Evaluating the Relationship Between Intimate Partner Violence-Related Training and Mental Health Professionals' Assessment of Relationship Problems

Samantha C. Burns,[1] ⓘD Cary S. Kogan,[1]
Richard E. Heyman,[2] Heather M. Foran,[3]
Amy M. Smith Slep,[2]
Tecelli Domínguez-Martínez,[4] Jean Grenier,[1,5]
Chihiro Matsumoto,[6] Geoffrey M. Reed[7,8]

[1]University of Ottawa, ON, Canada
[2]New York University, New York, NY, USA
[3]University of Klagenfurt, Austria
[4]National Institute of Psychiatry "Ramón de la Fuente Muñiz," Mexico City, Mexico
[5]Montfort Hospital, Ottawa, ON, Canada
[6]Japanese Society of Psychiatry and Neurology, Tokyo, Japan
[7]Columbia University, New York, NY, USA
[8]World Health Organization, Geneva, Switzerland

Corresponding Author:
Cary S. Kogan, University of Ottawa, ON K1N 6N5, Canada.
Email: ckogan@uottawa.ca

Abstract

Intimate partner violence (IPV) is a serious public health problem associated with increased risk of developing mental health conditions. Assessment of IPV in mental health settings is important for appropriate treatment planning and referral; however, lack of training in how to identify and respond to IPV presents a significant barrier to assessment. To address this issue, the World Health Organization (WHO) advanced a series of evidence-based recommendations for IPV-related training programs. This study examines the relationship between mental health professionals' experiences of IPV-related training, including the degree to which their training resembles WHO training recommendations, and their accuracy in correctly identifying relationship problems. Participants were psychologists and psychiatrists (N = 321) from 24 countries who agreed to participate in an online survey in French, Japanese, or Spanish. They responded to questions regarding their IPV-related training (i.e., components and hours of training) and rated the presence or absence of clinically significant relationship problems and maltreatment (RPM) and mental disorders across four case vignettes. Participants who received IPV-related training, and whose training was more recent and more closely resembled WHO training recommendations, were more likely than those without training to accurately identify RPM when it was present. Clinicians regardless of IPV-related training were equally likely to misclassify normative couple issues as clinically significant RPM. Findings suggest that IPV-related training assists clinicians in making more accurate assessments of patients presenting with clinically significant relationship problems, including IPV. These data inform recommendations for IPV-related training programs and suggest that training should be repeated, multicomponent, and include experiential training exercises, and guidelines for distinguishing normative relationship problems from clinically significant RPM.

Keywords

Introduction

Intimate partner violence (IPV) is defined as any behavior within a relationship that causes—or has reasonable potential to cause—physical, sexual, or psychological harm to a partner (Foran et al., 2015; WHO, 2012). Globally, it is estimated that 35% of ever-partnered women have experienced lifetime IPV (WHO, 2013). IPV is associated with increased risk of developing mental health problems including depression, anxiety, post-traumatic stress disorder (PTSD), substance use disorders, and suicidal ideation (Bacchus et al., 2017; Laskey et al., 2019; Miller & McCaw, 2019; WHO, 2005). A systematic

review of IPV prevalence studies conducted in psychiatric settings reported that the median prevalence of lifetime IPV was 30%–33% among female patients (inpatient and outpatient) and 18%–48% among male inpatients (Oram et al., 2013). Furthermore, systematic reviews suggest that women living with serious mental illness (i.e., who have a recurrent or persistent mental disorder that significantly impacts their functioning) are more than twice as likely to have experienced violence of any kind, including IPV, compared to the general population (Khalifeh & Dean, 2010; Mauritz et al., 2013).

WHO guidelines recommend that health professionals screen for IPV when assessing or treating individuals with mental health symptoms (WHO, 2013). Identification of IPV by global mental health professionals (i.e., clinicians who are involved in the assessment and treatment of individuals living with mental health symptoms) may lead to more accurate IPV prevalence data (Ellsberg & Heise, 2005), and help enhance our understanding of IPV risk factors and mental health consequences (Foran et al., 2015). Additionally, IPV assessment in mental health settings may contribute to improved case conceptualizations and referrals to care. Advocacy-based interventions have been shown to improve survivors' quality of life and perceived social support (Sullivan & Bybee, 1999), whereas psychological treatments (e.g., cognitive behavioral therapy) have contributed to improved coping and social adjustment (Johnson & Zlotnick, 2006; McNamara et al., 2008) and decreased ratings of PTSD symptom severity (Johnson et al., 2011).

Despite the existence of best practice recommendations related to the assessment of IPV in mental health settings, IPV remains under-detected in these settings (Howard et al., 2010). Studies from Australia (Forsdike et al., 2019) and the United Kingdom (Nyame et al., 2013) found that more than half of mental health clinicians did not ask new patients about IPV. Furthermore, a survey of U.S. mental health service users identified that 45% of women and 73% of men had never been asked about their experiences of IPV (Chang et al., 2011).

Lack of IPV-related training has been identified as an important barrier for IPV assessment in mental health settings (Forsdike et al., 2019; Rose et al., 2011; Trevillion et al., 2016). Clinicians without training report lower confidence and competence in addressing the needs of patients experiencing IPV (Rose et al., 2011). IPV-related training is often not a mandatory component of professional training programs (Fricchione et al., 2012; Kamimura et al., 2015). Studies from the United States (Campbell et al., 1999), the United Kingdom (Nyame et al., 2013), and across 24 countries in South America, Europe, and Asia (Burns et al., 2020) show that nearly half of mental health clinicians have never received this form of training.

IPV-related training has been linked to improved outcomes for clinicians, including increased IPV-related knowledge (Burns et al., 2020; Forsdike et al., 2019; Jayatilleke et al., 2015; McColgan et al., 2010; Trevillion et al.,

2016), improved confidence in addressing IPV (Forsdike et al., 2019; Jayatilleke et al., 2015), reduced unhelpful attitudes towards survivors (e.g., victim blaming; Jayatilleke et al., 2015; McColgan et al., 2010), and greater likelihood of screening for IPV (Murray et al., 2016). Given the apparent benefits of IPV-related training, the WHO advanced a series of evidence-based training recommendations for health care professionals (WHO, 2013). These recommendations specify that IPV-related training should be multi-component and offered at several time points (e.g., at the prequalification and professional level). Recommended training components include didactic training (e.g., basic knowledge about IPV laws, prevalence, and risk factors as well as local support services for survivors) and skill-building exercises (e.g., teaching clinicians how and when to inquire about IPV, and how to respond to survivors). There has been no previous research evaluating the relationship between mental health professionals' experiences of IPV-related training, including the degree to which their training resembles WHO training recommendations, and their accuracy in correctly identifying IPV.

