

The current study focused on mixed methods integration to inform validation evidence for a new help-seeking barriers instrument centered on trauma recovery. The overall findings indicated that the BHS-TR is a trustworthy and valid measure but deserves continuing attention for refinements. Expanding our measure based on the lived experience of survivors can help BHS-TR better capture the significant hindrances faced and the immense amount of effort survivors often take to seek help. Measuring the various barriers to seeking help for trauma recovery among survivors can move the IPV help-seeking literature into a more holistic and survivor-centered direction. This study adds to the growing literature supporting the benefits of using mixed methods for instrument development and validation. Moreover, its findings highlight the importance of giving attention to the voices of the target population throughout the validation process. Finally, the authors hope that the current study can serve as an exemplar to encourage mixed methods researchers faced with divergent findings to embrace the possibility of expanding insights from additional analyses and development of innovative follow-up strategies for a deeper, more nuanced understanding of complex phenomena.

Int. J. Environ. Res. Public Health **2022**, *19*, 4297

18 of 21

References

1. World Health Organization. *Violence against Women Prevalence Estimates, 2018: Global, Regional and National Prevalence Estimates for Intimate Partner Violence against Women and Global and Regional Prevalence Estimates for Non-Partner Sexual Violence against Women*; WHO: Geneva, Switzerland, 2021; ISBN 978-92-4-002225-6.
2. European Institute for Gender Equality. What is Gender-Based Violence? Available online: https://eige.europa.eu/gender-based-violence/what-is-gender-based-violence (accessed on 22 February 2022).
3. UN Women. *Gender Equality—Women's Rights in Review 25 Years after Beijing*; UN Women: New York, NY, USA, 2020; ISBN 978-92-1-127072-3.
4. World Health Organization. *Understanding and Addressing Violence against Women: Intimate Partner Violence*; WHO: Geneva, Switzerland, 2012.
5. European Institute for Gender Equality. *Gender Equality Index 2021: Health*; Publications Office of the European Union: Luxembourg, 2021; ISBN 978-92-9482-941-2.
6. United Nations. *Human Development Report 2020—The Next Frontier: Human Development and the Anthropocene*; United Nations Development Programme: New York, NY, USA, 2020; ISBN 978-92-1-126442-5.
7. World Economic Forum. *Global Gender Gap Report 2021*; World Economic Forum: Geneva, Switzerland, 2021; ISBN 978-2-940631-07-0.
8. Ministry of Welfare. *Male Violence against Women in Intimate Relationships in Iceland*; Ministry of Welfare: Reykjavík, Iceland, 2012; ISBN 978-9979-799-48-1.
9. Andersson, T.; Heimer, G.; Lucas, S. *Violence and Health in Sweden: A National Prevalence Study on Exposure to Violence among Women and Men and Its Association to Health*; The National Centre for Knowledge on Men's Violence against Women: Uppsala, Sweden, 2014; ISSN 1654-7195.
10. Official Statistics of Finland. *Statistics on Offenses and Coercive Measures*; Statistics Finland: Helsinki, Finland, 2020; ISSN 2342-9178.
11. European Union Agency for Fundamental Rights. *Violence against Women: An EU-Wide Survey—Main Results*; Publications Office of the European Union: Luxembourg, 2014; ISBN 978-92-9239-999-3.
12. Arnalds, Á.; Karlsdóttir, E. *Research on Violence against Women—The Experience of Women Aged 18–80 in Iceland*; Centre for Children and Family Research: Reykjavík, Iceland, 2010; ISBN 978-9979-9859-9-0. (In Icelandic)
13. Lutwak, N. The Psychology of Health and Illness: The Mental Health and Physiological Effects of Intimate Partner Violence on Women. *J. Psychol* **2018**, *152*, 373–387. [CrossRef]
14. Dutton, M.A.; Green, B.L.; Kaltman, S.I.; Roesch, D.M.; Zeffiro, T.A.; Krause, E.D. Intimate Partner Violence, PTSD, and Adverse Health Outcomes. *J. Interpers. Violence* **2006**, *21*, 955–968. [CrossRef] [PubMed]
15. García-Moreno, C.; Pallitto, C.; Devries, K.; Stöckl, H.; Watts, C.; Abrahams, N. *Global and Regional Estimates of Violence against Women: Prevalence and Health Effects of Intimate Partner Violence and Non-Partner Sexual Violence*; WHO: Geneva, Switzerland, 2013; ISBN 978-92-4-156462-5.
16. Bacchus, L.J.; Ranganathan, M.; Watts, C.; Devries, K. Recent Intimate Partner Violence against Women and Health: A Systematic Review and Meta-Analysis of Cohort Studies. *BMJ Open* **2018**, *8*, e019995. [CrossRef]

