
Integrative Interventions for Men with Concurrent Substance Misuse and Trauma: Roles for Mindfulness and Masculinities

Interventions intégratives auprès d'hommes aux prises avec des problèmes concomitants de toxicomanie et de traumatisme : rôles de la pleine conscience et des masculinités

Durwin B. Foster
Mary Theresa Kelly
Vancouver, British Columbia

ABSTRACT

Men experience higher lifetime trauma rates than women, and they use and misuse substances at rates far exceeding women. Men are also reported to experience significantly higher lifetime rates of comorbid posttraumatic stress disorder (PTSD) and substance use disorder (SUD) than women. Although there is agreement in the clinical field of trauma and substance abuse that integrated treatment programs are critical, relapse rates and treatment dropout rates remain relatively high despite the high standards in these programs. Most integrated treatment approaches for co-occurring disorders are based on cognitive-behavioural frameworks that emphasize coping skills and replacing maladaptive cognitions. We address two major gaps in these standard-of-care approaches. First, we examine the context of gender; most programs do not address gender constructs or provide gender-specific materials, and many programs were initially developed for women only. Second, we address the growing evidence for utilizing mindfulness and acceptance components in integrative interventions for men.

RÉSUMÉ

Les hommes éprouvent des taux plus élevés de traumatismes échelonnés sur la durée de vie que les femmes, et ils ont recours aux substances à des fréquences beaucoup plus élevées que chez les femmes. On rapporte aussi que les hommes présentent des taux à vie d'états concomitants de stress post-traumatiques (ESPT) et de toxicomanie considérablement plus élevés que chez les femmes. Malgré un consensus dans le domaine du traitement clinique des traumatismes et de la toxicomanie selon lequel les programmes de traitements intégrés sont cruciaux, les taux de rechute et d'abandon de traitement demeurent relativement élevés, en dépit des normes élevées qui encadrent ces programmes. La plupart des approches de traitements intégrés dans le cas de troubles concomitants se fondent sur des cadres cognitifs-comportementaux mettant l'accent sur les habiletés d'adaptation et le remplacement des processus cognitifs mésadaptés. Nous traitons deux lacunes majeures inhérentes à ces approches de normes de soins. Premièrement, la plupart des programmes ne tiennent pas compte des concepts de genre ni ne fournissent de matériel spécifique au genre; de plus, dans bien des cas, ces programmes ont été initialement conçus exclusive-

ment pour les femmes. Deuxièmement, nous tenons compte des preuves toujours plus convaincantes du recours à la pleine conscience et aux éléments d'acceptation dans les interventions intégratives auprès des hommes.

Substance use disorders (SUDs) and posttraumatic stress disorder (PTSD) are gendered health issues that affect large numbers of men in Canada. In this article we review the literature on integrated treatment programs for concurrent SUD and PTSD, and identify program areas not addressed in terms of two growing fields of research: (a) masculinities and (b) mindfulness and acceptance-based approaches.

MEN AND SUBSTANCE USE

Men use and misuse legal and illegal substances at rates far exceeding women, including use of alcohol, marijuana, cocaine, heroin, and/or pharmaceuticals to get high. For example, over 8% of men report being heavy, frequent drinkers, whereas only 2.3% of women report this risky pattern of alcohol use (Health Canada, 2009). In Canada, 6% of all deaths in people under 70 years of age have been attributed to alcohol-related causes, such as injuries and heart disease. Of the 4,010 alcohol-related deaths in Canada in 2001, 3,132 occurred in men and 877 in women (Rehm, Patra, & Popova, 2006). Men also experience three times the number of lost years of life due to alcohol as compared with women (Rehm et al., 2006). Twice as many men (14%) as women used cannabis in the last year. Similarly, more than 15% of men reported using a "harder" drug, including cocaine, speed, heroin, or ecstasy, compared with 7.9% of women (Health Canada, 2009). In general, men reported two to three times higher levels of alcohol and illicit drug dependence (Rush et al., 2008). Furthermore, these kinds of statistics are not able to capture the additional social and interpersonal burden of harm to men and their families due to substance misuse and dependence.

MEN AND TRAUMA

There is limited Canadian-based data on PTSD (Van Ameringen, Mancini, Patterson, & Boyle, 2008); in the United States, however, men experience higher lifetime trauma rates than women: 60.7% compared to 51.2%, respectively. In addition, men often experience different types of trauma. For example, men are more likely than women to witness another person being killed or badly injured; to be threatened with a weapon or physical attack; to be kidnapped or held captive; and to experience natural disasters (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Men who have undergone traumatic experiences show a greater likelihood than women to also experience subsequent traumatic events (Brady, Dansky, Sonne, & Saladin, 1998; Cottler, Nishith, & Compton, 2001). The phenomenon known as the "victim to perpetrator" sequence is a significant concern with respect to men because men suffering with untreated PTSD often attempt to cope with their distress by acting out the trauma through violence against oth-

ers, including abuses such as rape, physical fighting and assault, child abuse, and domestic assault (Hulnick, 1997).

COMORBIDITY OF ADDICTIONS AND TRAUMA

The comorbidity of addictions and trauma is a prevalent problem. For example, among American men who develop symptoms of posttraumatic stress disorder, 52% develop alcohol use disorder and 35% show evidence for other drug use disorders (Kessler et al., 1995). Men experiencing PTSD are also more likely to use “hard drugs,” such as cocaine and opioids, rather than “softer drugs,” such as marijuana (Cottler, Compton, Mager, Spitznagel, & Janca, 1992; Najavits, Weiss, & Shaw, 1997). Among men in substance abuse samples, the prevalence of PTSD occurs in the range of 11–60% current and 30–75% lifetime (Brady, 2001; Jacobsen, Southwick, & Kosten, 2001; Najavits et al., 1997).