Context for the Present Research

This research was conducted in the context of a larger study evaluating the clinical utility of proposed relationship problem and maltreatment (RPM) guidelines, created as a part of the development of guidelines (First et al., 2015) for Mental, Behavioral and Neurodevelopmental Disorders for the Eleventh Revision of WHO's International Classification of Diseases and Related Health Problems (ICD-11), approved in May 2019 by the World Health Assembly. RPM guidelines are intended to assist clinicians with the identification and classification of clinically significant relationship problems, including IPV, that may lead people to seek health services. The larger study, created in English and later translated into French, Japanese, and Spanish, was developed to compare the use of proposed ICD-11 RPM guidelines to guidance provided in ICD-10. Heyman et al. (2018) reported the English-language results of the field trial ($N = 738$) and showed that ICD-11 RPM guidelines improved clinicians' performance over ICD-10. French, Japanese, and Spanish results have not yet been reported.

Aims and Objectives

The present study uses data collected from specialized mental health professionals (i.e., psychiatrists and psychologists) who completed the ICD-11 RPM field trial in French, Japanese, and Spanish. The primary objective of this study was to explore how global clinicians' experiences of IPV-related

training were related to accuracy in distinguishing between different forms of IPV and normative relationship problems in a series of case-controlled vignettes. We hypothesized that clinicians with IPV training would be more likely to correctly identify relationship problems, including IPV, than those without training. We also hypothesized that clinicians with training that more closely resembled WHO training recommendations would perform better at identifying relationship problems. A secondary objective of this study was to assess differences in performance between the use of ICD-11 versus ICD-10 RPM guidelines within our sample. We hypothesized that, concordant with earlier findings (Heyman et al., 2018), ICD-11 guidelines would improve performance.

Method

Participants

Participants were members of the WHO's Global Clinical Practice Network (GCPN), a global network of more than 15,000 mental health professionals from 156 countries recruited to participate in the field trials for the development of the ICD-11 (Reed et al., 2015). This study was developed in English and later translated into French, Japanese, and Spanish by bilingual mental health professionals using a forward and backward translation procedure. Questions related to participants' IPV-related training were added to translated versions of the study and were not available for the English version. Because IPV-related training is the primary focus of this study, only French, Japanese, and Spanish data were used. To be eligible for the study, participants were required to (a) currently be providing mental health services and/or clinical supervision, and (b) be proficient or fluent in one of the three study languages. GCPN members meeting these eligibility criteria ($N = 3233$; French, $n = 713$, Japanese, $n = 1,022$, Spanish, $n = 1,498$) were sent personalized email invitations with a secure link to the study. Reminder emails were sent two and four weeks later. Data were collected over approximately two months. Participants ($n = 604$, 19% of those invited: French, $n = 139$, Japanese, $n = 147$, Spanish, $n = 318$) responded to the survey link and began the study. Participants who did not meet eligibility criteria ($n = 24$) or who did not complete the study ($n = 189$) were removed. Because the present study compared results across WHO global regions, participants from regions with response rates too low to permit this analysis were removed (i.e., Africa, $n = 7$, Eastern Mediterranean, $n = 5$, North America, $n = 2$). Finally, we were interested in examining the results concerning IPV-related training for

psychologists and psychiatrists, since they are specialized mental health professionals who are involved in both the assessment and treatment of patients and who make up most of the GCPN. Thus, participants from other professions ($n = 56$) were removed. The final sample comprised 321 participants from 24 countries (Table 1).

Table 1. Demographic Information ($N = 321$).

Variable	n (%)
Gender	
Male	195 (60.7)
Female	126 (39.3)
Profession	
Psychiatry	173 (53.9)
Psychology	148 (46.1)
Study language	
Japanese	89 (27.7)
French	51 (15.9)
Spanish	181 (56.4)
Global region[1]	
Japan	89 (27.7)
Europe	113 (35.2)
Latin America	119 (37.1)
Income level[2]	
High	206 (64.2)
Upper-middle	110 (34.3)
Lower-middle	5 (1.5)
	M (SD)
Age	49.78 (10.96)
Years of experience	19.81 (10.06)

Note. [1]Participants from Europe included participants from the following countries: Croatia, Cyprus, France, Poland, Portugal, Romania, Spain, and Switzerland; participants from Latin American included participants from Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Nicaragua, Panama, Peru, and Venezuela.

[2]National income level was assigned based on the World Bank country income classification (2016). There were no participants from low-income countries.

Data and Materials

Demographic Information

Participants provided basic demographic information (i.e., gender, age, years of professional experience, profession, and country of residence) during their registration to the GCPN, and again upon initiating the current study. Participants completed the study in one of three languages (i.e., French, Japanese, or Spanish) and were classified into one of the eight WHO regions and one of four national income levels (i.e., high, upper-middle, lower-middle, low) based on their country of residence. There was significant overlap among region, study language, and national income level variables. Notably, all participants from Japan completed the study in Japanese ($n = 89$), and all participants from Latin America completed the study in Spanish ($n = 119$). Participants from Europe completed the study in either Spanish ($n = 62$) or French ($n = 51$). Furthermore, all participants from Japan and almost all participants from Europe (99%) were from high-income countries, while most participants from Latin America (95%) were from middle-income countries. Because language and country income are dependent on region, only the region variable was included in the analyses.

IPV-Related Training

Participants' experiences of IPV-related training were measured with five questions. The first question asked participants to respond "Yes" or "No" to the following statement: "Please indicate whether, at any point during your clinical training or professional career, you have received formal training (e.g., as a part of courses, workshops, continuing education programs) about how to detect or respond to IPV, including physical and psychological abuse." Those who selected "No" were not shown the following questions. The second question was based on the WHO's IPV-related training recommendations (WHO, 2013) and asked participants to specify which components from the following list were included in their training: (a) definitions, laws and risk factors related to IPV, (b) support services for survivors of IPV, (c) how and when to inquire about IPV with patients, and (d) how to respond to survivors of IPV. The final three questions asked participants to input the number of hours dedicated to IPV-related training at three different time points: during their professional training, since completing their professional training, and during the past five years.

ICD Guidelines

The proposed ICD-11 RPM Clinical Descriptions or ICD-10 RPM Guidelines (WHO, 1992) were randomly assigned to participants for use when diagnosing persons described in vignettes. RPM Clinical Descriptions and Guidelines provide clinicians with a set of essential (required) features for diagnosing the presence or absence of clinically significant relationship problems.

Participants were also asked to use ICD-11 diagnostic definitions for mood disorders and anxiety and fear-related disorders.

Vignettes

Three co-authors RH, HF, and AS developed 12 vignettes for the study based on actual clinical cases with all identifying information removed. Vignettes depicted 6 male and 6 female adults of various ages who were in heterosexual relationships. Information related to cultural or religious background was omitted to mitigate participant biases when evaluating the vignettes. Vignettes reflected four study conditions: (I) features consistent with both a clinically significant RPM and a mental and behavioral disorder (MBD) (both RPM and MBD present), (II) features consistent with only a RPM (RPM present, MBD absent), (III) features consistent with only a MBD (RPM absent, MBD present), and (IV) features consistent with neither a RPM or a MBD (both RPM and MBD absent). Each vignette described a patient presenting with either the presence or absence of one of three ICD-11 RPMs (i.e., relationship distress with spouse or intimate partner; spouse or partner violence, physical; or spouse or partner abuse, psychological), and the presence or absence of one of two MBDs (i.e., single episode depressive disorder or generalized anxiety disorder). When an RPM was absent, normative relationship problems were described; when a MBD was absent, subthreshold psychiatric symptoms were described. Further details of vignette development and validation are provided in Heyman et al. 2018.