17. Alsaker, K.; Moen, B.E.; Morken, T.; Baste, V. Intimate Partner Violence Associated with Low Quality of Life—A Cross-Sectional Study. *BMC Women's Health* **2018**, *18*, 148. [CrossRef] [PubMed]
18. Hisasue, T.; Kruse, M.; Raitanen, J.; Paavilainen, E.; Rissanen, P. Quality of Life, Psychological Distress and Violence among Women in Close Relationships: A Population-Based Study in Finland. *BMC Women's Health* **2020**, *20*, 85. [CrossRef] [PubMed]
19. Daneshvar, S.; Shafiei, M.; Basharpoor, S. Group-based Compassion-focused Therapy on Experiential Avoidance, Meaning in Life, and Sense of Coherence in Female Survivors of Intimate Partner Violence with PTSD: A Randomized Controlled Trial. *J. Interpers. Violence* 2020, in press. [CrossRef] [PubMed]
20. Bonomi, A.E.; Thompson, R.S.; Anderson, M.; Reid, R.J.; Carrell, D.; Dimer, J.A.; Rivara, F.P. Intimate Partner Violence and Women's Physical, Mental, and Social Functioning. *Am. J. Prev. Med.* **2006**, *30*, 458–466. [CrossRef] [PubMed]
21. Saint Arnault, D.M.; O'Halloran, S. Using Mixed Methods to Understand the Healing Trajectory for Rural Irish women Years after Leaving Abuse. *J. Res. Nurs.* **2016**, *21*, 369–383. [CrossRef]
22. World Health Organization. *WHO Multi-Country Study on Women's Health and Domestic Violence against Women: Initial Results on Prevalence, Health Outcomes, and Women's Responses*; WHO: Geneva, Switzerland, 2005; ISBN 92-4-159358-X.
23. Cho, H.; Shamrova, D.; Han, J.; Levchenko, P. Patterns of Intimate Partner Violence Victimization and Survivors' Help-Seeking. *J. Interpers. Violence* **2020**, *35*, 4558–4582. [CrossRef] [PubMed]
24. Goodson, A.; Hayes, B.E. Help-Seeking Behaviors of Intimate Partner Violence Victims: A Cross-National Analysis in Developing Nations. *J. Interpers. Violence* **2021**, *36*, 4705–4727. [CrossRef] [PubMed]
25. Lövestad, S.; Vaez, M.; Löve, J.; Hensing, G.; Krantz, G. Intimate Partner Violence, Associations with Perceived Need for Help and Health Care Utilization: A Population-Based Sample of Women in Sweden. *Scand. J. Public Health* **2021**, *49*, 268–276. [CrossRef] [PubMed]
26. Bonomi, A.E.; Anderson, M.L.; Rivara, F.P.; Thompson, R.S. Health Care Utilization and Costs Associated with Physical and Nonphysical-Only Intimate Partner Violence. *Health Serv. Res.* **2009**, *44*, 1052–1067. [CrossRef]
27. García-Moreno, C.; Zimmerman, C.; Morris-Gehring, A.; Heise, L.; Amin, A.; Abrahams, N.; Montoya, O.; Bhate-Deosthali, P.; Kilonzo, N.; Watts, C. Addressing Violence against Women: A Call to Action. *Lancet* **2015**, *385*, 1685–1695. [CrossRef]
28. Daoud, N.; Kraun, L.; Sergienko, R.; Batat, N.; Shoham-Vardi, I.; Davidovitch, N.; Cohen, A. Patterns of Healthcare Services Utilization Associated with Intimate Partner Violence (IPV): Effects of IPV Screening and Receiving Information on Support Services in a Cohort of Perinatal Women. *PLoS ONE* **2020**, *15*, e0228088. [CrossRef] [PubMed]