In specific medical settings, researchers have reported a high prevalence of comorbid substance abuse and PTSD. For example, on an inpatient substance abuse unit, male veterans were assessed to have a 58% lifetime and 38% current prevalence of PTSD (Triffleman, Marmar, Delucchi, & Ronfeldt, 1995). Among male outpatients being treated for cocaine use disorder, PTSD was estimated at 24% lifetime prevalence (Brady et al., 1998). Among inner-city men on methadone maintenance programs, 11% have shown evidence of PTSD (Villagómez, Meyer, Lin, & Brown, 1995).

Men are reported to experience significantly higher lifetime rates of comorbid PTSD and substance use disorder than women. For example, 51.9% of men in the U.S. compared with only 27.9% of women diagnosed with PTSD also show comorbid alcohol use; 34.5% of men versus 26.9% of women experience PTSD and other drug use disorders (Kessler et al., 1995).

In addition, the degree to which addictions and PTSD occur among men may likely be underestimated because clinicians are known to underdiagnose or misdiagnose both PTSD and SUD (Davidson, 2001; Najavits, 2004), and most SUD clients have been neither assessed nor treated for PTSD (Brown, Stout, & Gannon-Rowley, 1998; Dansky, Roitzsch, Brady, & Saladin, 1997; Hyer, Leach, Boudewyns, & Davis, 1991; Najavits, 2004). As a result, the comorbidity of PTSD and SUD may far exceed current estimates.

In Canada, studies examining the prevalence of concurrent substance use and mental disorders have excluded PTSD (Rush et al., 2008); therefore, the true prevalence of concurrent SUDs and PTSD in Canada is unknown and underestimated. We also expect that the prevalence of co-occurring PTSD and substance abuse among men may be underreported because, unlike women, men are less likely to seek professional help for physical and psychological health conditions (Galdas, Cheater, & Marshall, 2005). In addition, by far the majority of homeless persons in Canada are men (Hwang, 2001), and many of these individuals are living with mental health disorders (Joyce & Limbos, 2009), adding further to underreported levels of co-occurring PTSD and SUD.

The clinical course is typically more severe and the outcome worse for men suffering with both of these problems. For example, men presenting with the comorbidity of PTSD and SUD present greater problems in many areas of their lives, including psychiatric symptoms, interpersonal problems, medical problems, employment problems, legal problems, lower coping skills, and lower motivation for treatment (Brady, Killeen, Saladin, Dansky, & Becker, 1994; Brown, Stout, & Mueller, 1999; Hien, Nunes, Levin, & Fraser, 2000; Najavits, 2005; Najavits et al., 1998; Ouimette, Ahrens, Moos, & Finney, 1997, 1998; Ouimette & Brown, 2002; Ouimette, Finney, & Moos, 1999).

Clinical reports from treatment providers consistently note the challenges involved for therapists and mental health workers attempting to assist this client population. Men experiencing this dual diagnosis also experience difficulty forming and sustaining the client-therapist working alliance, strong counter-transference reactions from their therapists, and other multiple crises (Brady et al., 1998; Fullilove, Lown, & Fullilove, 1992; Nace, 1988). Clinicians treating men with a dual diagnosis of PTSD and SUD face incredible challenges to reach positive outcomes due to the extensive associated health and life issues these clients present.

INTEGRATED INTERVENTIONS FOR SUD AND PTSD

There is agreement in the clinical field of trauma and substance abuse that integrated treatment programs are critical to successfully address co-occurring disorders and reduce relapse rates (Dass-Brailsford & Myrick, 2010). In addition, clinicians are beginning to make considerable efforts to change the pattern of underdiagnosis and undertreatment. For example, some clinicians have been advocating for a “no-wrong-door” approach when working with men with this comorbidity (Clark, 2002); that is, a consensus is gradually emerging that “clients need attention to both disorders regardless of how they enter the treatment system” (Najavits, 2007, p. 142). Because independent and sequential interventions appear to be less efficacious than simultaneous, integrated intervention (Brady, 2001; Ouimette & Brown, 2002), it is now “widely recommended to work on both disorders from the start of treatment” (Najavits, 2007, p. 143).

As a result of these emergent understandings, many integrated therapies for both PTSD and SUD have been developed, although few have been validated. To date, most of these integrated approaches are based on cognitive-behavioural frameworks that emphasize coping skills (Dass-Brailsford & Myrick, 2010). Some of these programs are sex-specific, and in most cases these programs were initially developed for women only. For example, Lisa Najavits has pioneered the development of an integrative cognitive-behavioural intervention for comorbid addictions and trauma known as *Seeking Safety* (Najavits, 2002; Najavits, Rosier, Nolan, & Freeman, 2007). A small outpatient pilot trial with 5 male participants was described by Najavits, Schmitz, Gotthardt, and Weiss (2005) as a study that “appears to be the first outcome trial to address a sample of civilian men with PTSD and SUD using manualized psychosocial treatment” (p. 425). These re-

searchers underscored the need for further studies that investigate interventions for civilian males experiencing both PTSD and SUD. We also noted that the program name, *Seeking Safety*, represents a stereotypically feminine value that may reflect a bias toward providing help for women who experience domestic trauma, thereby subtly discounting street-involved men who might be loathe to define themselves as needing help.

McGovern and colleagues (2009) adapted and evaluated a program of cognitive behavioural therapy (CBT) for persons with co-occurring PTSD and SUD for use in addiction treatment settings. They used a one-group, pretest/posttest design with measures of drug use and trauma severity at baseline, post-treatment, and 3 months post-treatment. The researchers concluded that the individualized CBT resulted in significant improvement in PTSD symptoms and only 27% of participants were assessed as positive for PTSD post-treatment. Significant reductions in substance use were recorded. However, the individuals were also receiving addiction treatment services, so it is impossible to determine to what extent the changes were a result of CBT. In terms of gender, 90% of this small sample were women ($N = 11$; McGovern et al., 2009).