Procedure

This study was exempted from review by the World Health Organization (WHO) Research Ethics Review Committee (Protocol ID RPC569) and by the Human Subjects Committee at the University of Kansas, Lawrence Campus (HSCL #20804).

Participants were sent an email invitation to participate in the study and followed an individualized link to the survey in Qualtrics® (Provo, USA). Participants who initiated the study were randomly assigned to view either ICD-11 or ICD-10 RPM guidelines for use throughout the study, without any explicit indication as to which version they were viewing. All participants viewed ICD-11 MBD diagnostic definitions for mood disorders and anxiety and fear-related disorders. After viewing the guidelines, participants were randomly assigned to one of 6 vignette comparison conditions. Comparisons were created for each vignette to have an equal probability of being presented throughout the study, and a similar probability of being presented with any of the other vignettes. Each comparison was composed of four vignettes, and

each vignette was drawn from a different study condition: (I) both RPM and MBD present, (II) RPM present, MBD absent, (III) RPM absent, MBD present, or (IV) both RPM and MBD absent. Vignettes were presented with the order of presentation counterbalanced across participants. After viewing each vignette, participants were asked to select a MBD diagnosis, or no diagnosis, followed by a RPM category, or no RPM, from drop-down lists of ICD categories (i.e., ICD-11 MBD categories and ICD-10 or ICD-11 RPM categories). Participants could consult MBD definitions and RPM guidelines while making their decisions. Participants completed this sequence four times, once for each vignette (see Heyman et al., 2018 for a full description of the methodology for the larger field trial). Finally, participants responded to the five questions about their IPV-related training experiences.

Results

Participants

The representativeness of our sample was determined by comparing participants who completed the survey (i.e., completers) to clinicians who were invited to the study but did not participate (nonparticipants), and to participants who initiated the study but did not complete it (noncompleters). Completers did not differ significantly from nonparticipants or noncompleters in terms of gender, profession, region, or proportion of participants in each survey language. However, completers had slightly more professional experience ($M = 19.54$, $SD = 10.12$) than nonparticipants ($M = 18.12$, $SD = 11.00$; $t(2,447) = 2.207$, $p < .05$) and noncompleters ($M = 17.62$, $SD = 9.27$; $t(508) = 2.085$, $p < .05$). Completers were also slightly older ($M = 49.64$, $SD = 10.99$) than nonparticipants ($M = 48.10$, $SD = 12.15$; $t(2447) = 2.175$, $p < .05$) and noncompleters ($M = 47.33$, $SD = 10.92$; $t(508) = 2.094$, $p < .05$).

ICD Version

Chi-square analyses were used to compare participants' accuracy (i.e., percentage of those who diagnosed correctly versus those who did not diagnose correctly) while identifying RPM and MBD in each study condition, using ICD-11 versus ICD-10 RPM guidelines. The accuracy of clinicians' diagnoses was not significantly different for the ICD-11 guidelines as compared to the ICD-10 guidelines. For this reason, the two ICD conditions were collapsed for subsequent analyses.

RPM Conditions

Each of the vignettes depicted patients presenting with MBD symptoms that either met full definitional requirements for a diagnosis (MBD present) or were subthreshold, which included some but not all the required features of a MBD (MBD absent). Differences in performance between MBD-present and MBD-absent conditions were relevant for the purposes of the larger ICD-11 field trial (Heyman et al., 2018) but were not pertinent for the current study. Therefore, for all following analyses, conditions I (both RPM and MBD present) and II (RPM present, MBD absent) were combined to form an RPM present condition, and conditions III (RPM absent, MBD present) and IV (both RPM and MBD absent) were combined to form an RPM absent condition. These new conditions represent two distinct assessment tasks for clinicians: identifying RPM in the presence of harmful relationship problems (RPM present) and identifying that there is no RPM when normal relationship problems are described (RPM absent).

Demographic Factors

Table 2 presents results of chi-square analyses of the relationship between categorical demographic factors (gender, profession, and region) and clinicians' accuracy (i.e., percentage of clinicians who had 0, 1, or 2 correct responses) when assessing for RPM and MBDs in each RPM condition (present; absent). To account for family-wise error, the Benjamini–Hochberg procedure was applied to all analyses. Significant differences were found for region in the RPM absent condition, while assessing for both RPM and MBDs. Notably, when the task was to identify the absence of relationship problems, clinicians from Japan performed significantly better than those from Europe or Latin America. When the task was to identify a mental disorder when RPM was absent, clinicians from Japan performed significantly better than those from Latin America.

Multinomial logistic regressions were run to explore the relationship between age, years of professional experience, and diagnostic accuracy. In both RPM conditions (present; absent), when the task was to diagnose RPM, there was no relationship between age or years of professional experience and accuracy. However, when the task was to diagnose a MBD, accuracy was significantly related with age and years of professional experience in both RPM conditions. When RPM was present, younger clinicians were more likely than older clinicians to have 1 or 2 correct responses while diagnosing MBDs (maximum possible is 2), compared with 0 ($\chi^2(1, N = 321) = 9.44, p < .01$). Also, clinicians with less experience were more likely than those with more experience to have 2

Table 2. Accuracy of Clinicians' Diagnoses by Response Condition and Demographic Variable.

	RPM Present						RPM Absent					
	RPM			MBD			RPM			MBD		
No. of Correct Responses	0	1	2	0	1	2	0	1	2	0	1	2
Variables												
Gender												
Female (n = 126)	9%	29%	62%	7%	44%	49%	14%	57%	29%	16%	36%	48%
Male (n = 195)	8%	42%	50%	10%	38%	52%	12%	49%	39%	9%	40%	51%
Chi-square (χ^2)	5.01			1.54			3.14			3.27		
Cramer's V	0.125			0.069			0.099			0.101		
Profession												
Psychiatrist (n = 173)	8%	39%	53%	10%	40%	50%	13%	48%	39%	8%	39%	53%
Psychologist (n = 148)	9%	35%	56%	8%	40%	52%	12%	57%	31%	16%	37%	47%
Chi-square (χ^2)	0.63			0.35			2.59			5.06		
Cramer's V	0.044			0.033			0.090			0.126		
Region												
Japan (n = 89)	10%	45%	45%	8%	45%	47%	7%	40%	53%	7%	30%	63%
Europe (n = 113)	6%	36%	58%	8%	40%	52%	13%	60%	27%	10%	46%	44%
Latin America (n = 119)	9%	31%	60%	11%	37%	52%	17%	53%	30%	18%	36%	46%
Chi-square (χ^2)	5.98			1.87			18.90***			13.21**		
Cramer's V	0.096			0.054			0.172			0.143		

Note. **p < .01; ***p < .001. Statistically significant with Benjamini–Hochberg correction.

correct responses (out of a maximum of 2), compared with 0 ($\chi^2(1, N = 321) = 8.03, p < .05$). When RPM was absent, younger clinicians were more likely than older clinicians to have 2 correct responses while diagnosing MBDs, compared with 1 ($\chi^2(1, N = 321) = 6.76, p < .05$). Also, clinicians with less experience were more likely than those with more experience to have 2 correct responses, compared with 1 ($\chi^2(1, N = 321) = 7.46, p < .05$).