29. McCloskey, L.A.; Lichter, E.; Williams, C.; Gerber, M.; Wittenberg, E.; Ganz, M. Assessing Intimate Partner Violence in Health Care Settings Leads to Women's Receipt of Interventions and Improved Health. *Public Health Rep.* **2006**, *121*, 435–444. [CrossRef] [PubMed]
30. Heron, R.L.; Eisma, M.C. Barriers and Facilitators of Disclosing Domestic Violence to the Healthcare Service: A systematic review of Qualitative Research. *Health Soc. Care Community* **2021**, *29*, 612–630. [CrossRef] [PubMed]
31. Palmieri, J.; Valentine, J.L. Using Trauma-Informed Care to Address Sexual Assault and Intimate Partner Violence in Primary Care. *J. Nurse Pract.* **2021**, *17*, 44–48. [CrossRef]
32. Lelaurain, S.; Graziani, P.; Lo Monaco, G. Intimate Partner Violence and Help-Seeking A Systematic Review and Social Psychological Tracks for Future Research. *Eur. Psychol.* **2017**, *22*, 263–281. [CrossRef]
33. Heywood, I.; Sammut, D.; Bradbury-Jones, C. A qualitative Exploration of 'Thrivership' among Women who Have Experienced Domestic Violence and Abuse: Development of a New Model. *BMC Women's Health* **2019**, *19*, 106. [CrossRef] [PubMed]
34. Sinko, L.; Goldner, L.; Saint Arnault, D.M. The Trauma Recovery Actions Checklist: Applying Mixed Methods to a Holistic Gender-Based Violence Recovery Actions Measure. *Sexes* **2021**, *2*, 363–377. [CrossRef]
35. Liang, B.; Goodman, L.; Tummala-Narra, P.; Weintraub, S. A Theoretical Framework for Understanding Help-Seeking Processes Among Survivors of Intimate Partner Violence. *Am. J. Community Psychol.* **2005**, *36*, 71–84. [CrossRef] [PubMed]
36. Schreiber, V.; Renneberg, B.; Maercker, A. Seeking Psychosocial Care After Interpersonal Violence: An Integrative Model. *Violence Vict.* **2009**, *24*, 322–336. [CrossRef] [PubMed]
37. Saint Arnault, D.M. Defining and Theorizing about Culture: The Evolution of the Cultural Determinants of Help-Seeking, Re-vised. *Nurs. Res.* **2018**, *67*, 161–168. [CrossRef] [PubMed]
38. Flasch, P.; Murray, C.E.; Crowe, A. Overcoming Abuse: A Phenomenological Investigation of the Journey to Recovery from Past Intimate Partner Violence. *J. Interpers. Violence* **2017**, *32*, 3373–3401. [CrossRef]
39. Melgar Alcantud, P.; Campdepadrós-Cullell, R.; Fuentes-Pumarola, C.; Mut-Montalvà, E. 'I Think I Will Need Help': A systematic Review of Who Facilitates the Recovery from Gender-Based Violence and How They Do So. *Health Expect.* **2021**, *24*, 1–7. [CrossRef] [PubMed]
40. Overstreet, N.M.; Quinn, D.M. The Intimate Partner Violence Stigmatization Model and Barriers to Help Seeking. *Basic Appl. Soc. Psych.* **2013**, *35*, 109–122. [CrossRef]
41. Robinson, S.R.; Ravi, K.; Voth Schrag, R.J. A Systematic Review of Barriers to Formal Help Seeking for Adult Survivors of IPV in the United States, 2005–2019. *Trauma Violence Abus.* **2021**, *22*, 1279–1295. [CrossRef] [PubMed]
42. Rodelli, M.; Koutra, K.; Thorvaldsdottir, K.B.; Bilgin, H.; Ratsika, N.; Testoni, I.; Saint Arnault, D.M. Conceptual Development and Content Validation of a Multicultural Instrument to Assess the Normalization of Gender-Based Violence against Women. *Sex. Cult.* **2022**, 1–22. [CrossRef]