Ford and Russo (2006) agreed that the cognitive-behavioural approaches to PTSD and SUD help clients replace dysregulated cognitions and learn adaptive coping and problem-solving skills; however, they argued that pure CBT approaches fail to provide clinicians and clients with a systematic method for modulating intense emotions and processing trauma memories without relapsing. These researchers have developed a manualized education and therapy program known as TARGET that teaches clients a sequence of steps to interrupt dysregulated cognitive patterns, process trauma-based memories, and also cultivate more coherent personal narratives, balanced meaning-making processes, and self-reflection on individual choices and abilities (Ford & Russo, 2006). The program is intended for men and women and does not address gender constructs nor provide gender-specific materials, although it is delivered in gender-specific groups. In a randomized trial, TARGET provided better results than treatment as usual (TAU), and participants showed improvement in traumatic stress, mood disorders, and substance use. Cultural differences in treatment outcomes were found, however; non-white men assigned to the TARGET group (as opposed to the TAU group) were more likely to drink to intoxicating levels and use illegal substances at the 12-month follow-up. In terms of gender, women constituted almost two thirds of the outpatient sample, further complicating interpretation of outcomes, and the authors reported that due to a shortage of trained men facilitators, the men's groups were led by men and women (Frisman, Ford, Lin, Mallon, & Chang, 2008).

We were able to locate only one integrated gender-relevant therapeutic intervention for men that had been validated in the published literature. *Transcend* is a hospital-based program for Vietnam veterans diagnosed with PTSD and substance abuse (Donovan, Padin-Rivera, & Kowaliw, 2001). The program incorporates cognitive behavioural approaches with substance relapse prevention skills, peer

support, and elements based on constructivist theories. Processing of trauma material is central to the program within a therapeutic framework of self-acceptance and compassionate reflection on war-time decision making.

Psychologists working with military veterans noted that large numbers of trauma-exposed veterans are being underserved in multiple ways. For example, many are not seeking help; if they do seek help, many refuse standard-of-care treatments such as Cognitive Processing Therapy (Resick, Monson, & Chard, 2007) and Prolonged Exposure (Foa, Hembree, & Rothbaum, 2007) because they do not feel they are ready for memory processing treatments, or are not significantly assisted by them (Schottenbauer, Glass, Arnhoff, Tendick, & Gray, 2008). Furthermore, even when willing, many veterans lack the coping skills for interventions focused primarily on the processing of traumatic memories through exposure. For men with SUDs, researchers report relapse rates greater than 60% across multiple types of substances (Connors, Maisto, & Donovan, 1996; Mackay & Marlatt, 1991; Miller, Walters, & Bennett, 2001), despite clients receiving best standard-of-care therapy (e.g., Marlatt & Gordon, 1985). Thus, there is an urgent need for interventions for men that address both PTSD and SUD within a context that not only accounts for sex differences, but also includes gender as a sociocultural construct. There is also a need for approaches that address the reluctance toward or inadequacy of treatments that prematurely expose clients to traumatic memory or those that, on the other hand, focus primarily on the development of coping skills. In the next sections, we address each of these gaps in turn.

MEN'S HEALTH AND MASCULINITIES

Biomedical and psychiatric research in understanding concurrent PTSD and SUD has emphasized the neurobiological pathways in these two disorders and shown how substance use aggravates symptoms of PTSD, although individuals may address their symptoms by using substances to self-medicate a distressed state (Dass-Brailsford & Myrick, 2010). Less attention has been given to the social context of gender and how the social construction of masculinity impacts and shapes the health behaviours of men experiencing these disorders.

Social constructionist approaches have challenged the tendency for Western medical research to pathologize masculinity in general or to rely solely on sex role theories in explaining men's health. For example, the Type A personality classification was at one time constructed as a male medical category and then subsequently declassified. On the other hand, the construction of PTSD as a medical category provided men with an explanation for their experience and potential sense of failed masculinity under combat conditions (Riska, 2009).

Since Courtenay (2000) applied the social theory of hegemonic masculinity (Connell, 1995) to the field of men's health, researchers have continued to explore the influence and intersection of gender as a socially constructed phenomenon. From this perspective, gender is socially produced through interactions between

individuals, communities, and institutions, and men's health behaviours and beliefs are viewed as performances of their masculine identities (Creighton & Oliffe, 2010; Courtenay, 2000). Dominant or traditional constructs of masculinity celebrate and normalize men's risk-taking behaviours, neglect for self-care, autonomy, self-reliance, stoicism, and desire to enact "toughness." This is in contrast with more "feminine" social constructs that posit women as weaker, more likely to seek or need help, more emotional, and more frequent users of the health care system. An emergent body of literature has investigated the influence of masculinity in men's recovery and help-seeking for mental health issues.

In a review of literature on men's depression and masculinity, Oliffe and Phillips (2008) illustrated how the experience of depression and seeking professional help for depression is at odds with dominant ideals of masculinity. Men who experience depression may attempt to maintain their masculine identities by self-treating or denying ill health, and avoid the perception of being seen as weak or ineffectual by not attending professional consults or accessing health services (Oliffe & Phillips, 2008).