IPV-Related Training

Chi-square analyses were performed to evaluate the relationship between IPV-related training (i.e., received training: yes or no) and accuracy (i.e., percentage who had 0, 1, or 2 correct diagnoses) when assessing for RPM and MBDs in both RPM conditions (present; absent).

Due to significant differences in performance across global regions (Japan, Europe, and Latin America) in the RPM absent condition, chi-square analyses were conducted separately by region. As shown in Table 3, there were no significant differences. Across all regions, when RPM was absent, IPV-related training did not impact the likelihood of identifying the absence of RPM. As anticipated, IPV-related training also did not impact the likelihood of correctly identifying a MBD.

Table 3 also shows clinicians' performance when assessing for RPM and MBDs when RPM is present. Results showed that clinicians with IPV-related training ($n = 172$) were significantly more likely than those without training ($n = 149$) to have more correct responses when identifying RPM. As anticipated, there was no relationship between IPV-related training and the likelihood of correctly identifying a MBD.

Training factors (i.e., timing of training, number of hours, and depth of content) were examined to determine their impact on the likelihood of accurately identifying RPM.

Timing of training: Chi-square analyses were performed to evaluate the relationship between IPV-related training (i.e., whether clinicians had received training: yes or no) and accuracy (i.e., the percentage of clinicians who had 0, 1, or 2 correct responses) at different time points (i.e., during professional training; since completing professional training; and in the past 5 years). The Benjamini–Hochberg procedure was applied to all analyses to correct for family-wise error. Clinicians who received IPV-related training after completing their professional training ($\chi^2(2, N = 305) = 6.55, p < .05$) and in the past 5 years ($\chi^2(2, N = 300) = 6.48, p < .05$) were significantly more likely to correctly identify RPM than clinicians without training. Clinicians who received IPV-related training during their professional training programs were not more likely than those without training to correctly identify RPM, ($\chi^2(2, N = 298) = 4.88, p > .05$).

Table 3. Accuracy of Clinicians' Diagnoses by Response Condition, RPM Condition, Region, and IPV-Related Training.

			RPM			MBD		
No. of Correct Responses			0	1	2	0	1	2
Condition	Region	Training						
RPM absent	Japan	Yes (n = 10)	10%	50%	40%	10%	20%	70%
		No (n = 79)	6%	39%	55%	6%	32%	62%
		Chi-square (χ^2)	0.78			0.66		
		Cramer's V	0.094			0.086		
	Europe	Yes (n = 64)	14%	64%	22%	11%	48%	41%
		No (n = 49)	12%	55%	33%	8%	43%	49%
		Chi-square (χ^2)	1.65			0.85		
		Cramer's V	0.121			0.086		
	Latin America	Yes (n = 98)	15%	53%	32%	15%	39%	46%
		No (n = 21)	24%	52%	24%	29%	24%	47%
		Chi-square (χ^2)	1.10			2.81		
		Cramer's V	0.096			0.154		
RPM present	All regions combined[1]	Yes (n = 172)	8%	31%	61%	11%	36%	54%
		No (n = 149)	9%	44%	47%	7%	46%	48%
		Chi-square (χ^2)	6.21*			4.25		
		Cramer's V	0.139			0.115		

Note. [1]Regions are combined since there are no significant differences in performance across regions in the RPM present condition (Table 2).

*p < .05.

Hours of training: Two multinomial logistic regressions were carried out to investigate whether the number of hours of IPV-related training (during professional training and since completing professional training, respectively) were related to clinicians' accuracy in identifying RPM (i.e., the likelihood of having 0, 1, or 2 correct responses). Boxplots adjusted for skewed distributions (Walker et al., 2018) were used to detect and remove outliers for each "number of hours of IPV-related training" variable (i.e., during professional training [$n = 5$], and since completing professional training [$n = 8$]). Multinomial regression results showed that the number of hours of training did not significantly predict the likelihood of having a greater number of correct responses, either during professional training ($\chi^2(2, n = 148) = 1.40, p > .05$) or after professional training ($\chi^2(2, n = 152) = 0.57, p > .05$).

Depth of training. The WHO recommends 4 components to be included in IPV-related training protocols (i.e., basic information on IPV, information about local support services for survivors, how and when to inquire about IPV, and how to offer support to survivors; WHO & PAHO, 2013). Depth of training was defined as the number of training components that participants reported receiving as part of their IPV-related training. Less than half of participants (49.4%, $n = 85$) indicated that all 4 components were part of their training, and 31 participants (18.0%) noted that their training contained only one component, most often basic information on IPV ($n = 15$). Twenty-nine participants (16.9%) reported receiving two components of training, most often basic information on IPV paired with information about local support services ($n = 14$). Twenty-nine clinicians (16.9%) reported three components of training, most often basic information on IPV paired with how and when to inquire about IPV and how to offer support to survivors ($n = 11$). Four participants (2.3%) indicated that they received training that contained none of these components. A full report of participants' IPV-related training experiences is provided in (Burns et al., 2020).

Table 4 presents the results of a chi-square analysis assessing the relationship between the number of training components that participants received (0–4) and their accuracy when assessing for RPM (i.e., percentage who had 0, 1, or 2 correct responses). Results show a significant relationship between the number of training components and clinicians' accuracy. *Post hoc* chi-square analyses were performed to determine what number of training components, compared with no training, were related to an increased likelihood of accurately identifying RPM. The Benjamini–Hochberg procedure was applied to all analyses to correct for family-wise error. Results showed that clinicians who received only one component of training ($\chi^2 (2, n = 183) = 2.72, p > .05$) or two components of training ($\chi^2 (2, n = 181) = 0.15, p > .05$) did not perform better than those without training. However, clinicians who received 3 ($\chi^2 (2, n = 181) = 7.42, p < .025$) or 4 components of training ($\chi^2 (2, n = 235) = 7.59, p < .05$) performed significantly better than those without training.

Table 4. Accuracy of Clinicians' Diagnoses of RPM by Number of Training Components.

No. of Correct Responses	0	1	2
No. of Training Components			
0 (*n* = 153)	9%	44%	47%
1 (*n* = 30)	17%	30%	53%
2 (*n* = 28)	8%	46%	46%
3 (*n* = 28)	4%	21%	75%
4 (*n* = 82)	6%	28%	66%
Performance (χ^2)		16.46*	
Cramer's V		0.226	

Note. *$p < .05$. Statistically significant with Benjamini–Hochberg correction.

Discussion

This study explored the relationship between global psychologists' and psychiatrists' IPV-related training experiences and diagnostic accuracy in the context of relationship problems and partner violence. Specifically, we hypothesized that IPV-trained clinicians with training more closely resembling WHO recommendations (WHO, 2013) would be more likely than those without training to accurately distinguish among different forms of clinically significant RPM and normative relationship problems. This study also assessed differences in performance between the use of ICD-11 versus ICD-10 RPM guidelines within our sample.