43. Hien, D.; Ruglass, L. Interpersonal Partner Violence and Women in the United States: An Overview of Prevalence Rates, Psychiatric Correlates and Consequences and Barriers to Help Seeking. *Int. J. Law Psychiatry* **2009**, *32*, 48–55. [CrossRef]

44. Fleming, C.E.; Resick, P.A. Help-Seeking Behavior in Survivors of Intimate Partner Violence: Toward an Integrated Behavioral Model of Individual Factors. *Violence Vict.* **2017**, *32*, 195–209. [CrossRef]

45. Johnson, R.B.; Onwuegbuzie, A.J.; Turner, L.A. Toward a Definition of Mixed Methods Research. *J. Mix. Methods Res.* **2007**, *1*, 112–133. [CrossRef]

46. Onwuegbuzie, A.J.; Johnson, R.B. The Validity Issue in Mixed Research. *Res. Sch.* **2006**, *13*, 48–63.

47. Tashakkori, A.; Teddlie, C. *Handbook of Mixed Methods in Social and Behavioral Research*; Sage Publications: Los Angeles, CA, USA, 2003; ISBN 0-7619-2073-0.

48. Campbell, D.T.; Fiske, D.W. Convergent and Discriminant Validation by the Multitrait-Multimethod Matrix. *Psychol. Bull.* **1959**, *56*, 81–105. [CrossRef] [PubMed]

49. Onwuegbuzie, A.J.; Bustamante, R.M.; Nelson, J.A. Mixed Research as a Tool for Developing Quantitative Instruments. *J. Mix. Methods Res.* **2010**, *4*, 56–78. [CrossRef]

50. Daigneault, P.; Jacob, S. Unexpected but Most Welcome: Mixed Methods for the Validation and Revision of the Participatory Evaluation Measurement Instrument. *J. Mix. Methods Res.* **2014**, *8*, 6–24. [CrossRef]

51. Sankofa, N.L. Transformativist Measurement Development Methodology: A Mixed Methods Approach to Scale Construction. *J. Mix. Methods Res.* **2021**, 1–21. [CrossRef]

52. Luyt, R. A Framework for Mixing Methods in Quantitative Measurement Development, Validation, and Revision. *J. Mix. Methods Res.* **2012**, *6*, 294–316. [CrossRef]

53. Koskey, K.L.K.; Sondergeld, T.A.; Stewart, V.C.; Pugh, K.J. Applying the Mixed Methods Instrument Development and Construct Validation Process: The Transformative Experience Questionnaire. *J. Mix. Methods Res.* **2018**, *12*, 95–122. [CrossRef]

54. Dellinger, A.B.; Leech, N.L. Toward a Unified Validation Framework in Mixed Methods Research. *J. Mix. Methods Res.* **2007**, *1*, 309–332. [CrossRef]

55. Fetters, M.D.; Curry, L.A.; Creswell, J.W. Achieving Integration in Mixed Methods Designs–Principles and Practices. *Health Serv. Res.* **2013**, *48*, 2134–2156. [CrossRef] [PubMed]

56. Fetters, M.D.; Molina-Azorin, J.F. The Journal of Mixed Methods Research Starts a New Decade: The Mixed Methods Research Integration Trilogy and Its Dimensions. *J. Mix. Methods Res.* **2017**, *11*, 291–307. [CrossRef]

57. Onwuegbuzie, A.J.; Johnson, R.B.; Collins, K.M.T. Assessing Legitimation in Mixed Research: A New Framework. *Qual. Quant.* **2011**, *45*, 1253–1271. [CrossRef]

58. Johnson, R.B.; Christensen, L.B. *Educational Research: Quantitative, Qualitative, and Mixed Approaches*, 6th ed.; Sage Publications: Los Angeles, CA, USA, 2017; ISBN 978-1483391601.