Conducting a focus group study with men and women who experienced depressive symptoms, Brownhill, Wilhelm, Barclay, and Schmieid (2005) reported that men tended to let feelings of depression slowly build up by avoiding and purposefully forgetting, distancing, or distracting themselves; numbing with the use of alcohol or drugs; escaping with self-isolating behaviours; and releasing these emotions by hurting others or themselves. The authors described this "big build" emotional trajectory as common in men, and argued that although men and women may experience depression in similar ways, men are more likely to *express* depression with aggression, violence, and self-medicating with alcohol or drugs (Brownhill et al., 2005).

Self-destructive behaviours such as alcohol and drug abuse, physical fighting, and involvement in crime activities have been theorized as performances of "marginalized" or "oppositional" masculinity that contest the dominant form of masculine identity to which few men gain membership or access (Courtenay, 2000). Binge drinking and the excessive use of alcohol have been interpreted as symbolic acts of masculinity among young men. Among both men and women, higher levels of alcohol consumption are linked with higher levels of negative masculine qualities such as aggression, whereas lower consumption levels are linked to higher positive qualities such as nurturance (de Visser, 2009).

Experts in men's health have also pointed out that positive aspects of dominant masculinity may be drawn on as a resource in helping men overcome challenging health conditions or behaviours (Creighton & Oliffe, 2010; Emslie, Ridge, Ziebland, & Hunt, 2006). For example, de Visser (2009) described how young men who did not abuse alcohol identified with a form of masculinity that did not succumb to peer pressure or conformity to fit in with the guys, but focused on independence and integrity. In fact, some of the men in de Visser's study stated they felt stronger and more masculine as non-drinkers. In other empirical work, the route to mental health recovery for most men involved the performance of

traditional masculine behaviours such as regaining control and being one of the guys (Emslie et al., 2006). For a few men, however, wellness involved the construction of alternate masculine identities that emphasized creativity and intelligence rather than dominant masculine ideals such as competitiveness and autonomy (Emslie et al., 2006).

The masculine identities that different populations of men adopt may span risk-taking and self-destructive behaviours, such as excessive drinking and illicit drug use, as well as “positive” identities related to responsibility, such as protector and breadwinner identities. The tendency for work in masculinities and men’s health to reify the construct of “marginalized” masculinity can result in researchers and practitioners overlooking the importance of the specific communities of practice to which specific groups of men belong (Creighton & Oliffe, 2010). Clinicians may benefit from an awareness of masculinity as an important influence in men’s health by examining the positive and negative codes of masculinity operative at the local level of the communities to which the men they treat belong; in this work, they may choose to purposely draw on traditional elements of masculinity (e.g., self-reliance) or work with more diverse masculinity scripts (e.g., creative expression). In summary, to fully understand the treatment of SUD and PTSD, we think it is necessary and useful for interventions to be developed with awareness of the influence of multiple constructs of masculinity in men’s health and recovery.

MINDFULNESS AND ACCEPTANCE IN INTEGRATIVE INTERVENTIONS FOR SUDS AND PTSD

Integrated interventions for men to address PTSD and SUD have continued to rely primarily on cognitive-behavioural therapies that teach clients improved coping skills (Dass-Brailsford & Myrick, 2010). However, such approaches may also underestimate the significance of somatic-affective experiences in recovery. Scholars and practitioners in applied psychology show continued and growing interest in the capacity for mindfulness practices to alleviate emotional distress and mental illness (Grégoire, Baron, & Baron, 2012). For example, one research publication reported 19 peer-reviewed articles on mindfulness interventions, 8 review articles, and 6 registered clinical trials (Black, 2012). This is an increase of 5 mindfulness intervention articles, as well as twice as many review articles and registered clinical trials compared to one year earlier. Two main components characterize mindfulness practices: sustaining attention on one’s immediate moment-by-moment experience, and maintaining an attitude of openness and acceptance toward our experience (Bishop et al., 2004). Mindfulness is not simply relaxation training, but rather a type of cognitive-affective training that contributes to well-being. In outlining the potential efficacy of mindfulness approaches, we examine four types of “evidence”: controlled research, pragmatic research, accepted clinical practice in relevant contexts, and theoretical rationales for mindfulness and acceptance approaches.

MINDFULNESS AND SUBSTANCE USE

At the levels of controlled and pragmatic research, a systematic review article on mindfulness approaches for substance abuse (Zgierska et al., 2009) found 25 eligible studies. The majority of these studies showed some positive outcomes compared to baseline or standard-of-care (SOC) approaches, which were usually CBT (Zgierska et al., 2009). Furthermore, data from the controlled trials suggested that clients receiving mindfulness approaches, as an adjunct to SOC or pharmacotherapy, did as well as or better than those receiving SOC or pharmacotherapy alone. The efficacy of mindfulness-based approaches, furthermore, is supported by the consistency of positive results obtained across different study designs, mindfulness-based treatment variants, populations, and types of SUDs. Preliminary evidence from these studies supports the claim of efficacy, as well as safety, of mindfulness-based interventions for a variety of health issues—in particular, relapse-prone individuals with comorbid addictions and trauma. Although preliminary evidence is promising, future trials need to investigate mindfulness interventions with larger samples and meet the standards of randomized controlled research designs. Future research also needs to begin to address the question of how different populations of SUD clients may or may not benefit from mindfulness approaches. In addition, despite the evidence in support of mindfulness approaches, one of the obstacles is a lack of individuals trained and qualified to teach mindfulness techniques (Dass-Brailsford & Myrick, 2010).