The findings show that, across all study conditions, the use of ICD-11 guidelines did not improve participants' performance over ICD-10 for specific case vignettes. Heyman et al. 2018 reported on the English-language data and found that ICD-11 outperformed ICD-10. These authors considered participants to have correctly responded if they selected any RPM category, regardless of whether it was the one described in the vignette. This was done to increase comparability between ICD manuals. In contrast, in the current study, to measure response accuracy participants were only rated as having a correct response if they selected the specific RPM described in the vignette. Results from both studies suggest that ICD-11 guidelines assist clinicians in identifying when an RPM is present but are less helpful in making accurate distinctions between different forms of relationship problems. Further review and revision of proposed ICD-11 RPM guidelines may be needed to address this issue, prior to the planned release of the ICD-11 clinical descriptions and diagnostic guidelines in 2022. Importantly, this finding highlights the need

for additional training to assist clinicians in making accurate assessments of patients presenting with relationship problems, including IPV.

To determine whether clinician factors impacted performance, we assessed the relationship between seven demographic variables and participants' diagnosis of RPM and MBDs in two study conditions (RPM present; RPM absent). Findings showed that when the task was to correctly identify an RPM (i.e., RPM present condition), none of the demographic variables impacted performance. However, when the task was to correctly identify the absence of RPM (i.e., RPM absent condition), significant differences in performance were found across regions. Clinicians from Europe and Latin America were more likely to misclassify normative relationship problems as clinically significant RPM, compared to participants from Japan. Cultural differences in clinical decision-making may have influenced these results. Western clinicians have been found to employ a more analytical approach to diagnosis, retaining only details that assist in making categorical judgments, whereas East Asian clinicians appear to take a more holistic approach by gathering and remembering various types of details (Nisbett et al., 2001). Vignettes were created to depict normative relationship problems with features that fell just below the threshold for an RPM. It is possible that clinicians from Europe and Latin America (i.e., Western) were more likely than Japanese clinicians to adopt an analytical approach and sought to fit sub-threshold vignette features to clinical guidelines, leading to over-identification of RPM.

A second possible explanation for regional differences in performance is that certain cultural factors may impact clinicians' familiarity with diagnosing relationship problems in clinical practice. Research suggests that Japanese individuals hold more patriarchal gender norms than individuals living in Western countries (Hofstede et al., 2010; Yamawaki et al., 2009), which can contribute to the perception of IPV as a private family matter rather than a public health issue (Nagae & Dancy, 2010; Nguyen et al., 2013; Yamawaki et al., 2009). IPV survivors in Japan report feeling ashamed of disclosing violence (Nagae & Dancy, 2010; Weingourt et al., 2001), and a national survey revealed that only 6% of women who experienced IPV had disclosed this to a health professional (Cabinet Office, 2012, as cited in Umeda et al., 2017). This is a lower rate of disclosure than reported in Western countries (e.g., Canada, where 32% of IPV survivors disclosed violence to a health care worker; Mont et al., 2005). Furthermore, a randomized control trial of IPV screening practices in Japanese antenatal care found that women were more likely to disclose IPV using a self-report questionnaire, compared with a face-to-face interview with a health provider (Kataoka et al., 2010). It is possible that these cultural factors could contribute to Japanese clinicians having

less experience assessing and identifying relationship problems in their regular practice, compared with clinicians from other regions. Thus, when presented with ambiguous patient presentations, participants from Japan may have been more likely to rely on ICD guidelines to make correct diagnoses. In contrast, participants from Europe and Latin America, who may have more clinical experience with IPV, could have been more likely to apply clinical intuition instead of guidelines to diagnose vignettes, leading to over-identification of RPM

Findings also showed that in both study conditions (i.e., RPM present; RPM absent), age and years of professional experience were related to performance when assessing for a MBD. Younger clinicians and those with less experience were more likely to correctly diagnose a Mental or Behavioral Disorder (presence or absence), compared with older clinicians and those with more experience. Clinicians with more experience are more likely to rely on faster intuitive judgment than slow, deliberate, analytical judgment when presented with familiar patient presentations (Schwartz & Elstein, 2009). Intuitive judgment relies on heuristics, and although it is more time-efficient, it can lead to diagnostic errors (Croskerry & Nimmo, 2011). It is possible that when presented with patients describing familiar mood and anxiety symptoms, older clinicians with more experience were more likely to rely on intuitive judgment than younger clinicians with less experience, leading to misclassification of subthreshold mood and anxiety symptoms as clinical disorders.

The main findings of this study described the relationship between IPV-related training and mental health clinicians' performance when assessing for RPM across two study conditions: when RPM was present (i.e., when the task was to identify RPM and distinguish between its different forms), and when RPM was absent (i.e., when the task was to distinguish between normative relationship problems and RPM). In the RPM-absent condition, results showed that across all regions, IPV-related training was unrelated to performance. Specifically, clinicians with and without training appeared to have similar difficulty with correctly identifying that RPM was absent. Amongst clinicians without training, 45%–76% incorrectly classified normative relationship problems as RPM on at least one occasion. Similarly, 60%–78% of clinicians who had received IPV-related training made at least one classification error across the two presented vignettes. It is possible that over-identification of RPM was related to the study design, whereby clinicians were asked to assess for RPM and therefore may have been more likely to assign subclinical features to clinically significant RPM. Nonetheless, these results suggest that IPV-related training programs may benefit from including specific

guidelines on how to distinguish normative relationship problems from clinically significant RPM.

In the RPM present condition, participants who had prior IPV-related training were more likely than those without training to accurately identify RPM. This finding suggests that IPV-related training assists mental health clinicians in making more accurate clinical decisions while assessing patients presenting with RPM. It builds on previous research citing benefits of IPV-related training including improved knowledge and confidence with regards to addressing IPV (Burns et al., 2020; Forsdike et al., 2019; Jayatilleke et al., 2015) and improved IPV-related screening practices (Murray et al., 2016). As hypothesized, in both the RPM-present and RPM-absent conditions, IPV-related training was not associated with clinicians' performance while identifying a MBD. This suggests that participants' superior performance while assessing for RPM is related to IPV-related training specifically, rather than their amount of overall professional training. Clinicians with more overall training would presumably have also performed better at identifying a MBD.

To help inform IPV-related training protocols, the current study also sought to explore the relationship between performance and different components of IPV-related training, based on the WHO's evidence-based training guidelines (WHO, 2013). Our findings showed that clinicians who received training in the past five years or after completing their professional training programs were more likely to accurately identify RPM than clinicians without training. Clinicians who had received IPV-related training during their professional training programs, however, were not more likely than those without training to correctly identify RPM. Furthermore, the number of hours of IPV-related training was not related to performance. Overall, these results imply that the recency of IPV-related training is more important than the amount of training to improve RPM identification. In line with WHO training recommendations (WHO, 2013), this suggests that clinicians would benefit from periodic IPV-related training throughout their careers.