59. Perez, A.; Howell Smith, M.C.; Babchuk, W.; Lynch-O'Brien, L. Advancing Quality Standards in Mixed Methods Research: Extending the Legitimation Typology. *J. Mix. Methods Res.* 2002; *under review*.

60. Pluye, P.; Grad, R.M.; Levine, A.; Nicolau, B. Understanding Divergence of Quantitative and Qualitative Data (or Results) in Mixed Methods Studies. *Int. J. Mult. Res. Approaches* **2009**, *3*, 58–72. [CrossRef]

61. Bustamante, C. TPACK and Teachers of Spanish: Development of a Theory-Based Joint Display in a Mixed Methods Research Case Study. *J. Mix. Methods Res.* **2019**, *13*, 163–178. [CrossRef]

62. Boyle, M.H.; Offord, D.R.; Campbell, D.; Catlin, G.; Goering, P.; Lin, E.; Racine, Y.A. Mental Health Supplement to the Ontario Health Survey: Methodology. *Can. J. Psychiat.* **1996**, *41*, 549–558. [CrossRef] [PubMed]

63. Saint Arnault, D.M.; Zonp, Z. Understanding Help-Seeking Barriers after Gender-Based Violence: Validation of the Barriers to Help Seeking-Trauma Version (BHS-TR). *Arch. Psychiatr. Nurs.* **2022**, *37*, 1–9. [CrossRef] [PubMed]

64. Thorvaldsdottir, K.B.; Halldorsdottir, S.; Johnson, R.M.; Sigurdardottir, S.; Saint Arnault, D.M. Adaptation of the Barriers to Help-Seeking for Trauma (BHS-TR) Scale: A Cross-Cultural Cognitive Interview Study with Female Intimate Partner Violence Survivors in Iceland. *J. Patient-Rep. Outcomes* **2021**, *5*, 22. [CrossRef] [PubMed]

65. Thorvaldsdottir, K.B.; Halldorsdottir, S.; Saint Arnault, D.M. Understanding and Measuring Help-Seeking Barriers among Intimate Partner Violence Survivors: Mixed-Methods Validation Study of the Icelandic Barriers to Help-Seeking for Trauma (BHS-TR) Scale. *Int. J. Environ. Res. Public Health* **2022**, *19*, 104. [CrossRef]

66. Wild, D.; Grove, A.; Martin, M.; Eremenco, S.; McElroy, S.; Verjee-Lorenz, A.; Erikson, P. Principles of Good Practice for the Translation and Cultural Adaptation Process for Patient-Reported Outcomes (PRO) Measures: Report of the ISPOR Task Force for Translation and Cultural Adaptation. *Value Health* **2005**, *8*, 94–104. [CrossRef] [PubMed]

67. Ægisdóttir, S.; Gerstein, L.H.; Çinarbaş, D.C. Methodological Issues in Cross-Cultural Counseling Research: Equivalence, Bias, and Translations. *Couns. Psychol.* **2008**, *36*, 188–219. [CrossRef]

68. Boateng, G.O.; Neilands, T.B.; Frongillo, E.A.; Melgar-Quiñonez, H.R.; Young, S.L. Best Practices for Developing and Validating Scales for Health, Social, and Behavioral Research: A Primer. *Front. Public Health* **2018**, *6*, 1–18. [CrossRef] [PubMed]

69. Creswell, J.W.; Plano Clark, V.L. *Designing and Conducting Mixed Methods Research*, 3rd ed.; Sage Publications: Los Angeles, CA, USA, 2018; ISBN 9781483344379.