In terms of clinical practice in relevant or related settings, Zgierska et al. (2009) note that mindfulness is currently used in many therapeutic programs, including for SUD. As of 1997, there were 240 meditation programs that were part of the U.S. health care system. Most typically this is Mindfulness-Based Stress Reduction (Kabat-Zinn, 1990), but more recently both Mindfulness-Based Cognitive Therapy (Segal, Williams, & Teasdale, 2002) for preventing relapse of depression and Mindfulness-Based Relapse Prevention (Bowen et al., 2009) for substance abuse are being implemented. Mindfulness is also a key component of related therapies such as Dialectical Behaviour Therapy (Linehan, 1993), Acceptance and Commitment Therapy (Hayes, Strosahl, & Wilson, 2003), and Spiritual Self-Schema Therapy for SUD (Avants, Beitel, & Margolin, 2005).

At the level of theoretical rationales, approaches based on mindfulness and acceptance can be seen to show both convergent and divergent validity with respect to CBT. That is, these approaches can be seen as differentiated yet complementary to CBT. To understand this, we can think of the state of mind of those struggling with SUDs as being characterized by craving defined as a conglomeration of thoughts, emotions, and sensations contributing to a preoccupation with obtaining more of the substance (Eliason & Amodia, 2007). CBT approaches often focus on the development of coping skills, such as control of the environment to avoid triggering, as well as attempts to control maladaptive cognitions. In contrast, mindfulness and acceptance approaches emphasize contextual phenomenological

states (Hayes et al., 2003) that are “de-centered” (Segal et al., 2002), as in not fixated on cravings, thoughts, or environmental cues. There is no reason that these approaches cannot be complementary, allowing clinicians and clients to strategically switch therapeutic focus between more active or “controlling” approaches and more reflective or “accepting” approaches. We are reminded of the serenity prayer, so often used in Alcoholics Anonymous: “God grant me the serenity to accept the things I cannot change, courage to change the things I can, and wisdom to know the difference.”

We identified one treatment program for co-occurring SUDS and trauma that incorporates mindfulness and relaxation techniques into a cognitive-behavioural framework. *Addictions and Trauma Recovery Integration*, or ATRIUM, is a 12-week manualized program developed for use with men and women (Dass-Brailsford & Myrick, 2010), and as such is not intended to be gender-relevant for men.

MINDFULNESS AND PTSD

The therapeutic value of mindfulness for treating PTSD has been studied with samples of war veterans. These approaches have “both theoretical and empirical promise for better understanding the etiology and maintenance of PTSD and improving treatment outcomes” (Vujanovic, Niles, Pietrefesa, Schmertz, & Potter, 2011, p. 25). In response to the significant challenges in treating trauma in military veterans, skills-based treatment groups that include mindfulness components have been employed (Linehan, 1993).

There are five clinically significant functions of mindfulness practices in the treatment of trauma (Vujanovic et al., 2011). These functions are conceptualized in the context that mindfulness practice promotes both greater awareness and greater acceptance of potentially distressing internal experiences as well as trauma-related triggers. First, these approaches can help facilitate an approach-orienting coping; mindfulness practices may help decrease avoidance symptoms over time, targeting what Foa, Rothbaum, and Molnar (1995) see as the core behaviour maintaining the disorder. Second, greater awareness of present internal experience can lead to better communication of difficulties with the therapist, allowing the therapist to be of greater assistance. Third, acceptance of internal experience may help resolve core emotions associated with PTSD such as shame and guilt (Henning & Frueh, 1997). Fourth, evidence suggests that regular mindfulness practice decreases physiological arousal and stress reactivity symptoms (Delizonna, Williams, & Langer, 2009), with hyper-arousal being another core feature of PTSD. And fifth, with dissociation seen by many as a core psychodynamic of PTSD (Van der Kolk, McFarlane, & Weisaeth, 2006), mindfulness practices can be useful in helping patients discern when to attend to distressing internal experience and when to distract oneself in order to prevent dissociation (Vujanovic et al., 2011). This capability is supported by research on mindfulness training that shows it helps cultivate sustained attention and attention switching, as well as helping to inhibit ruminating thoughts (Jha, Krompinger, & Baime, 2007).

CONCLUSIONS

We had multiple aims in this article. First, we described the extent of the problems of both PTSD and SUDs in men. Second, we surveyed the reasons for and the movement toward integrated treatment for concurrent PTSD and SUDs. Third and most important, we addressed two gaps in extant approaches to addressing concurrent PTSD and substance misuse in men by including a focus on masculinities as a gendered context for clinical intervention, and mindfulness and acceptance practices as useful clinical approaches for working with men with concurrent addictions and PTSD. We invite feedback from interested readers and sincerely hope that our efforts will spur further research. As well, we hope it encourages dialogue amongst counsellors about how to better serve Canadian men suffering from these significant emotional and behavioural health challenges.

Acknowledgement

This research was partially supported by a grant from the “Intersections of Mental Health Perspectives in Addictions Research Training” program (www.addictionsresearchtraining.ca).