This study also looked at the relationship between the number of WHO-recommended IPV-related training components and performance. WHO guidelines propose that IPV-related training should include didactic components (i.e., basic information about IPV, and local support services for survivors), and skills training components (i.e., how and when to inquire about IPV, and how to offer support to survivors; WHO, 2013). Our findings show that clinicians whose training included three or four of the recommended components were significantly more likely to correctly identify RPM than participants without training. However, participants whose training contained only one component (most commonly basic information about IPV) or two components (most commonly basic information about IPV combined with

information about local support services) performed similarly to those without training. It appears that clinicians whose IPV-related training more closely resembled WHO training recommendations were more likely to perform well at identifying RPM. Because clinicians who received three or more training components necessarily participated in at least one skills training exercise (i.e., learning how and when to inquire about IPV and/or how to respond to IPV), these results suggest that training that only provides basic information about IPV, without the addition of more experiential skills training, is not enough to improve clinical decision-making in the context of RPM. IPV-related training programs should be delivered in-depth and include experiential learning tasks. This finding in line with previous research showing that clinicians who participated in experiential IPV-related training activities, compared with didactic training, were more likely to report improved IPV-related attitudes and knowledge (Buranosky et al., 2012).

Limitations

Participants in this study were clinicians who volunteered to be members of the WHO's GCPN and responded to an invitation to participate in an online field trial for the revision of the ICD-11 relationship problem and maltreatment guidelines. Only 10% of GCPN members who were sent an invitation constituted the final sample. These clinicians may have chosen to participate because they had expertise in the assessment and treatment of patients presenting with RPM. Furthermore, participants were psychologists and psychiatrists only, from high-income (64.2%) and middle-income countries (35.8%) across three global regions: Japan, Europe (French- and Spanish-speaking Europeans only), and Latin America. Thus, results may not be generalizable to a broader sample of global mental health professionals.

A vignette-based method was used in this study to experimentally control case presentation. Research supports the use of vignettes as a valid and reliable method for assessing clinical practice (Evans et al., 2015); however, vignettes are necessarily brief and may lack the richness of information that clinicians would collect in their regular practice. Furthermore, clinicians' assessment of RPM in real-world clinical practice may be impacted by factors (e.g., discomfort asking about IPV; Sprague et al., 2012) that are absent in a vignette-based study. Thus, this study can only provide an analogue of participants' real-world assessment of RPM. Vignettes depicted patients presenting with relatively mild RPM, which included instances of IPV (i.e., physical and psychological partner violence) that met minimum definitional requirements for an RPM, as well as relationship distress with a spouse or intimate partner. Relationship distress is not a form of IPV; it was included

because it is an important risk factor for IPV (Stith et al., 2008) and is associated with negative mental health outcomes (e.g., depression, anxiety, and alcohol use disorder; Foran et al., 2015; Whisman, 2007). Less prevalent forms of IPV (e.g., sexual partner violence) were not included due to concerns about survey length. Thus, this study reports on the relationship between IPV-related training and clinicians' assessment of milder forms of RPM and may not be representative of clinical decision-making in the context of more severe IPV (e.g., intimate terrorism).

Clinicians' experiences of IPV-related training were measured using self-report data and may have been subject to bias. For example, participants could have inflated their training experiences to appear more socially desirable, or may have had difficulty accurately recalling the timing, duration, and content of their IPV-related training. Training experiences were also observed rather than experimentally manipulated, signifying that the content of training could vary widely across participants. Although we assessed for specific components of IPV-related training based on WHO training recommendations, it is possible that participants' unique training experiences included elements not captured in our survey that could have influenced performance. Moreover, participants were asked to select as many WHO-recommended training components as were included in their IPV-related training program from a drop-down list. Although this provided information on the characteristics of clinicians' training (e.g., content and number of components), participants' responses to this question were not independent and therefore it was not possible to compare between training components to determine which were more strongly related to performance.

Conclusion

This study evaluated the relationship between the use of ICD guidelines, IPV-related training, and global psychologists' and psychiatrists' accuracy when assessing for relationship problems, including IPV. Findings suggest that the use of descriptive ICD guidelines is not sufficient to guide clinicians in making accurate clinical decisions in the context of RPM. As such, study results will be used to assist the WHO in making improvements to proposed RPM guidelines for inclusion in the ICD-11. Results also imply that IPV-related training leads to improved diagnostic decision-making in the context of RPM. Clinicians who received IPV-related training were more likely than their counterparts to accurately distinguish between different forms of RPM and normative relationship problems. Training appeared to yield the best results when it was delivered recently and contained at least three WHO-recommended training activities, including more experiential skills training

exercises. Overall, these findings provide empirical support for the WHO's IPV-related training guidelines (WHO, 2013). Interestingly, clinicians with and without training appeared to misclassify normative relationship problems as RPM, suggesting that IPV-related training programs should also provide guidance on how to distinguish between normative and clinically significant relationship problems.

This study provides a glance at the relationship between global mental health professionals' experiences of IPV-related training and their diagnostic accuracy when assessing for relationship problems. Results can help to inform the development of IPV-related training programs to improve clinicians' decision-making in the context of RPM. Future research may expand on these findings by experimentally manipulating clinicians' experiences of IPV-related training in real-world settings, for improved ecological validity and better specification of components for inclusion in training programs.

Acknowledgments

Declaration of Conflicting Interests

Funding

ORCID iD

Samantha C. Burns　iD　https://orcid.org/0000-0003-4970-8168

References

Bacchus, L. J., Ranganathan, M., Watts, C., & Devries, K. (2017). Recent intimate partner violence against women and health: A systematic review and meta-analysis of cohort studies. *BMJ Open*, *8*(7). https://doi.org/10.1136/bmjopen-2017-019995

Buranosky, R., Hess, R., McNeil, M. A., Aiken, A. M., & Chang, J. C. (2012). Once is not enough: Effective strategies for medical student education on intimate partner violence. *Violence Against Women*, *18*(10), 1192–1212. https://doi.org/10.1177/1077801212465154

Burns, S. C., Kogan, C. S., Heyman, R. E., Foran, H. M., Smith Slep, A. M., Dominguez-Martinez, T., Grenier, J., Matsumoto, C., & Reed, G. M. (2020). Exploring mental health professionals' experiences of intimate partner violence-related training: Results from a global survey. *Journal of Interpersonal Violence*. https://doi.org/10.1177/0886260520908020

Cabinet Office. (2012). *Government of Japan: Reports on intimate partner violence* (Danjyo kan ni okeru bouryoku ni kansuru chosa). Cabinet Office Government of Japan [In Japanese]. https://www.gender.go.jp/e-vaw/chousa/h24_boryoku_cyo-usa.html

Campbell, R., Raja, S., & Grining, P. L. (1999). Training mental health professionals on violence against women. *Journal of Interpersonal Violence*, *14*(10), 1003–1013.

Chang, J. C., Cluss, P. A., Burke, J. G., Hawker, L., Dado, D., Goldstrohm, S., & Scholle, S. H. (2011). Partner violence screening in mental health. *General Hospital Psychiatry*, *33*(1), 58–65. https://doi.org/10.1016/j.genhosp-psych.2010.11.009

Croskerry, P., & Nimmo, G. R. (2011). Better clinical decision making and reducing diagnostic error. *Journal of the Royal College of Physicians of Edinburgh*, *41*(2), 155–162. https://doi.org/10.4997/JRCPE.2011.208

Ellsberg, M., & Heise, L. (2005). *Researching violence against women: A practical guide for researchers and activists*. World Health Organization.