70. Mendlinger, S.; Cwikel, J. Spiraling Between Qualitative and Quantitative Data on Women's Health Behaviors: A Double Helix Model for Mixed Methods. *Qual. Health Res.* **2008**, *18*, 280–293. [CrossRef] [PubMed]

71. Collins, K.M.T.; Onwuegbuzie, A.J.; Jiao, Q.G. A Mixed Methods Investigation of Mixed Methods Sampling Designs in Social and Health Science Research. *J. Mix. Methods Res.* **2007**, *1*, 267–294. [CrossRef]
72. Tourangeau, R. Cognitive Sciences, and Survey Methods. In *Cognitive Aspects of Survey Methodology: Building a Bridge between Disciplines*; Jabine, T., Straf, M., Tanur, J., Tourangeau, R., Eds.; National Academy Press: Washington, DC, USA, 1984; pp. 73–100.
73. Willis, G.B. Research Synthesis the Practice of Cross-Cultural Cognitive Interviewing. *Public Opin. Q.* **2015**, *79*, 359–395. [CrossRef]
74. Kroenke, K.; Strine, T.W.; Spitzer, R.L.; Williams, J.B.W.; Berry, J.T.; Mokdad, A.H. The PHQ-8 as a Measure of Current Depression in the General Population. *J. Affect. Disord.* **2009**, *114*, 163–173. [CrossRef]
75. Wu, Y.; Levis, B.; Riehm, K.E.; Saadat, N.; Levis, A.W.; Azar, M.; Rice, D.B.; Boruff, J.; Cuijpers, P.; Gilbody, S.; et al. Equivalency of the Diagnostic Accuracy of the PHQ-8 and PHQ-9: A Systematic Review and Individual Participant Data Meta-Analysis. *Psychol. Med.* **2020**, *50*, 2816. [CrossRef] [PubMed]
76. Blevins, C.A.; Weathers, F.W.; Davis, M.T.; Witte, T.K.; Domino, J.L. The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): Development and Initial Psychometric Evaluation. *J. Trauma. Stress* **2015**, *28*, 489–498. [CrossRef] [PubMed]
77. Bovin, M.J.; Marx, B.P.; Weathers, F.W.; Gallagher, M.W.; Rodriguez, P.; Schnurr, P.P.; Keane, T.M. Psychometric Properties of the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (PCL-5) in Veterans. *Psychol. Assess.* **2016**, *28*, 1379–1391. [CrossRef] [PubMed]
78. Antonovsky, A. The Structure and Properties of the Sense of Coherence Scale. *Soc. Sci. Med.* **1993**, *36*, 725–733. [CrossRef]
79. Holmefur, M.; Sundberg, K.; Wettergren, L.; Langius-Eklöf, A. Measurement Properties of the 13-Item Sense of Coherence Scale using Rasch Analysis. *Qual. Life Res.* **2015**, *24*, 1455–1463. [CrossRef]
80. Eriksson, M.; Lindström, B. Validity of Antonovsky's Sense of Coherence Scale: A Systematic Review. *J. Epidemiol. Community Health* **2005**, *59*, 460–466. [CrossRef] [PubMed]
81. Guetterman, T.C.; Fetters, M.D.; Creswell, J.W. Integrating Quantitative and Qualitative Results in Health Science Mixed Methods Research Through Joint Displays. *Ann. Fam. Med.* **2015**, *13*, 554–561. [CrossRef] [PubMed]
82. Haynes-Brown, T.K.; Fetters, M.D. Using Joint Display as an Analytic Process: An Illustration Using Bar Graphs Joint Displays from a Mixed Methods Study of How Beliefs Shape Secondary School Teachers' Use of Technology. *Int. J. Qual.* **2021**, *20*, 1–14. [CrossRef]
83. Patton, M.Q. *Qualitative Research & Evaluation Methods*, 3rd ed.; Sage Publications: Los Angeles, CA, USA, 2002; ISBN 978-0761919711.
84. Greene, J.C. *Mixed Methods in Social Inquiry*, 1st ed.; Jossey-Bass: San Francisco, CA, USA, 2007; ISBN 978-0-7879-8382-6.
85. Coates, L.; Wade, A. Langauge and Violence: Analysis of Four Discursive Operations. *J. Fam. Violence* **2007**, *22*, 511–522. [CrossRef]
86. Wilson, D.; Smith, R.; Tolmie, J.; de Haan, I. Becoming Better Helpers: Rethinking Language to Move Beyond Simplistic Responses to Women Experiencing Intimate Partner Violence. *Policy Q.* **2015**, *11*, 25–31. [CrossRef]
87. Kantor, V.; Knefel, M.; Lueger-Schuster, B. Perceived Barriers and Facilitators of Mental Health Service Utilization in Adult Trauma Survivors: A Systematic Review. *Clin. Psychol. Rev.* **2017**, *52*, 52–68. [CrossRef]
88. Olafsson, S. Contemporary Icelanders—Scandinavian or American? *Scand. Rev.* **2003**, *91*, 6–14.
89. Andrade, L.H.; Alonso, J.; Mneimneh, Z.; Wells, J.E.; Al-Hamzawi, A.; Borges, G.; Bromet, E.; Bruffaerts, R.; de Girolamo, G.; de Graaf, R.; et al. Barriers to Mental Health Treatment: Results from the WHO World Mental Health Surveys. *Psychol. Med.* **2014**, *44*, 1303–1317. [CrossRef]
90. Sinko, L.; Burns, C.J.; O'Halloran, S.; Saint Arnault, D.M. Trauma Recovery is Cultural: Understanding Shared and Different Healing Themes in Irish and American Survivors of Gender-Based Violence. *J. Interpers. Violence* **2021**, *36*, 7765–7790. [CrossRef] [PubMed]
91. Shaghaghi, A.; Bhopal, R.S.; Sheikh, A. Approaches to Recruiting 'Hard-To-Reach' Populations into Research: A Review of the Literature. *Health Promot. Perspect.* **2011**, *1*, 86–94. [CrossRef]
92. Ellard-Gray, A.; Jeffrey, N.K.; Choubak, M.; Crann, S.E. Finding the Hidden Participant: Solutions for Recruiting Hidden, Hard-to-Reach, and Vulnerable Populations. *Int. J. Qual. Methods* **2015**, *14*, 38–48. [CrossRef]