References

- Avants, S. K., Beitel, M., & Margolin, A. (2005). Making the shift from “addict self” to “spiritual self.” Results from a Stage 1 study of Spiritual Self-Schema (3-S) therapy for the treatment of addictions and HIV risk behavior. *Mental Health, Religion & Culture*, *8*, 167–177. doi:10.1080/13694670500138924
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., ... Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, *11*, 230–241. doi:10.1093/clipsy.bph077
- Black, D. (Ed.). (2012, August). *Mindfulness Research Monthly*, *3*, 1–3. Retrieved from <http://www.mindfulexperience.org>
- Bowen, S., Chawla, N., Collins, S. E., Witkiewitz, K., Hsu, S., Grow, J., ... Marlatt, A. (2009). Mindfulness-based relapse prevention for substance use disorders: A pilot efficacy trial. *Substance Abuse*, *30*, 295–305. doi:10.1080/08897070903250084
- Brady, K. T. (2001). Comorbid posttraumatic stress disorder and substance use disorders. *Psychiatric Annals*, *31*, 313–319.
- Brady, K. T., Dansky, B. S., Sonne, S. C., & Saladin, M. E. (1998). Posttraumatic stress disorder and cocaine dependence: Order of onset. *American Journal on Addictions*, *7*, 128–135. doi:10.1111/j.1521-0391.1998.tb00327.x
- Brady, K. T., Killeen, T., Saladin, M. E., Dansky, B. S., & Becker, S. (1994). Comorbid substance abuse and posttraumatic stress disorder: Characteristics of women in treatment. *American Journal on Addictions*, *3*, 160–164. doi:10.1111/j.1521-0391.1994.tb00383.x
- Brown, P. J., Stout, R. L., & Gannon-Rowley, J. (1998). Substance use disorder-PTSD comorbidity: Patients’ perceptions of symptom interplay and treatment issues. *Journal of Substance Abuse Treatment*, *14*, 1–4. doi:10.1016/S0740-5472(97)00286-9
- Brown, P. J., Stout, R. L., & Mueller, T. (1999). Substance use disorder and posttraumatic stress disorder comorbidity: Addiction and psychiatric treatment rates. *Psychology of Addictive Behaviors*, *13*, 115–122. doi:10.1037/0893-164X.13.2.115
- Brownhill, S., Wilhelm, K., Barclay, L., & Schmied, V. (2005). “Big build”: Hidden depression in men. *Australia and New Zealand Journal of Psychiatry*, *39*, 921–931. doi:10.1111/j.1440-1614.2005.01665.x

- Clark, W. H. (2002). Bridging the gap between substance abuse practice and research: The national treatment plan initiative. *Journal of Drug Issues, 32*, 757–767. doi:10.1177/002204260203200302
- Connell, R. W. (1995). *Masculinities*. Berkeley, CA: University of California Press.
- Connors, G. J., Maisto, S. A., & Donovan, D. M. (1996). Conceptualizations of relapse: A summary of psychological and psychobiological models. *Addiction, 91*(Suppl), S5–S13. doi:10.1080/09652149638764
- Cottler, L. B., Compton, W. M., Mager, D., Spitznagel, E. L., & Janca, A. (1992). Posttraumatic stress disorders among substance users from the general population. *American Journal of Psychiatry, 149*, 664–670.
- Cottler, L. B., Nishith, P., & Compton, W. M. (2001). Gender differences in risk factors for trauma exposure and post-traumatic stress disorder among inner-city drug abusers in and out of treatment. *Comprehensive Psychiatry, 42*, 111–117. doi:10.1053/comp.2001.21219
- Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well-being: A theory of gender and health. *Social Science & Medicine, 50*, 1385–1401. doi:10.1016/S0277-9536(99)00390-1
- Creighton, G., & Oliffe, J. L. (2010). Theorising masculinities and men's health: A brief history with a view to practice. *Health Sociology Review, 19*, 409–418. doi:10.5172/hesr.2010.19.4.409
- Dansky, B. S., Roitzsch, J. C., Brady, K. T., & Saladin, M. E. (1997). Posttraumatic stress disorder and substance abuse: Use of research in a clinical setting. *Journal of Traumatic Stress, 10*, 141–148. doi:10.1002/jts.2490100114
- Dass-Brailsford, P., & Myrick, A. C. (2010). Psychological trauma and substance abuse: The need for an integrated approach. *Trauma, Violence & Abuse, 11*, 202–213. doi:10.1177/1524838010381252
- Davidson, J. R. T. (2001). Recognition and treatment of posttraumatic stress disorder. *Journal of the American Medical Association, 286*, 584–588. doi:10.1001/jama.286.5.584
- Delizonna, L. L., Williams, R. P., & Langer, E. J. (2009). The effect of mindfulness on heart rate control. *Journal of Adult Development, 16*, 61–65. doi:10.1007/s10804-009-9050-6
- De Visser, R. (2009). Young men, alcohol and masculinity. In A. Broom & P. Tovey (Eds.), *Men's health: Body, identity and social context* (pp. 126–139). Chichester, UK: John Wiley & Sons.
- Donovan, B., Padin-Rivera, E., & Kowaliv, S. (2001). "Transcend": Initial outcomes from a post-traumatic stress disorder/substance abuse treatment program. *Journal of Traumatic Stress, 14*, 757–772. doi:10.1023/A:1013094206154
- Eliason, M. J., & Amodia, D. S. (2007). An integral approach to drug craving. *Addiction Research and Theory, 15*, 343–364. doi:10.1080/16066350701500627
- Emslie, C., Ridge, D., Ziebland, S., & Hunt, K. (2006). Men's accounts of depression: Reconstructing or resisting hegemonic masculinity? *Social Science and Medicine, 62*, 2246–2257. doi:10.1016/j.socscimed.2005.10.017
- Foa, E. B., Hembree, E. A., & Rothbaum, B. O. (2007). *Prolonged exposure therapy for PTSD: Emotional processing of traumatic experiences, therapist guide*. New York, NY: Oxford University Press.
- Foa, E. B., Rothbaum, B. O., & Molnar, C. (1995). Cognitive-behavioral therapy of PTSD. In M. J. Friedman, D. S. Charney, & A. Y. Deutch (Eds.), *Neurobiological and clinical consequences of stress: From normal adaptation to PTSD* (pp. 483–494). New York, NY: Raven Press.
- Ford, J. D., & Russo, E. (2006). Trauma-focused, present-centered, emotional self-regulation approach to integrated treatment for posttraumatic stress and addiction: Trauma adaptive recovery group education and therapy (TARGET). *American Journal of Psychotherapy, 60*, 335–355.
- Frisman, L., Ford, J., Lin, H., Mallon, S., & Chang, R. (2008). Outcomes of trauma treatment using the TARGET model. *Journal of Groups in Addiction and Recovery, 3*, 285–303. doi:10.1080/15560350802424910
- Fullilove, M. T., Lown, E. A., & Fullilove, R. E. (1992). Crack 'hos and skeezers: Traumatic experiences of women crack users. *Journal of Sex Research, 29*, 275–287. doi:10.1080/00224499209551647
- Galdas, P. M., Cheater, F., & Marshall, P. (2005). Men and health help-seeking behavior: Literature review. *Journal of Advanced Nursing, 49*, 616–623. doi:10.1111/j.1365-2648.2004.03331.x
- Grégoire, S., Baron, C., & Baron, L. (2012). Mindfulness and counselling. *Canadian Journal of Counselling and Psychotherapy/Revue canadienne de counseling et de psychothérapie, 46*, 161–177. Retrieved from <http://cjcrc.ualgary.ca/cjc/index.php/rcc/article/view/967/2333>

- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2003). *Acceptance and commitment therapy: An experiential approach to behavior change*. New York, NY: Guilford Press.
- Health Canada. (2009). *Canadian Alcohol and Drug Use Monitoring Survey*. Retrieved from <http://www.hc-sc.gc.ca/hc-ps/drugs-drogues/stat/2009/tables-tableaux-eng.php#t10>
- Henning, K. R., & Frueh, B. C. (1997). Combat guilt and its relationship to PTSD symptoms. *Journal of Clinical Psychology, 53*, 801–808. doi:10.1002/(SICI)1097-4679(199712)53:8<801::AID-JCLP3>3.0.CO;2-1
- Hien, D. A., Nunes, E., Levin, F. R., & Fraser, D. (2000). Posttraumatic stress disorder and short-term outcome in early methadone maintenance treatment. *Journal of Substance Abuse Treatment, 19*, 31–37. doi:10.1016/S0740-5472(99)00088-4
- Hulnick, M. J. (1997). Victim-to-perpetrator process: Effect of trauma on incarcerated adult male sex offenders (Doctoral dissertation). *Dissertation Abstracts International: Section A. Humanities and Social Sciences, 57*, 3826.
- Hwang, S. W. (2001). Homelessness and health. *Canadian Medical Association Journal, 164*, 229–233.
- Hyer, L., Leach, P., Boudewyns, P. A., & Davis, H. (1991). Hidden PTSD in substance abuse inpatients among Vietnam veterans. *Journal of Substance Abuse Treatment, 8*, 213–219. doi:10.1016/0740-5472(91)90041-8
- Jacobsen, L. K., Southwick, S. M., & Kosten, T. R. (2001). Substance use disorders in patients with posttraumatic stress disorder: A review of the literature. *American Journal of Psychiatry, 158*, 1184–1190. doi:10.1176/appi.ajp.158.8.1184
- Jha, A. P., Krompinger, J., & Baime, M. J. (2007). Mindfulness training modifies subsystems of attention. *Cognitive, Affective & Behavioral Neuroscience, 7*, 109–119. doi:10.3758/CABN.7.2.109
- Joyce, D. P., & Limbos, M. (2009). Identification of cognitive impairment and mental illness in elderly homeless men: Before and after access to primary health care. *Canadian Family Physician, 55*, 1110–1111.
- Kabat-Zinn, J. (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York, NY: Delta.
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the national comorbidity survey. *Archives of General Psychiatry, 52*, 1048–1060. doi:10.1001/archpsyc.1995.03950240066012
- Linehan, M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York, NY: Guilford Press.
- Mackay, P. W., & Marlatt, G. A. (1991). Maintaining sobriety: Stopping is starting. *Substance Use & Misuse, 25*, 1257–1276. doi:10.3109/10826089109081045
- Marlatt, G., & Gordon, J. (1985). *Relapse prevention: Maintenance strategies in the treatment of addictive disorders*. New York, NY: Guilford.
- McGovern, M. P., Lambert-Harris, C., Acquilano, S., Xie, H., Alterman, A. I., & Weiss, R. D. (2009). A cognitive behavioral therapy for co-occurring substance use and posttraumatic stress disorders. *Addictive Behaviors, 34*, 892–897. doi:10.1016/j.addbeh.2009.03.009
- Miller, W. R., Walters, S. T., & Bennett, M. E. (2001). How effective is alcoholism treatment in the United States? *Journal of Studies on Alcohol, 62*, 211–220.
- Nace, E. P. (1988). Posttraumatic stress disorder and substance abuse: Clinical issues. In M. Galanter (Ed.), *Recent developments in alcoholism* (Vol. 6, pp. 9–26). New York, NY: Plenum.
- Najavits, L. M. (2002). *Seeking safety: A treatment manual for PTSD and substance abuse*. New York, NY: Guilford Press.
- Najavits, L. M. (2004). Treatment of posttraumatic stress disorder and substance abuse: Clinical guidelines for implementing *Seeking Safety* therapy. *Alcoholism Treatment Quarterly, 22*, 43–62. doi:10.1300/J020v22n01_04
- Najavits, L. M. (2005). Theoretical perspective on posttraumatic stress disorder and substance use disorder. *Australian Psychologist, 40*, 118–126. doi:10.1080/00050060500094621