Evans, S. C., Roberts, M. C., Keeley, J. W., Blossom, J. B., Amaro, C. M., Garcia, A. M., Stough, C. O., Canter, K. S., Robles, R., & Reed, G. M. (2015). Vignette methodologies for studying clinicians' decision-making: Validity, utility, and application in ICD-11 field studies. *International Journal of Clinical and Health Psychology*, *15*(2), 160–170.

First, M. B., Reed, G. M., Saxena, S., & Hyman, S. E. (2015). The development of the ICD-11 clinical descriptions and diagnostic guidelines for mental and behavioral disorders. *World Psychiatry*, *14*(1), 82–90. https://doi.org/10.1002/wps.20189

Foran, H. M., Beach, S. R. H., Slep, A. M., Heyman, R. E., & Wamboldt, M. Z. (2015). *Family problems and family violence: Reliable assessment and the ICD-11*. Springer Publishing Company. ISBN: 9780826109118.

Forsdike, K., O'Connor, M., Castle, D., & Hegarty, K. (2019). Exploring Australian psychiatrists' and psychiatric trainees' knowledge, attitudes and preparedness in responding to adults experiencing domestic violence. *Australasian Psychiatry*, *27*(1), 64–68. https://doi.org/10.1177/1039856218789778

Fricchione, G. L., Borba, C. P. C., Alem, A., Shibre, T., Carney, J. R., & Henderson, D. C. (2012). Capacity building in global mental health: Professional training. *Harvard Review of Psychiatry*, *20*(1), 47–57.

Heyman, R. E., Kogan, C. S., Foran, H. M., Burns, S. C., Slep, A. M. S., Wodja, A. K., Keeley, J. W., Rebello, T. J., & Reed, G. M. (2018). A case-controlled field study evaluating ICD-11 proposals for relational problems and intimate partner violence. *International Journal of Clinical Health Psychology*, *18*(2), 113–123. https://doi.org/10.1016/j.ijchp.2018.03.001

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind: Intercultural cooperation and its importance for survival* (3rd ed.) McGraw-Hill.

Howard, L. M., Trevillion, K., & Agnew-Davies, R. (2010). Domestic violence and mental health. *International Review of Psychiatry*, *22*(5), 525–534. https://doi.org/10.3109/09540261.2010.512283

Jayatilleke, A. C., Yoshikawa, K., Yasuoka, J., Poudel, K. C., Fernando, N., Jayatilleke, A. U., & Jimba, M. (2015). Training Sri Lankan public health midwives on intimate partner violence: A pre- and post-intervention study. *BMC Public Health*, *15*, 331. https://doi.org/10.1186/s12889-015-1674-9

Johnson, D. M., & Zlotnick, C. (2006). A cognitive-behavioral treatment for battered women with PTSD in shelters: Findings from a pilot study. *Journal of Traumatic Stress*, *19*(4), 6559–6564. https://doi.org/10.1002/jts.20148

Johnson, D. M., Zlotnick, C., & Perez, S. (2011). Cognitive behavioral treatment of PTSD in residents of battered women's shelters: Results of a randomized clinical trial. *Journal of consulting and clinical psychology*, *79*(4), 542–551. https://doi.org/10.1037/a0023822

Kamimura, A., Al-Obaydi, S., Nguyen, H., Trinh, H. N., Mo, W., Doan, P., & Franchek-Roa, K. (2015). Intimate partner violence education for medical students in the USA, Vietnam and China. *Public Health*, *129*(11), 1452–1458.

Kataoka, Y., Yaju, Y., Eto, H., & Horiuchi, S. (2010). Self-administered questionnaire versus interview as a screening method for intimate partner violence in the prenatal setting in Japan: A randomized controlled trial. *BMC Pregnancy Childbirth*, *10*, 84. https://doi.org/10.1186/1471-2393-10-84

Khalifeh, H., & Dean, K. (2010). Gender and violence against people with severe mental illness. *International Review of Psychiatry*, *22*(5), 535–546. https://doi.org/10.3109/09540261.2010.506185

Laskey, P., Bates, E. A., & Taylor, J. C. (2019). A systematic literature review of intimate partner violence victimisation: An inclusive review across gender and sexuality. *Aggression and Violent Behavior*, *47*, 1–11. https://doi.org/10.1016/j.avb.2019.02.014.

Mauritz, M. W., Goossens, P. J. J., Draijer, N., & van Achterberg, T. (2013). Prevalence of interpersonal trauma exposure and trauma-related disorders in severe mental illness. *European Journal of Psychotraumatology, 4*. https://doi.org/10.3402/ejpt.v4i0.19985

McColgan, M. D., Cruz, M., McKee, J., Dempsey, S. H., Davis, M. B., Barry, P., Yoder, A. L., & Giardino, A. P. (2010). Results of a multifaceted intimate partner violence training program for pediatric residents. *Child Abuse and Neglect*, *34*(4), 275–283.

McNamara, J. R., Tamanini, K., & Pelletier-Walker, S. (2008). The impact of short-term counseling at a domestic violence shelter. *Research on Social Work Practice*, *18*(2), 132–136. https://doi.org/10.1177/1049731507307790

Miller, E., & McCaw, B. (2019). Intimate partner violence. *New England Journal of Medicine, 380*, 850–857. https://doi.org/10.1056/NEJMra1807166

Mont, J. D., Forte, T., Cohen, M. M., Hyman, I., & Romans, S. (2005). Changing help-seeking rates for intimate partner violence in Canada. *Women & Health*, *41*(1), 1–19.

Murray, C. E., Davis, J., Rudolph, L., Graves, K. N., Colbert, R., Fryer, M., Mason, A., & Thigpen, B. (2016). Domestic violence training experiences and needs among mental health professionals: Implications from a statewide survey. *Violence & Victims*, *31*(5), 901–920. https://doi.org/10.1891/0886-6708.VV-D-14-00092

Nagae, M., & Dancy, B. L. (2010). Japanese women's perceptions of intimate partner violence (IPV). *Journal of Interpersonal Violence*, *25*(4), 753–766. https://doi.org/10.1177/0886260509334413

Nguyen, T. T., Morinaga, Y., Frieze, I. H., Cheng, J., Li, M., Doi, A., Hirai, T., Joo, E., & Li, C. (2013). College students' perceptions of intimate partner violence: A comparative study of Japan, China, and the United States. *International Journal of Conflict and Violence*, *7*(2), 262–273.