Appendix

The 26-item BHS-TR Scale

Barriers to Help-Seeking for Trauma Sale

Think about your experiences and feelings that are a result of gender-based violence. In the last 12 months, how much did the following reasons influence you in <u>not</u> seeking help?

    (1) Did not influence me

    (2) Influenced me a little

    (3) Influenced me somewhat

    (4) Strongly influenced me

Structural Barriers Index

Financial Concerns

2. I was concerned that the help I needed would be too expensive

19. The available health insurance would not cover the type of treatment I needed

18. I did not have adequate financial resources

Unavailable/Not Helpful

15. I was not satisfied with the available services

16. I felt that the help available would not provide the type of treatment or help that was best for the problem

17. I had sought help before, but it did not help

External Constraints

14. I was worried that if others discovered my health problems or situation, I could lose my children, security, or housing

34. Others were preventing me from getting the help I needed

25. I was afraid of the consequences for myself, my children, or my family

Inconvenience

5. I had distance or transportation problems

8. I thought getting help would take too much time or was inconvenient

Internal Barriers Index

Weakness/Vulnerability

40. I thought that strong people should not need help

39. Getting help would mean that I had failed or had been defeated

35. I was scared of being seen as weak

41. Seeking help would require acknowledging things I did not want to face

24. I thought my situation was too personal or wanted to keep it private

Problem Management Beliefs

1. I thought the problem would probably get better by itself

11. I thought the situation was normal or was not severe

10. I wanted to or thought I should solve the problems on my own

Frozen/Confused

29. I could not seem to clarify my feelings or know what I needed

30. I was afraid I could not clearly express what I needed

26. I was confused or unable to plan out all the details or steps

27. I felt paralyzed or frozen and unable to get started

Shame

6. I was concerned about what others might think

7. I was ashamed

28. I believed that people would judge me