- Najavits, L. M. (2007). Seeking safety: An evidence-based model for substance abuse and trauma/PTSD. In K. A. Witkiewitz & G. A. Marlatt (Eds.), *Therapist's guide to evidence based relapse prevention: Practical resources for the mental health professional* (pp. 141–167). San Diego, CA: Elsevier.
- Najavits, L. M., Gastfriend, D. R., Barber, J. P., Reif, S., Muenz, L. R., Blaine, J., ... Weiss, R. D. (1998). Cocaine dependence with and without posttraumatic stress disorder among subjects in the NIDA collaborative cocaine treatment study. *American Journal of Psychiatry*, *155*, 214–219.
- Najavits, L. M., Rosier, M., Nolan, A. L., & Freeman, M. C. (2007). A new gender-based model for women's recovery from substance abuse: Results of a pilot outcome study. *American Journal of Drug and Alcohol Abuse*, *33*, 5–11. doi:10.1080/00952990601082597
- Najavits, L. M., Schmitz, M., Gotthardt, S., & Weiss, R. D. (2005). Seeking safety plus exposure therapy: An outcome study on dual diagnosis men. *Journal of Psychoactive Drugs*, *37*, 425–435. doi:10.1080/02791072.2005.10399816
- Najavits, L. M., Weiss, R. D., & Shaw, S. R. (1997). The link between substance abuse and posttraumatic stress disorder in women. A research review. *American Journal on Addictions*, *6*, 273–283. doi:10.1111/j.1521-0391.1997.tb00408.x
- Olliffe, J. L., & Phillips, M. J. (2008). Men, depression and masculinities: A review and recommendations. *Journal of Men's Health*, *5*, 194–202. doi:10.1016/j.jomh.2008.03.016
- Ouimette, P. C., Ahrens, C., Moos, R. H., & Finney, J. W. (1997). Posttraumatic stress disorder in substance abuse patients: Relationship to one-year posttreatment outcomes. *Psychology of Addictive Behaviors*, *11*, 34–47. doi:10.1037/0893-164X.11.1.34
- Ouimette, P. C., Ahrens, C., Moos, R. H., & Finney, J. W. (1998). During treatment changes in substance abuse patients with posttraumatic stress disorder: The influence of specific interventions and program environments. *Journal of Substance Abuse Treatment*, *15*, 555–564. doi:10.1016/S0740-5472(97)00315-2
- Ouimette, P. C., & Brown, P. J. (Eds.). (2002). *Trauma and substance abuse: Causes, consequences, and treatment of comorbid disorders*. Washington, DC: American Psychological Association.
- Ouimette, P. C., Finney, J. W., & Moos, R. H. (1999). Two-year posttreatment functioning and coping of substance abuse patients with posttraumatic stress disorder: Substance use disorder and posttraumatic stress disorder comorbidity. *Psychology of Addictive Behaviors*, *13*, 105–114. doi:10.1037//0893-164X.13.2.105
- Rehm, J., Patra, J., & Popova, S. (2006). Alcohol-attributable mortality and potential years of life lost in Canada 2001: Implications for prevention and policy. *Addiction*, *101*, 373–384. doi:10.1111/j.1360-0443.2005.01338.x
- Resick, P. A., Monson, C. M., & Chard, K. M. (2007). *Cognitive processing therapy: Veteran/military version*. Washington, DC: Department of Veterans' Affairs.
- Riska, E. (2009). Men's mental health. In A. Broom & P. Tovey (Eds.), *Men's health: Body, identity and social context* (pp. 145–158). Chichester, UK: John Wiley & Sons.
- Rush, B., Urbanoski, K., Bassani, D., Castel, S., Wild, T. C., Strike, C., ... Somers, J. (2008). Prevalence of co-occurring substance use and other mental disorders in the Canadian population. *Canadian Journal of Psychiatry*, *53*, 800–809.
- Schottenbauer, M. A., Glass, C. R., Arnkoff, D. B., Tendick, V., & Gray, S. H. (2008). Nonresponse and dropout rates in outcome studies on PTSD: Review and methodological considerations. *Psychiatry: Interpersonal and Biological Processes*, *71*, 134–168. doi:10.1521/psyc.2008.71.2.134
- Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York, NY: Guilford Press.
- Triffleman, E. G., Marmar, C. R., Delucchi, K. L., & Ronfeldt, H. (1995). Childhood trauma and posttraumatic stress disorder in substance abuse inpatients. *Journal of Nervous and Mental Disease*, *183*, 172–176. doi:10.1097/00005053-199503000-00008
- Van Ameringen, M., Mancini, C., Patterson, B., & Boyle, M. H. (2008). Post-traumatic stress disorder in Canada. *CNS Neuroscience & Therapeutics*, *14*, 171–181. doi:10.1111/j.1755-5949.2008.00049.x

- Van der Kolk, B. A., McFarlane, A. C., & Weisaeth, L. (2006). *Traumatic stress: The effects of overwhelming experience on mind, body, and society*. New York, NY: Guilford Press.
- Villagómez, R. E., Meyer, T. J., Lin, M. M., & Brown, L. S. (1995). Post-traumatic stress disorder among inner city methadone maintenance patients. *Journal of Substance Abuse Treatment, 12*, 253–257. doi:10.1016/0740-5472(95)00025-Z
- Vujanovic, A. A., Niles, B., Pietrefesa, A., Schmertz, S. K., & Potter, C. M. (2011). Mindfulness in the treatment of posttraumatic stress disorder among military veterans. *Professional Psychology: Research and Practice, 42*, 24–30. doi:10.1037/a0022272
- Zgierska, A., Rabago, D., Chawla, N., Kushner, K., Koehler, R., & Marlatt, A. (2009). Mindfulness meditation for substance use disorders: A systematic review. *Substance Abuse, 30*, 266–294. doi:10.1080/08897070903250019

About the Authors

Durwin Foster is a Canadian Certified Counsellor in private practice in North Vancouver, British Columbia, Canada.

Mary Theresa Kelly is an independent consultant and writer in Vancouver, British Columbia, Canada.

Address correspondence to Durwin Foster; e-mail <durwin@durwinfoster.com>