Nisbett, R. E., Peng, K., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic versus analytic cognition. *Psychological Review*, *108*(2), 291–310. https://doi.org/10.1037/0033-295x.108.2.291

Nyame, S., Howard, L. M., Feder, G., & Trevillion, K. (2013). A survey of mental health professionals' knowledge, attitudes and preparedness to respond to domestic violence. *Journal of Mental Health*, *22*(6), 536–543. https://doi.org/10.3109/09638237.2013.841871

Oram, S., Trevillion, K., Feder, G., & Howard, L. M. (2013). Prevalence of experiences of domestic violence among psychiatric patients: Systematic review. *The British Journal of Psychiatry*, *202*, 94–99. https://doi.org/10.1192/bjp.bp.112.109934

Reed, G. M., Rebello, T. J., Pike, K. M., Medina-Mara, M. E., Gureje, O., Zhoa, M., Dai, Y., Roberts, M. C., Maruta, T., Matsumoto, C., Krasnov, V. N., Kulygina, M., Lovell, A. M., Stona, A., Sharan, P., Robles, R., Gaebel, W., Zielasek, J., Khoury, B., Mari, J., Ayuso-Mateos, J. L, Evans, S. C., Kogan, C. S., & Saxena, S. (2015). WHO's Global Clinical Practice Network for mental health. *The Lancet*, *2*(5), 379.

Rose, D., Trevillion, K., Woodall, A., Morgan, C., Feder, G., & Howard, L. (2011). Barriers and facilitators of disclosures of domestic violence by mental health service users: Qualitative study. *The British Journal of Psychiatry: The Journal of Mental Science*, *198*(3), 189–194. https://doi.org/10.1192/bjp.bp.109.072389

Schwartz, A., & Elstein, A. S. (2009). Clinical problem solving and diagnostic decision making: A selective review of the cognitive research literature. In J. A. Knottnerus & F. Buntinx (Eds.), *The evidence base of clinical diagnosis: Theory and methods of diagnostic research* (pp. 237–255). Blackwell.

Sprague, S., Madden, K., Simunovic, M., Godin, K., Pham, N. K., Bhandari, M., & Goslings, J. C. (2012). Barriers to screening for intimate partner violence. *Women and Health*, *52*(6), 587–605. https://doi.org/10.1080/03630242.2012.690840

Stith, S. M., Green, N. M., Smith, D. B., & Ward, D. B. (2008). Marital satisfaction and marital discord as risk markers for intimate partner violence: A meta-analytic review. *Journal of Family Violence*, *23*(3), 149–160. http://doi.org/10.1007/s10896-007-9137-4

Sullivan, C. M., & Bybee, D. I. (1999). Reducing violence using community-based advocacy for women with abusive partners. *Journal of Consulting and Clinical Psychology*, *67*(1), 43–53. https://doi.org/10.1037//0022-006x.67.1.43

Trevillion, K., Corker, E., Capron, L. E., & Oram, S. (2016). Improving mental health service responses to domestic violence and abuse. *International Review of Psychiatry*, *28*(5), 423–432. https://doi.org/10.1080/09540261.2016.1201053

Umeda, M., Kataoka, Y., & Miller, E. (2017). Principles of care for women experiencing intimate partner violence: Views of expert Japanese health professionals and advocates. *Health Care for Women International*, *38*(11), 1219–1233. https://doi.org/10.1080/07399332.2017.1355916

Walker, M. L., Dovoedo, S., Chakraborti, S., & Hilton, C. W. (2018). An improved boxplot for univariate data. *The American Statistician*, *72*(4), 348–353. https://doi.org/10.1080/00031305.2018.1448891

Weingourt, R., Maruyama, T., Sawada, I., & Yoshino, J. (2001). Domestic violence and women's mental health in Japan. *International Nursing Review*, *48*(2), 102–108.

Whisman, M. A. (2007). Marital distress and DSM-IV psychiatric disorders in a population-based national survey. *Journal of Abnormal Psychology*, *116*(3), 638–643.

World Health Organization. (1992). *International classification of diseases and related health problems* (10th revision).

World Health Organization. (2005). *WHO multi-country study on women's health and domestic violence against women: Summary report of initial results on prevalence, health outcomes and women's responses*. ISBN: 9241593512.

World Health Organization. (2013). *Responding to intimate partner violence and sexual violence against women: WHO clinical and policy guidelines*. ISBN: 9789241548595.

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

Yamawaki, N., Ostenson, J., & Brown, C. R. (2009). The functions of gender role traditionality, ambivalent sexism, injury, and frequency of assault on domestic violence perception: A study between Japanese and American college students. *Violence Against Women*, *15*(9), 1126–1142. https://doi.org/10.1177/1077801209340758

Author Biographies

Samantha C. Burns, BA, is completing a PhD in clinical psychology at the University of Ottawa. Her research focuses on mental health professionals' training and practices

with regard to intimate partner violence, with the goal of improving clinicians' assessment of and response to family maltreatment.

Cary S. Kogan, PhD, is a professor of clinical psychology at the University of Ottawa. His research focuses on developmental neuroscience of neurodevelopmental disorders and classification of mental health conditions. Currently, in partnership with international collaborators, he is interested in the development and evaluation of the World Health Organization's International Classification of Diseases 11th Edition (ICD-11) with the goal of improving identification of mental health and related conditions to reduce global disease burden.

Richard E. Heyman, PhD, is a professor in the Faculty of Health at New York University and co-director of the Family Translational Research Group. Dr Heyman's research program has focused on the development and maintenance of family problems, with a strong focus on family maltreatment and relationship distress. He also studies interventions at all stages of the translational research cycle.

Heather M. Foran, PhD, is a professor of psychology at the University of Klagenfurt in Austria. Her research focuses on models of family environment, mental health, and physical health. She also is involved in studies on assessment and prevention of family maltreatment with a focus on public health approaches.

Amy M. Smith Slep, PhD, is professor in the Faculty of Health at New York University and co-director of the Family Translational Research Group. Dr Slep's research has focused on anger and aggression in families, and the interconnections of child and partner abuse. Her work emphasizes translation into prevention, as well as implementation science.

Tecelli Dominguez-Martinez, PhD, is a medical science researcher at the Research Global Mental Health Center of the Direction of Epidemiology and Psychosocial Research at the National Institute of Psychiatry "Ramón de la Fuente Muñiz" in Mexico City. Her research focuses on psychosocial risk factors, diagnosis, classification, prevention, and intervention of mental disorders. She has worked on multiple field studies of the World Health Organization to validate the mental and behavioral disorders chapter from the 11th revision of the ICD.

Jean Grenier, PhD, is a clinical psychologist and researcher at the Montfort Hospital and Institut du savoir Montfort in Ottawa, Canada. He is also professor of clinical psychology and assistant professor at the Department of Family Medicine at the University of Ottawa. His research focuses on the integration of psychological services in primary care and psychological interventions in the context of chronic health problems.

Chihiro Matsumoto, PhD, is a national study coordinator for ICD-11 field studies at Japanese Society of Psychiatry and Neurology. She has helped implement a number of ICD-11-related field studies in Japan. Her interests also include training clinicians on diagnosis and classification of personality disorders, which is expected to be substantially different in the ICD-11 compared to the current classification system.

Geoffrey M. Reed, PhD, is a professor of medical psychology, Department of Psychiatry, Columbia University, Vagelos College of Physicians and Surgeons. He is a consultant to the World Health Organization (WHO) and, beginning in 2008, served as senior project officer for the development of ICD-11 mental, behavioral, and neurodevelopmental disorders in WHO's Department of Mental Health and Substance Abuse.